Revenue Recognition

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Synopsis

Revenue recognition is one of the significant areas of abuse facing accountants today. This paper discusses the criteria and methods used in revenue recognition. It explores the issues and problems relating to revenue recognition. It will also discuss SARBOX's impact on revenue recognition. Companies with a higher market value per share are better able to engage in deal making and capital generation through borrowing on favorable terms. Such firms are also able to issue stock more easily and at better prices. I will use a case study to demonstrate how some firms sometimes adopt an aggressive revenue recognition strategy in hope to show better performance. The paper will further reports detailed evidence on how managers manage earnings.

CHAPTER I

Introduction

The Public Sector Committee (PSC) of IFAC has released an exposure draft of a proposed study entitled Definition and Recognition of Revenues. Information on revenues is significant in assisting users to charge the financial situation and performance of governments. Comparing revenues with expenses facilitates users to charge inter-period equity, i.e. whether present revenues are adequate to cover the costs of programs and services given in the existing period. Concepts of revenues developed in the private sector pose some interesting issues when applied to governments. While governments have some revenues similar to business enterprises (e.g. inflows arising from the sale of goods and services, interest, dividends), most of their revenues are non-reciprocal transfers in the form of taxes, levies, duties and fines obtained through the use of sovereign powers.

Other non-reciprocal revenues may resemble grants and donations received by non-governmental entities, although there may be circumstances (e.g. the annual appropriation process) which create particular issues for governments. Additionally, generally accepted accounting practice for grants and donations is not particularly well established. Governments also face distinctive measurement problems in recognizing revenues. For example, there is not yet any international consensus on the appropriate basis for measuring taxation revenues. Furthermore, there may be a considerable time lag between the point at which the transaction which gives rise to the revenue takes place and the point at which the amount can be reliably estimated.

The study identifies and acknowledges that a wide variety of views exists about whether, when and how certain revenues should be recognized and reported. It is intended that this study will contribute to the debate about these issues. In the year 1999, Healy and Wahlen provided a general definition and description of the earnings management. According to this definition, financial reporting, as well as, modification of these monetary reports involves the decision-making of managers for the misleading representation of financial performance of the company. (Healy and Wahlen 1999, 368) One of the examples of this definition can be taken by the situations where capital lease handling is utilized by the lessors at the time of arrangement of leases by the earnings management. In addition, GAAP can also be related with the earnings management, which is quite, but cannot be distinguished easily.

For many years, it has been an observation that regulators and watchdogs have been worried due to an aggressive earnings management. (Levitt 1998) In addition, a number of major businesses, such as Enron, WorldCom, etc. have been involved in the shocking accounting, which has resulted in the exaggeration of apprehension and anxiety. In the result, a number of responses have been received, which has included the SAB No. 101, that is, suitable revenue recognition, as well as, SAB No. 100 and 102, that are, expense recognition, and a number of other SABs that contain unsullied guidance from the SECs. Moreover, fresh compulsion of the AICPA has also been included in the abovementioned responses that are related with the reporting of auditors regarding the waiving of audit modifications, etc. Furthermore, the accuracy and wholeness of the company's annual reports should be confirmed by the CEOs, as well as, CFOs, which is one of the new requirements of SEC, which has been included in these responses.

So far, earnings management has not been properly studied or researched methodically by the experts, which can provide definite descriptions of this term. However, a number of studies have been carried out in this regard, which has described the occurrence of earnings management, and have provided its different characteristics. For instance, a number of areas are required during the alteration of regulations, which can be recognized by regulators, as well as, habitual setters. In addition, training related to the earnings management can also be given to the beginners by this research, as performance of the company is assessed and reported by the auditors. In addition, earnings management helps the foreseeing of the investors' transactions by the managers, as well as, audit committees. Earnings management can also be taught well by the educators, if the occurrence of earnings management is researched in a proper way.

Recently, a new practice has emerged in the business world of different countries, where external audit firm of a corporation is communicated for the hiring of senior executives that performs the financial reporting. This practice has been referred as the revolving door, and has been observed in one of the major corporations of the world, such as, Global Crossing, Enron, HIH Insurance, and Independent Insurance in the United States, Australia, and the United Kingdom respectively. (Clikeman, 1998) In addition, it has been observed that external auditor of the companies were involved in the hiring of managers for the financial reporting, as earlier mentioned in the paper, which results in the fraud financial statements. One of the examples of prominent fraud cases in this regard is the taxpayer. Its customers are provided with systems and products related to the telecommunication.

Limited customization was required by the abovementioned company for the selling of small telecommunication systems, which included in one of its segments. Moreover, it was observed that completion of these products required several months. A number of statements

were recorded in the sales agreement regarding the system delivery. In this regard, free on board, delivery was considered, and certification, as well as, testing of the system was required before the full payment from the customer. However, the employees of the taxpayer were considered for the testing purpose of these systems. Finally, the customer has the limitation of ten days for the notification to the taxpayer. In the reply, ninety days were given to the taxpayer for the recertification of the system. It has been observed that income was recognized by the taxpayer before the SAB 101, which was used for the utilization of both financial, as well as, tax legalities. After SAB 101, income recognition was postponed by the taxpayer, until the product was accepted by the customer, as all the post-delivery compulsions were fulfilled by the taxpayer.

MicroStrategy (also referred to as "the firm" in this article) produces data-mining software that analyzes large amounts of corporate data on marketing and customer relationships. The firm is one of the largest decision support software vendors of its type, with customers across industries as diverse as retail, finance, telecommunications, insurance, healthcare, pharmaceuticals, and consumer packaged goods. The firm reported that it has entered into relationships with hundreds of systems integrators, application developers, and platform partners. MicroStrategy delivers its software via wireless networks and the Internet. It also offers consulting, training, and support services for its customers and partners. MicroStrategy began selling data-mining software in 1994 and went public in June 1998 with an initial public offering price of $12 per share. The stock opened on the first day of trading on the NASDAQ at $15 7/8 and traded as high as $18 1/8. The timing of revenue recognition is significant in publicly held companies, especially because of its impact on the market valuation of the firm. In recent years, fierce competition for capital in the technology industry has led to increasingly liberal

approaches taken by firms and their auditors in recognizing revenue. Firms pressured to show performance often fall prey to the temptation to recognize revenue too early. The early recognition of revenue could have a positive impact on a company's share price if it leads analysts and investors to revise upward their estimates for the company's growth rate in earnings. Investors often assign higher price earnings to stocks that have high earnings growth rates, so the early recognition of revenues eventually boosts the market value of a firm's shares.

The accounting profession has issued a collection of guidelines for revenue recognition that include industry- and transaction-specific rules. The two primary criteria in the accounting literature for revenue recognition are that revenue should not be recognized until it is (a) realized or realizable and (b) earned (Financial Standards Accounting Board 1953) Both of these criteria generally are met at the point of sale, which is defined as the delivery of goods or the rendering of services to customers. In cases in which services are delivered over a period of time, revenue is recognized as earned over the passage of time (SFAC No. 5). The AICPA Statement of Position (SOP) 97-2 (1997) requires that revenue recognized from software arrangements should be allocated to each element of the arrangement according to the relative fair values of the elements, such as software products, upgrades, enhancements, post contract support, installation, and training.

It has been noted by the SEC Staff Accounting Bulletin 101 that revenue recognition, and similar purposes are not considered during the occurrence of delivery in licensing, as well as, similar arrangements. However, this term has been limited until the commencement of the license term. It has been stated by the SAB 101 that if the customer receives a product or a system physically without the commencement of a license term, recognition of revenue should

be not realized. However, the transactions, as well as, earnings process should be considered for the recognition of the revenue after the inception of the license term.

CHAPTER II

Background

Different issues were addressed in the first issue. In this regard, one of the issues considered the matter of delaying of revenue recognition in the tax purposes that was an important question. Moreover, the underlying facts, as well as, changes in the requirements of IRS content were considered in this issue. It was stated by the taxpayer that SAB 101 was implemented by the taxpayer during the period, and acquisition resulted in the increment of sales. Moreover, it was stated that customer satisfaction was focused with a greater emphasis by the company due to the abovementioned achievement. However, it was concluded by the IRS that the underlying facts were not changed; even the abovementioned practices were changed by the taxpayer.

It has been indicated by the Service that execution of SAB 101 has not affected, and on changes have been observed in the sales agreement of the taxpayer. Thus, a number of accounting methods were applied with the same facts. Therefore, it was evaluated that IRS permission was required in the delay, which was one of the changes in the accounting method related to the tax purposes. It has also been argued by the taxpayer that, as GAAP has been obeyed by the new method, the federal tax purposes should incorporate the method. Further, it has responded by the Service that income for tax purposes does not clearly reflects by the obeying of GAAP. The Thor Power Tool Co., 439 US 522 (1979) has been referred in this regard.

Clear Reflection of Income

Moreover, the underlying facts, as well as, changes in the requirements of IRS content were considered in this issue. It was stated by the taxpayer that SAB 101 was implemented by the taxpayer during the period, and acquisition resulted in the increment of sales. Moreover, it was stated that customer satisfaction was focused with a greater emphasis by the company due to the abovementioned achievement. However, it was concluded by the IRS that the underlying facts were not changed; even the abovementioned practices were changed by the taxpayer. As the first issue was described earlier in this paper, the second issue will now be discussed. Clear reflection of income for tax purposes by the new method and its possibilities have been addressed in the second issue. Generally, it has been observed that income recognition delays greatly due to the criteria that are required for the income recognition for financial reporting reasons with the incorporation of SAB 101.

In this regard, it has been stated in the second issue that formal acceptance in written from the customers was required for the deferral of income recognition by the taxpayer. For tax purposes, it is a requirement that all the occurrences related to the receipt of income, as well as, determination of accurate amount, should be observed for the recognition of income by the taxpayer. In this issue, it was concluded by the Service that installation date was referred for the income recognition by the taxpayer. In other words, certification, as well as, test of system by the taxpayer is required.

Thus, the installation date of the system was considered by the taxpayer for the income recognition, as it is the requirement for a number of financial reporting purposes. In other words, formal acceptance of the customer regarding the system is required. Under SAB 101, accumulation of income has considered a must condition, that is, the customer acceptance.

However, this argument has been rejected by the Service, and it was stated by it that a ministerial act can be deemed in terms of this formal acceptance.

Observations

A number of observations have been made and researched on the earnings management. In this regard, awareness has been given to the taxpayers, and it should be noted by them that different principles have been emphasized by the book and tax. It has been indicated by the TAM by following the Thor Power, that income recognition should be rescheduled by the companies until realization is assured by them. In this regard, purposes related to tax have been greatly highlighted. On the other hand, income must be recognized by the taxpayers, as soon as it becomes reasonable and fixed. Furthermore, it has been indicated by the TAM that existence of a previous condition must be present for the deferral of income acknowledgment.

Note In the TAM, the Service based its conclusions on both issues on the taxpayer's sales agreement. The agreement did not require the customer's final acceptance prior to final billing. However, it was industry practice to bill only after final acceptance. If the sales agreement had been changed to reflect the taxpayer's practice, such that final payment was due on customer acceptance, the IRS might have been more willing to accept the taxpayer's arguments that not “all events” occurred until that time, and there was a change in underlying facts.

The sharing of personnel between companies committing financial fraud and their audit firms is a contentious issue that has recently been discussed in the business press and by Congress (Jubak [2002]; U.S. Senate [2002]), and has eventually led to the practice being specifically addressed in the Sarbanes-Oxley Act of 2002 (U.S. House of Representatives [2002]). A provision of Section 206 has been included in this recent legislation, in which the hiring of senior financial reporting managers by the public companies has been forbidden in the

United States. Specifically, limitation of one year has been put by this provision in the country. Debates and propositions related to the abovementioned employment restrictions have been imposed in the past. However, a cooling off period has now been introduced in this practice particularly. On the other hand, income must be recognized by the taxpayers, as soon as it becomes reasonable and fixed. Furthermore, it has been indicated by the TAM that existence of a previous condition must be present for the deferral of income acknowledgment. In this regard, impairment has been indicated by a number of legislators, as well as, commentators in terms of the audit independence. In addition, these situations have been related with more financial misrepresentations. (Imhoff [1978, 2003]; ISB [2000]; Jubak [2002])

However, most of the extant research on this issue has focused on perceptions of CPAs and various financial statement users as to whether auditor independence is diminished. As earlier mentioned in the paper, no experiential examination of employment practice has been published that can provide any association with the adverse results being suffered by the business shareholders, despite concept of revolving door has been related with unfavorable observations in the past. In this regard, it has been observed that earnings management has been excessively practiced, which has been considered as one of the unpleasant outcomes. In all the securities markets, all the investors, as well as, regulators have concerned on earnings management, which has resulted in the focus on the same in this paper. (Collingwood, 2001; Klein, 2002)

In essence, our study examines whether the concerns regarding possible impairment of auditor independence, and the resultant restrictions on auditor employment enacted in the Sarbanes-Oxley Act (SOA) of 2002, are supported when examining one indication of possible impairment of auditor independence—changes in the levels of reported accounting accruals. It has been indicated by our results that earnings management did not provide any significant

differences during the practices of revolving door hiring concept, when companies were compared with each other on the bases of hiring from non-audit firms, audit firms, etc.

Using both the cross-sectional version of the modified Jones (1991) discretionary total accruals model and the measure of non-operating accruals introduced by Givoly and Hayn (2000), these companies do not exhibit significant differences in changed accounting accruals either right before or immediately after the hiring of individuals from their external auditor compared to the groups of control firms. Specifically, we find no evidence of significant differences in the changes of reported accounting accruals in the period immediately preceding the hire (from *t - 2 to t* - 1), the individual's initial year of hire (from f — 1 to *t),* or the three-year period surrounding their hire (from; — 1 to f + 1). We also test for, but do not find evidence that, earnings management has increased by firms hiring their auditors over the 11 -year period studied.

Thus, while numerous arguments against this practice exist, our empirical findings regarding changed levels of reported accounting accruals does not provide support for the supposition of significantly impaired auditor independence surrounding these hiring's. Following is the rest of the paper. Section 2 provides a brief background discussion of the relevant literature and presents our hypotheses. Section 3 discusses the earnings management measures used in the study. Section 4 describes our samples and Section 5 discusses the results. Section 6 summarizes the conclusions of our study. As earlier mentioned in the paper, no experiential examination of employment practice has been published that can provide any association with the adverse results being suffered by the business shareholders, despite concept of revolving door has been related with unfavorable observations in the past. In this regard, it has been observed that earnings management has been excessively practiced, which has been considered as one of the

unpleasant outcomes. In all the securities markets, all the investors, as well as, regulators have concerned on earnings management, which has resulted in the focus on the same in this paper.

CHAPTER III

Prior Research

As noted above, and in the wake of several high-profile financial frauds, the Sarbanes-Oxley Act of 2002 includes a section on auditor conflicts of interest that expressly precludes revolving door employment practices. (Section 206) Specifically, it has been stated in the act that provision of audit service to a chief executive officer, chief accounting, as well as, financial officer by a registered public accounting firm is lawful. Moreover, if the public accounting firm had employ the same person in the past, it would be unlawful according to this act. (Sector 206)

While auditor-to-client employment restrictions have long been debated within the profession, including various proposed restrictions (AICPA [1978]; ISB [2000]; Pitt [2002]), the new rule is the first to directly regulate this practice. In this regard, specific prevention has been done by the abovementioned act, by which, the former firms have been averted to employ the individuals as financial reporting individuals who were formerly employed in the same firms.

Prior studies (e.g., Imhoff [1978]; Firth [1981]; Schleifer and Shockley [1990]; It has been demonstrated by Koh and Mahathevan in the year 1993 that industry has a very common place, that is, the revolving door. In addition, it has been revealed by them that a high level of concern regarding the earlier mentioned unfavorable outcomes should be possessed by bankers, financial statement users, and a number of financial analysts in the industry. In the year 1994, Parlin and Bartlett also supported these perception outcomes by their findings. According to them, a larger beginning estimate of materiality was established by the auditors in their study. Additionally, Kaplan and White cotton (2001) found that auditors were generally not likely to report peers that violated established firm or professional employment rules concerning discussing or accepting employment with audit clients. However, while these studies have

provided some insight into the perceptions of this employment practice, no prior research that we are aware of has specifically addressed whether firms hiring individuals from their external auditor manifests in differential financial reporting on the part of the hiring company.

Specifically, if auditor independence is impaired with respect to the potential employer before their hire, and/or these individuals use audit-firm-specific knowledge to enhance their new employer's reporting after their hire, then we would expect companies employing individuals from their former auditor to exhibit larger changes in reporting discretion in their financial statements either immediately before or after the hire compared to levels reported by other similar companies. Researchers (e.g.. Ball and Brown [1968]; Beaver et al. [1979];

In the year 2001, a relation between earnings and prices of the stock was documented by DeFond and Park. It was noted in this documentary that management with a strong enticement for the management of earnings is provided by this relationship. Particularly, stock price performance has also been related with the remuneration of the earnings, which is a particular incentive of this relationship. (Healthy, 1985; Yermack, 1997) Therefore, finding of required confirmations regarding the exploitation related to the accounting has been not a matter of surprise for the researchers. One of the reasons of this is the weak practices of corporate domination around the world. (Beasley, 1996; Carcelio and Neal, 2000; Klein, 2002)

These studies, however, have not yet addressed the issue of corporate hiring practices regarding financial executives and actual financial reporting. In regard to the revolving door, two issues arise. The first is whether the newly hired individual was truly independent with respect to their new employer in their former role as outside auditor. The AICPA has long recognized that once an individual is formally approached by a client regarding possible employment, independence with respect to that client that is now a potential employer is difficult to maintain,

and have required these individuals to notify their audit firms and to withdraw from servicing these clients until the employment issue is resolved (AICPA [1978, 1991, 2002]).

Notwithstanding this requirement, previous research has demonstrated that these potential employment discussions are not universally reported and individuals may not necessarily withdraw from these audit engagements. To the extent that this is true, these individuals may treat the current audit client/potential future employer less strictly or critically if they anticipate a reward of an attractive offer of future employment for such accommodating behavior. Accordingly, these individuals are in a position, because of their audit relationship with the client, to indirectly affect the company's financial reporting decisions and reported financial statements (Francis et al. [1999]). Such breakdowns in auditor independence would allow companies to exercise excessive earnings management practices in the period just prior to the hiring of their former auditor.

After the hiring, earnings management is practiced uniquely by the financial reporting personnel, who used to be the former auditors in the same firms. (Beasley et al, 2000; Imhoff, 2003) In this regard, not only the specific reporting characteristics of the company are known by them, but even, the audit techniques that have been employed by them formerly are understood personally by them, which were used for the examination and evaluation of accurate amounts for the financial reporting and tax purposes.

Moreover, the current auditors are also known by them personally, and there are chances that some of the auditors may have worked under them also. (ISB, 2000) Former auditors might be afforded by the abovementioned information and relationships that are personally managed by these personnel, as public companies have now employed these individuals for the purposes of financial reporting and accumulation of statements.

Additionally, former SEC Chair Levitt has contended that earnings management was on the rise during the 1990s (Levitt [1998]). In fact, several researchers have provided evidence consistent with significant earnings management in more recent periods to meet earnings expectations (Bartov et al. [2002]; Beatty et al. [2002]; Matsumoto [2002]; Moehrle [2002]). Dechow and Skinner (2000) note that several studies have documented an unusually large number of zero and small positive earnings forecast errors (cases where companies just meet or slightly exceed analyst's earnings forecasts) compared to small negative errors in recent years (DeGeorge et al. [1999]; Richardson et al. [1999]).

Recent studies by Brown (2001) and Matsumoto (2002) further document a time-series trend in earnings forecast errors. Brown's (2001) study finds that over the 16-year period of 1984—1999, the proportion of companies whose earnings just meet or slightly exceed analysts' forecasts has significantly increased, while the proportion of companies just missing their earnings forecast has declined. His study shows that median earnings surprises have shifted over this time period from small negative surprises to small positive surprises. Similarly, Matsumoto (2002) finds that the percentage of companies meeting or exceeding their analyst forecasted earnings figures grew from 41 percent in 1985 to 70 percent in 1997. Thus, the conjecture by Levitt (1998) does appear to have some empirical merit—earnings management appears to have increased over the more recent time periods based on the significant increase in companies meeting or beating analysts' earnings forecasts.

Hypotheses

It has been an expectation that, as financial reporting individuals have been recently hired from the CPA firms directly by the companies, more earnings management would be observed in future based on the abovementioned discussion in this paper. The increase in earnings

management may take place immediately prior to hiring when the individual is still employed by their audit firm, or may be manifest immediately subsequent to hiring when the individual is now a client of their former audit firm and is directly responsible for the company's financial reporting.

Thus, our first two hypotheses:

Hypothesis 1

It has been expected that exhibition of earnings management can be increased immediately in the firms that have engaged in the hiring of financial reporting individuals directly from their auditors, as compared with the companies before the hiring, not engaged in this practice.

Hypothesis 2

It has been expected that exhibition of earnings management can be increased immediately in the firms that have engaged in the hiring of financial reporting individuals directly from their auditors, as compared with the companies after the hiring, not engaged in this practice. We also examine whether increases in earnings management by companies engaging in the practice of hiring their external auditors has become more pronounced in recent years. In the year 1998, it was argued by Former SEC Chair Levitt that recent years have observed more enveloping in the practice of earnings management, and this chronological shift has been empirically supported by Brown and Matsumoto in the year 2001 and 2002 respectively. However, no analysis has been performed on companies hiring individuals directly from their external audit firms to assess whether earnings management practices in these situations has increased in recent years. Therefore, the following is the third hypothesis that has been made for the evaluation of practices related to the earnings management with their relation to the

participants of revolving door, as well as, with the statement that has been made by Former SEC Chair Levitt in the year 1998, as earlier mentioned in the paper.

Hypothesis 3

In recent years, it has been an observation that auditors are being communicated for the hiring of senior financial reporting individuals by a number of companies have resulted in the increment of earnings management practices. In this regard, evaluation and detection of earnings management has been done by the employment of a number of approaches by various researchers and experts, such as, Healy, Dechow, Teoh, DeGeorge, Givoly and Hayn in the year 1985, 1996, 1998, 1999, and 2000 respectively. In this study, earnings management has been evaluated by the utilization of two modern measures.

To assess total discretionary accruals we use the cross-sectional version of the widely applied (Teoh et al. [1998a]; Erickson and Wang [1999]; Klein [2002]) modified Jones (1991) model that estimates accrual levels for individual firms, then calculates the unexpected amount of accruals—typically referred to as "discretionary accruals." To address empirical concerns regarding the Jones model (Dechow et al. [1995]; Erickson and Wang [1999]), we also use the non estimated measure of non operating accruals introduced by Givoly and Hayn (2000).

Total Accruals Measure

Unexpected accounting accumulation has been identified by the model of Jones, which has also been included in the reported financial statements. It has been observed that optional accumulation part of reported earnings utilizes these accumulations as a proxy. (Dechow and Skinner, 2000) As in prior research, total accruals are defined as net income minus cash flow from operations."•^ Unexpected or "abnormal" total accruals are estimated from the following model for each firm:

$TC_{,,}/TA_{,,,\_,} = a, [1/TA_{,,\_,}] + p_{,,} [(CREV_{,,} - CAR_{,,}) / TA_{,,\_,}] + P_{,,}. [GPPE, / TA, \_,] + e,$

Where TC is total accruals, TA is total assets, CREV is change in revenue, CAR is change in accounts receivable, and GPPE is gross fixed assets for firm / at year *t.* It should be noted that the abovementioned accumulations have been denoted with an 'e' as a residual. Since random distribution of the incentives that are required for the management of earnings has been done among the companies, the unconditional value of abnormal accumulations has been used by the earlier studies that have employed the model of Jones. Some of the studies have been carried out by Healy and Wahlen, Warfield, Becker, Bartov, Reynolds, Francis, Frankel, and Klein in the year 1999, 1995, 1998, 2000, and 2002 respectively. (Consistent with these prior studies, we use the absolute value of discretionary total accruals to measure the combined effect of income-increasing and income-decreasing earnings management decisions.

CHAPTER IV

Methodology

To mitigate methodological concerns regarding the use of the Jones model, we also use the measure of non operating accruals introduced by Givoly and Hayn (2000) in their time-series examination of earnings, case flows, and accruals. In their study, they measure non operating accruals, which they argue are a better measure of managements' "discretionary accruals" as net income plus depreciation minus cash flow from operations, less the changes in accounts receivable, inventory, prepaid expenses, accounts payable, and taxes payable.

The result is a measure of accruals consisting primarily of items such as bad debt and loss provisions, gains/losses on asset disposals, asset write-downs, accruals and the capitalization of expenses, and deferrals of revenue and their subsequent recognition. Givoly and Hayn (2000) argue that this measure of non operating accruals includes items that are largely under the discretion of management regarding the timing and/or estimation of recorded amounts. Accordingly, they represent an additional gauge of whether companies are actively trying to manage reported results. To control for size effects, we scale their measure by total assets at the beginning of the year (TA). Accordingly, we assess whether this second measure changes substantially for companies after the hire of an individual from their audit firm.

Earnings Management Period

This study tests whether companies exhibit excessive earnings management surrounding the hiring of key financial reporting personnel directly from their auditors. Specifically, we examine whether reported accruals increase in the year prior to and in the year the executive joined the public company (time *t)."* Accordingly, we examine the change in our accruals measures for year t — { {t — 2 *to* t — 1) and year t (t — 1 to t). Additionally, to capture any

timing lags regarding the individual's influence over financial reporting after their hire, we also assess the three-year period from year f — 1 to year *t* + 1 surrounding their hire. If a biased financial reporting is the outcome of the practice that involves the auditor of a company for the hiring of a new financial reporting person, the period for the appointment of new individual would be very critical for the company. One of the reasons of the seriousness is that it has been earlier mentioned in the paper that these individuals have a decent knowledge regarding the financial techniques, as well as, financial auditors of the company. Thus, we assess the increases in reported accruals immediately prior to their hiring through the two subsequent reporting years.

Sample Selection

A number of key words have been considered for the full searching of the Dow Jones Interactive Database for the identification of newly hired individuals by the company. In this regard, 11-year period from the year 1989 to 1999 was considered with the keywords, such as, CFO, Controller, Chief Accounting Officer, etc. We chose these job titles for searches because these are the titles specifically identified in the SOA as the prohibited company positions. We then searched background biographies to identify former employers of the newly hired individuals. We then used Compustat to identify the company's audit firm as well as the financial statement data needed to calculate the accruals. Moreover, manager or partner level professionals at an audit firm have been considered during the study. In addition, companies that have immediately hired individuals for a senior post have been considered during the study.

The resultant test sample is comprised of companies that had engaged in the type of employment practice now expressly prohibited by the act. Accordingly, our sample affords a more direct test of the "revolving door" than including companies that employ individuals that were former employees of their audit firms regardless of the length of employment tenure or

time to appointment. In order to confirm whether earnings management is practiced excessively by the companies having individuals from their former auditor, three control groups have been categorized for the testing of samples. Companies not employing the individuals from their former auditors have been included in the first control group. In this regard, ranks outside of public accounting are utilized for the hiring of individuals in these companies. Secondly, the companies employing individuals from their former auditors have been included in the second control group, which will also be compared with the tested samples.

The final control group consists of companies that maintained their incumbent reporting executives and did not hire new financial reporting personnel (i.e., the "no-hire" group). This last group is used to control for the possible general reporting changes that may be manifest when hiring any new financial reporting personnel. NYSE, AMEX, and NASDAQ companies were the confined ones during the formulation of the samples, as the required financial data had to be obtained for the calculation of earnings-management estimation model. In addition, financial services, as well as, utilities industry firms were excluded from the study, in order to remain consistent with the earlier studies. (SIC codes 6000-6999 and 4900-4999) In this regard, 1, 128 individuals were identified initially. The period of 1989-1999 was considered for the employment of financial reporting positions of these personnel.

Furthermore, direct hiring of individuals from the former auditors by 117 companies were observed during the study. Subsequently, non-CPA firms were considered for the hiring of individuals by a number of companies during the derivation of first control group of matched non-auditor hires. Then, the auditor-firm relation firms were compared with the abovementioned non-auditor firms. Specifically, title, year of hiring, SIC codes, and total assets were used for the matching purposes. During the study, sixteen of the identified 117 company hires could not be

adequately matched and 101 auditor firm relation hires was the final sample of the study. In addition, sixty-seven hires of financial reporting personnel were also identified during the search procedures.

The auditor no-firm relation group was the second control group during the study. However, the test group could not be matched with these individuals due to the smaller size of the samples. In the result, an additional control group was formed that included all the sixty-seven companies for the purpose of analyses. The knowledge effect related to the general auditor is controlled by this group. Our final control group was made up of companies that did not hire new personnel and continued with their incumbent financial reporting executives. This "no-hire" group of 101 was derived from all Compustat firms and was matched to our test sample of firms based on reporting year, two-digit SIC code, and total assets. 5. Results

Sample Distribution and Descriptive Statistics

The total number of test people, as well as, control firms has been outlined in the Panel A of Table 1. The period of 1989 to 1999 has been considered for a relatively even spread of the sample firms, as shown in this panel. It has also been shown that from the year 1994, slightly greater increment has been observed in the annual numbers of these firms. It has been indicated by Panel B that approximately fifty-six percent of new and matched control samples have been comprised in the two-digit SIC codes that have been related to the manufacturing sector. Moreover, an even distribution of the abovementioned samples related to the five accounting firms have been illustrated by Panel C. Additional comparisons (not tabled) of net sales, total assets, long-term debt to- assets, operating cash flow to assets, and percentage change in sales indicate that there were no significant differences *(p > O.]O)* Between all three control samples

and the test sample.

TABLE 1

Sample Distribution by Event-Year, Industry, and Accounting Firm Affiliatio

Panel A: Sample distribution by event-year

Event-Year	Auditor-Firm Relation Firms	Matched Nonauditor Firms	Nonmatched Auditor No-Firm Relation Firms	Matched No New Hire Firm
1989	5 (5.0%)	3 (3.0%)	5 (7.5%)	5 (5.0%
1990	2 (2.0%)	3 (3.0%)	7 (10.4%)	2 (2.0%
1991	8 (7.9%)	7 (6.9%)	9 (13.4%)	8 (7.9%
1992	9 (8.9%)	8 (7.9%)	5 (7.5%)	9 (8.9%
1993	5 (5.0%)	4 (4.0%)	6 (9.0%)	5 (5.0%
1994	10 (9.9%)	9 (8.9%)	7 (10.4%)	10 (9.9%
1995	9 (8.9%)	14 (13.9%)	8 (11.9%)	9 (8.9%
1996	19 (18.8%)	14 (13.9%)	4 (6.0%)	19 (18.8%
1997	14 (13.9%)	16 (15.8%)	6 (9.0%)	14 (13.9%
1998	12 (11.9%)	11 (10.9%)	5 (7.5%)	12 (11.9%
1999	8 (7.9%)	12 (11.9%)	5 (7.5%)	8 (7.9%
Total	101	101	67	101

Panel B: Sample distribution by two-digit SIC industry

SIC Codes	Industry	Auditor-Firm Relation Firms	Matched Nonauditor Firms	Nonmatched Auditor No-Firm Relation Firms	Matched N New Hire Firms
10–19	Mining & Construction	3 (3.0%)	3 (3.0%)	4 (6.0%)	3 (3.0%
20–39	Manufacturing	57 (56.4%)	57 (56.4%)	24 (35.8%)	57 (56.4%
40–49	Transportation and Utilities	6 (5.9%)	6 (5.9%)	8 (11.9%)	6 (5.9%
50–59	Wholesale and Retail	14 (13.9%)	14 (13.9%)	8 (11.9%)	14 (13.9%
70–89	Services	21 (20.8%)	21 (20.8%)	23 (34.3%)	21 (20.8%
Total		101	101	67	101

Panel C: Sample distribution by audit firm affiliation

Accounting Firm	Auditor-Firm Relation Firms	Nonmatched Auditor No-Firi Relation Firms
Arthur Andersen	17 (16.8%)	11 (16.4%)
Deloitte and Touche	17 (16.8%)	11 (16.4%)
Ernst & Young	25 (24.8%)	12 (17.9%)
KPMG	19 (18.8%)	11 (16.4%)
PricewaterhouseCoopers	19 (18.8%)	17 (25.4%)
Others	4 (4.0%)	5 (7.5%)
Total	101	67

Descriptive statistics for sample firms. The auditor-firm relation firms are firms where the newly hired individual worked for the sample firms' auditor immediately before being hired by the sample firm. The matched nonauditor firms are firms where the newly hired person did not work for any audit firm immediately prior to being hired. The matched no new hire firms are firms where the firm did not hire a new financial executive in the three years surrounding the matching year. The nonmatched auditor no-firm relation firms are firms where the newly hired person did not work for the sample firms' auditor, but worked for a different public accounting firm immediately before being hired.

CHAPTER V

Results and conclusions

Univariate Tests

The total optional accumulation has been indicated by the first two columns of Table 2, which has been supported by the modified Jones model. In addition, the non-operating accumulation with the non-estimated measure has also been considered in this table. Moreover, the complete total, as well as, non-operating accretions have been presented in the second set of columns in the Table 2. Specifically, 101 companies have been referred in this table. While the values for both groups for all four years *{t — 2, t — \,t,* and f + 1) are nonzero *ip* < 0.001), to more directly assess our first two hypotheses, we compare changes in accruals levels for these two groups in the last portions of Table 2. A number of comparisons and studies have evaluated that no significant differences have been found between the mean changes in absolute optional accumulation and the total non-operating accumulation. Particularly, levels for / - 2 to / - \, *t* - 1 to /, and for f — 1 to; + 1 has been referred in this regard.

For example, companies hiring financial reporting individuals from their external auditor exhibit a mean (median) change in discretionary total accruals of 0.0009 (0.0057) immediately prior to their hire *(t - 2 to t* - 1), and -0.0056 (0.0022) for the initial year of hire *(t* — 1 to?); which are not significantly different than the mean (median) changes of -0.0049 (0.0000) and -0.0187 (-0.0065) found for the matched non auditor control group, respectively. Similar non significant changes are found in *the t ~ I to t* + \ time period comparisons for discretionary total accruals, and in assessing changes in non operating accruals for all three time periods. Comparisons of both accruals measures, for all time periods, indicate no significant differences in changes in accruals between our test sample and the control sample of matched non auditor

hiring firms. Based on these analyses, companies hiring financial reporting executives directly from their audit firms do not appear to manage their reported accruals any more aggressively immediately prior to or following the hire than companies hiring individuals from non audit firms. These findings do not support //, or *H2* as we do not find a significant difference in changed levels of accounting accruals surrounding these hiring decisions.

As earlier mentioned in the paper, a number of comparisons have been done for the evaluation of earnings management. In this regard, the results of these comparisons have been presented in the Table 3. It has also been noted that results of the Table 2 has been constant with the results in the Table 3. Again, no significant differences have been observed in these comparisons, as similar with the results of the Table 2. However, differences between this second control group and our test sample for changes in accruals levels from *t - 2 to t - I, t* - 1 to f, and for f - 1 to f + 1 indicate no significant differences between groups *(p* > 0.10). These findings also do not provide support for //, or *H2* when comparing our auditor-firm relation test sample to individuals hired from public accounting firms other than the company's auditor. Subsequently, the results of the comparison of the auditor-firm relation test sample with the third control sample have been presented in the Table 4.

TABLE 2

Absolute Accruals: Auditor-Firm Relation versus Matched Nonauditor Firms

Absolute discretionary total accruals and absolute nonoperating accruals

	Auditor-Firm Relation Firms (n = 101)		Matched Nonauditor Firms (n = 101)		Difference	Difference
	Mean	Median	Mean	Median	in Means	in Medians
Time (t − 2)						
Discretionary total accruals	0.1106	0.0458	0.1161	0.0702	−0.0055	−.0244*
					(0.772)	(0.094)
Nonoperating accruals	0.0807	0.0352	0.0762	0.0470	0.0044	−0.0118
					(0.732)	(0.595)
Time (t − 1)						
Discretionary total accruals	0.1085	0.0606	0.1091	0.0722	−0.0006	−0.0116
					(0.971)	(0.797)
Nonoperating accruals	0.0840	0.0335	0.0720	0.0476	0.0120	−0.0141
					(0.382)	(0.741)
Time (t)						
Discretionary total accruals	0.1145	0.0791	0.0871	0.0681	0.0273*	0.0110
					(0.068)	(0.207)
Nonoperating accruals	0.0867	0.0335	0.0647	0.0379	0.0219	−0.0044
					(0.111)	(0.780)
Time (t + 1)						
Discretionary total accruals	0.1080	0.0716	0.0953	0.0655	0.0126	0.0061
					(0.372)	0.334)
Nonoperating accruals	0.0767	0.0441	0.0545	0.0320	0.0221*	0.0121*
					(0.051)	(0.072)
Time [(t − 1) − (t − 2)]						
Discretionary total accruals	0.0009	0.0057	−0.0049	0.0000	0.0059	0.0057
					(0.762)	(0.583)
Nonoperating accruals	0.0033	−0.0001	−0.0011	0.0034	0.0045	−0.0035
					(0.789)	(0.870)
Time [(t) − (t − 1)]						
Discretionary total accruals	−0.0056	0.0022	−0.0187	−0.0065	0.0131	0.0087
					(0.459)	(0.582)
Nonoperating accruals	−0.0025	−0.0002	−0.0078	−0.0050	0.0053	0.0048
					(0.741)	(0.901)
Time [(t + 1) − (t − 1)]						
Discretionary total accruals	−0.0088	0.0079	−0.0119	−0.0038	0.0030	0.0117
					(0.862)	(0.836)
Nonoperating accruals	−0.0090	−0.0023	−0.0160	−0.0035	0.0069	0.0012
					(0.615)	(0.444)

Absolute discretionary total accruals and nonoperating accruals are as a percentage of previous year-end total assets. Absolute discretionary total accruals are from the modified Jones (1991) model. Absolute nonoperating accruals are as described by Givoly and Hayn (2000). The auditor-firm relation firms are firms where the newly hired individual worked for the sample firms' auditor immediately

TABLE 2 (*continued*)

before being hired by the sample firm. The matched nonauditor firms are firms where the newly hired person did not work for any auditing firm immediately prior to being hired. Time (t) is the first year the newly hired individual worked for the auditor-firm relation firm. All other years ($t - 2$, $t - 1$, $t + 1$) are in relation to time t.

*Denotes significance at the 10% level.

Note that *P*-values are in parentheses. *P*-values for differences in means are calculated using a t test assuming unequal variances, while differences in medians are calculated using a Wilcoxon signed-rank test.

Results from these comparisons are again consistent with the previous analyses. Absolute discretionary total accruals and non operating accruals are significantly greater than zero *(p* < 0.001) for times *t - 2, t* - \, *t,* and f -I- 1 for this final control group; however, differences between the "no-hire" control group and our test sample for changes in accruals levels for all time periods indicate no significant differences *(p* > 0.10) in changed accruals levels. All univariate mean and median comparisons of changes in both accruals measures (i.e., absolute total accruals and absolute non operating accruals) to all three control samples lend evidence of highly consistent patterns of accruals changes across groups. These univariate findings uniformly do not provide support for //, or/Zj.

Multivariate Tests

The changes in total optional accumulation has been utilized by the running of unbalanced ANOVAs for the assessment of test sample and three control groups that have been earlier discussed in the paper simultaneously. In addition, changes in the accumulation of Table 6 have also been referred for this purpose. Moreover, changes in total optional accumulation have been indicated by the panel A of Table 5. Once again, no significant differences were observed during this assessment. Thus, our test sample does not appear to be significantly different than the three control groups in this simultaneous analysis, again providing no support for //,. Results reported in panel B of Table 5 for the r - 1 to *t* analysis also indicate no significant overall differences in changes in absolute discretionary total accruals in the individual's first year of hire

across the four groups in our study *(p* > 0.499). This finding also does not support / / j. An examination of the r - 1 to r -I- 1 results presented in panel C of Table 5

TABLE 3

Absolute Accruals: Auditor-Firm Relation versus Nonmatched Auditor No-Firm Relation

Absolute discretionary total accruals and absolute nonoperating accruals

	Auditor-Firm Relation Firms (n = 101)		Nonmatched Auditor No-Firm Relation Firms (n = 67)		Difference	Difference
	Mean	Median	Mean	Median	in Means	in Medians
Time (t − 2)						
Discretionary total accruals	0.1106	0.0458	0.1203	0.0649	−0.0097	−0.0191
					(0.6411)	(0.146)
Nonoperating accruals	0.0807	0.0352	0.0906	0.0590	−0.0099	−0.0238
					(0.485)	(0.150)
Time (t − 1)						
Discretionary total accruals	0.1085	0.0606	0.1123	0.0686	−0.0037	−0.0080
					(0.842)	(0.916)
Nonoperating accruals	0.0840	0.0335	0.0831	0.0436	0.0008	−0.0101
					(0.959)	(0.775)
Time (t)						
Discretionary total accruals	0.1145	0.0791	0.0996	0.0632	0.0148	0.0159
					(0.413)	(0.479)
Nonoperating accruals	0.0867	0.0335	0.0725	0.0365	0.0142	−0.003
					(0.370)	(0.884)
Time (t + 1)						
Discretionary total accruals	0.1080	0.0716	0.0821	0.0484	0.0258	0.0232**
					(0.107)	(0.033)
Nonoperating accruals	0.0767	0.0441	0.0618	0.0410	0.0148	0.0031
					(0.214)	(0.558)
Time [(t − 1) − (t − 2)]						
Discretionary total accruals	0.0009	0.0057	−0.0112	0.0064	0.0122	−0.0007
					(0.577)	(0.748)
Nonoperating accruals	0.0033	−0.0001	−0.0039	−0.0098	0.0073	0.0088
					(0.689)	(0.240)
Time [(t) − (t − 1)]						
Discretionary total accruals	−0.0056	0.0022	−0.0115	−0.0133	0.0059	0.0155
					(0.770)	(0.908)
Nonoperating accruals	−0.0025	−0.0002	−0.0074	0.0008	0.0049	−0.0010
					(0.793)	(0.633)
Time [(t + 1) − (t − 1)]						
Discretionary total accruals	−0.0088	0.0079	0.0302	−0.0145	0.0213	0.0224
					(0.299)	(0.240)
Nonoperating accruals	−0.0090	−0.0023	−0.0147	0.0061	0.0056	−0.0084
					(0.724)	(0.860)

Absolute discretionary total accruals and nonoperating accruals are as a percent of previous year-end total assets. Absolute discretionary total accruals are from the modified Jones (1991) model. Absolute nonoperating accruals are as described by Givoly and Hayn (2000). The auditor-firm relation

TABLE 3 (*continued*)

firms are firms where the newly hired individual worked for the sample firms' auditor immediately before being hired by the sample firm. The nonmatched auditor no-firm relation firms are firms where the newly hired person did not work for the sample firms' auditor, but worked for a different public accounting firm immediately before being hired. Time (t) is the first year the newly hired individual worked for the auditor-firm relation firm. All other years ($t - 2$, $t - 1$, $t + 1$) are in relation to time t.

**Denotes significance at the 5% level.

Note that *P*-values are in parentheses. *P*-values for differences in means are calculated using a t test assuming unequal variances while differences in medians are calculated using a Wilcoxon signed-rank test.

indicate that changed levels of absolute discretionary accruals is also relatively consistent between groups for the three-year time period surrounding the individual's hire *(p* = 0.303), lending further support for the non significant differences found in the individual periods immediately prior to and subsequent to the individual's hiring. Table 6 presents the overall ANOVA model results for the changes in absolute non operating accruals from / - 2 to ; - 1 in panel A, from *t* - 1 to f in panel B, and from *t* — 1 to f + 1 in panel C. All three of these models are not significant at conventional levels *(p* = 0.973, 0.470, and 0.863, respectively). These results provide robust evidence to the consistency of reported changes in accruals levels of our test sample of "revolving door" companies and the three control groups used for comparison. High consistency has been observed in our results, and it has been suggested by this steadiness that significant higher increases have not bee exhibited by the companies that are engaged in the hiring of financial reporting professionals directly from their former auditors.

5.3 Tests **for** H:

Two ways have been employed for the portioning of our sample data into early and late hires, in order to test our third hypothesis. Subsequently, the median year of 11-year sample period has been considered for the splitting of data in the Panel A of Table 7. Moreover, the size of auditor-firm relation sample has been considered for the splitting of panel B in the same table.

These two partitioning techniques result in the comparison of subsample periods of 1989-1994 *(n* = 39) versus 1995-1999 *(n* = 62) and 1989-1995 *(n* = 48) versus 1996-1999 (n = 53)." Both panel A and panel B of Table 7 report that there is no statistically significant difference in terms of changes in absolute discretionary total

TABLE 4

Absolute Accruals: Auditor-Firm Relation versus Matched No New Hire Firms

Absolute discretionary total accruals and absolute nonoperating accruals

	Auditor-Firm Relation Firms (n = 101)		Matched No New Hire Firms (n = 101)		Difference	Difference
	Mean	Median	Mean	Median	in Means	in Medians
Time (t − 2)						
Discretionary total accruals	0.1106	0.0458	0.0988	0.0542	0.0117	−0.0084
					(0.509)	(0.720)
Nonoperating accruals	0.0807	0.0352	0.0703	0.0310	0.0103	0.0042
					(0.452)	(0.551)
Time (t − 1)						
Discretionary total accruals	0.1085	0.0606	0.0893	0.0557	0.0191	0.0049
					(0.199)	(0.377)
Nonoperating accruals	0.0840	0.0335	0.0722	0.0418	0.0117	−0.0083
					(0.391)	(0.565)
Time (t)						
Discretionary total accruals	0.1145	0.0791	0.1007	0.0529	0.0137	0.0262
					(0.397)	(0.402)
Nonoperating accruals	0.0867	0.0335	0.0932	0.0454	−0.0064	−0.0119
					(0.696)	(0.559)
Time (t + 1)						
Discretionary total accruals	0.1080	0.0716	0.0935	0.0602	0.0144	0.0114
					(0.301)	(0.341)
Nonoperating accruals	0.0767	0.0441	0.0652	0.0329	0.0114	0.0112
					(0.332)	(0.123)
Time [(t − 1) − (t − 2)]						
Discretionary total accruals	0.0009	0.0057	−0.0114	−0.0061	0.0124	0.0118
					(0.499)	(0.357)
Nonoperating accruals	0.0033	−0.0001	0.0024	0.0033	0.0009	−0.0034
					(0.955)	(0.703)
Time [(t) − (t − 1)]						
Discretionary total accruals	−0.0056	0.0022	0.0073	0.0034	−0.0129	−0.0012
					(0.462)	(0.600)
Nonoperating accruals	−0.0025	−0.0002	0.0151	0.0030	−0.0176	−0.0032
					(0.317)	(0.336)
Time [(t + 1) − (t − 1)]						
Discretionary total accruals	−0.0088	0.0079	0.0062	0.0043	−0.0150	0.0036
					(0.365)	(0.593)
Nonoperating accruals	−0.0090	−0.0023	−0.0058	−0.0053	−0.0032	0.0030
					(0.806)	(0.661)

Absolute discretionary total accruals and nonoperating accruals are as a percent of previous year-end total assets. Absolute discretionary total accruals are from the modified Jones (1991) model. Absolute nonoperating accruals are as described by Givoly and Hayn (2000). The auditor-firm relation

or,

TABLE 4 (*continued*)

firms are firms where the newly hired individual worked for the sample firms' auditor immediately before being hired by the sample firm. The matched no new hire firms are firms where the firm did not hire a new financial executive in the three years surrounding the matching year. Time (t) is the first year the newly hired individual worked for the auditor-firm relation firm. All other years ($t - 2$, $t - 1$, $t + 1$) are in relation to time t.

Note that P-values are in parentheses. P-values for differences in means are calculated using a t test assuming unequal variances while differences in medians are calculated using a Wilcoxon signed-rank test.

Operating accruals between the sub sample time periods in any of the mean (median) comparisons. These results are consistent for both of the two accruals measures for the r - 2 to f - 1, the f - 1 to r, and for the f - 1 to r + 1 periods, across both time partitions. In the result, support has not been received by the hypothesis three. There has been an expectation that in recent years, companies may have hired the audit firms increasingly. However, no significant increase for earnings management by companies has been observed in these years, which have already been discussed earlier in the paper.

Thus, while Brown (2001) and Matsumoto (2002) find evidence of an overall temporal shift in earnings management when examining earnings forecast errors, we find that companies hiring individuals from their auditor do not appear to more actively manage their earnings in the more recent time periods than in the earlier periods of our sample.

Extensions and Robustness Tests

In the year 1995, miss-specification of accumulation models has been demonstrated by Dechow with his professionals. In this regard, samples with extreme financial performance were referred for the application of the abovementioned models. Moreover, the conclusions of accumulation tests might be impacted by this factor, if business operations of the firms may have fundamental changes, which roam around the period that involves the changing of the executive posts. In order to assure that extreme performance has not been considered during the utilization

of total optional accumulation measure, the successful procedure of Erickson and Wang has been employed in the study. (Erickson and Wang, 1999) Particularly, changes in revenues between event, as well as, non-event period for all the groups have been compared by the abovementioned approach, and all the groups have been referred for this comparison.

When we perform this analysis, we find no significant (/? > 0.10) differences in changes in revenue between the event and nonevent periods for all groups used in our study, we also find non significant *(p* > 0.10) mean and median differences in revenue changes between our test sample of auditor-firm relation firms and the three control groups for the event period. It has been suggested by the abovementioned overall findings that discretionary total accumulation results have not been affected significantly by the extreme financial performance. In addition, five big firms were also considered during the portioning of data for the comparison of data having any significant differences.

TABLE 5

ANOVA Results: Change in Absolute Discretionary Total Accruals

Panel A: ANOVA table for change in absolute discretionary total accruals: Time ($t - 1$) minus Time ($t - 2$)

ANOVA Table

	SS	df	MS	F	Prob. > F
Between groups	0.0098	3	0.0032	0.18	0.9084
Within groups	6.5802	366	0.0179		
Total	6.5900	369	0.0178		

Comparison by group (Bonferroni)

	Firms with an Auditor-Relation	Matched Nonaudit Firms	Nonmatched Firms with No Auditor Firm Relation
Matched nonaudit firms	−0.0059 (1.000)		
Nonmatched firms with no auditor firm relation	−0.0122 (1.000)	0.0001 (1.000)	
Matched firms with no new hire	−0.0124 (1.000)	−0.0064 (1.000)	−0.0062 (1.000)

Panel B: ANOVA table for change in absolute discretionary total accruals: Time (t) minus time ($t - 1$)

ANOVA Table

	SS	df	MS	F	Prob. > F
Between groups	0.0361	3	0.0120	0.79	0.499
Within groups	5.5636	366	0.0152		
Total	5.5997	369	0.0151		

Comparison by group (Bonferroni)

	Firms with an Auditor-Relation	Matched Nonaudit Firms	Nonmatched Firms with No Auditor Firm Relation
Matched nonaudit firms	−0.0131 (1.000)		
Nonmatched firms with no auditor firm relation	−0.0059 (1.000)	0.0071 (1.000)	
Matched firms with no new hire	0.0129 (1.000)	0.0260 (0.806)	−0.0188 (1.000)

Panel C: ANOVA table for change in absolute discretionary total accruals: Time ($t + 1$) minus time ($t - 1$)

ANOVA Table

	SS	df	MS	F	Prob. > F
Between groups	0.0534	3	0.0178	1.22	0.303
Within groups	5.3333	366	0.0146		
Total	5.3867	369	0.0146		

TABLE 5 (*continued*)

Comparison by group (Bonferroni)

	Firms with an Auditor-Relation	Matched Nonaudit Firms	Nonmatched Firms with No Auditor Firm Relation
Matched nonaudit firms	−0.0030 (1.000)		
Nonmatched firms with no-auditor firm relation	−0.0213 (1.000)	−0.0182 (1.000)	
Matched firms with no new hire	0.0150 (1.000)	0.0181 (1.000)	−0.0364 (0.356)

Absolute discretionary total accruals are as a percent of previous year-end total assets. Absolute discretionary total accruals are from the modified Jones (1991) model. The auditor-firm relation firms are firms where the newly hired individual worked for the sample firms' auditor immediately before being hired by the sample firm. The matched nonauditor firms are firms where the newly hired person did not work for any auditing firm immediately prior to being hired. The matched no new hire firms are firms where the firm did not hire a new financial executive in the three years surrounding the matching year. The nonmatched auditor no-firm relation firms are firms where the newly hired person did not work for the sample firms' auditor, but worked for a different public accounting firm immediately before being hired. Time (t) is the first year the newly hired individual worked for the auditor-firm relation firm. All other years ($t - 2$, $t - 1$, $t + 1$) are in relation to time t.

Specific accounting firms have been considered as the bases for the assessment of any significant differences, which have not been suggested by the findings. Accordingly, it has been noted that not a single accounting firm has been referred by the companies for the hiring of individuals, which have been utilized for the obtaining of the results.

Conclusions

A sample of companies has been investigated by our study, where audit firm of the company were collaborated directly for the acquiring of financial reporting professionals. However, the Sarbanes-Oxley Act of 2002 has prohibited the practice of acquiring professionals in this manner. Using the cross-sectional Jones (1991) model to estimate total discretionary accruals and the measure of non operating accruals introduced by Givoly and Hayn (2000), we find no evidence of increased earnings management for the year prior to hire, the initial year of hire, and for the three-year window surrounding the hire for companies hiring individuals directly from their external audit firms. Once again, no significant differences between the matched and non-matched control groups have been indicated consistently by the comparisons of

our test sample. As earlier mentioned in the paper, no significant higher changes in total optional accumulation have been exhibited by the companies that are engaged in a practice that has been prohibited, as earlier described in the paper. Thus, our analyses of changed levels of reported accounting accruals does not provide support for the proposition that auditor independence was significantly impaired in these instances. While we cannot directly assess the potential effect of the one-year "cooling off period prescribed in the Sarbanes-Oxley

TABLE 6

ANOVA Results: Change in Absolute Nonoperating Accruals

Panel A: ANOVA table for change in absolute nonoperating accruals: Time ($t - 1$) minus time ($t - 2$)

ANOVA Table

	SS	df	MS	*F*	Prob. > *F*
Between groups	0.0028	3	0.0009	0.08	0.973
Within groups	4.6072	366	0.0126		
Total	4.6101	369	0.0125		

Comparison by group (Bonferroni)

	Firms with an Auditor Relation	Matched Nonaudit Firms	Nonmatched Firms with No Auditor Firm Relation
Matched nonaudit firms	−0.0045 (1.000)		
Nonmatched firms with no auditor firm relation	−0.0073 (1.000)	−0.0028 (1.000)	
Matched firms with no new hire	−0.0009 (1.000)	0.0036 (1.000)	−0.0064 (1.000)

Panel B: ANOVA table for change in absolute nonoperating accruals: Time (t) minus time ($t - 1$)

ANOVA Table

	SS	df	MS	*F*	Prob. > *F*
Between groups	0.0337	3	0.0122	0.84	0.470
Within groups	4.8875	366	0.0133		
Total	4.9213	369	0.0133		

Comparison by group (Bonferroni)

	Firms with an Auditor Relation	Matched Nonaudit Firms	Nonmatched Firms with No Auditor Firm Relation
Matched nonaudit firms	−0.0053 (1.000)		
Nonmatched firms with no auditor firm relation	−0.0049 (1.000)	0.0004 (1.000)	
Matched firms with no new hire	0.0176 (1.000)	0.0230 (0.946)	−0.0225 (1.000)

Panel C: ANOVA table for change in absolute nonoperating accruals: Time ($t + 1$) minus time ($t - 1$)

ANOVA Table

	SS	df	MS	*F*	Prob. > *F*
Between groups	0.0065	3	0.0021	0.25	0.863
Within groups	3.2125	366	0.0088		
Total	3.2190	369	0.0087		

Comparison by group (Bonferroni)

	Firms with an Auditor Relation	Matched Nonaudit Firms	Nonmatched Firms with No Auditor Firm Relation
Matched nonaudit firms	−0.0069 (1.000)		
Nonmatched firms with no auditor firm relation	−0.0056 (1.000)	0.0012 (1.000)	
Matched firms with no new hire	0.0032 (1.000)	0.0101 (1.000)	−0.0089 (1.000)

Absolute nonoperating accruals are as a percent of previous year-end total assets. Absolute nonoperating accruals are as described by Givoly and Hayn (2000). The auditor-firm relation firms are firms where the newly hired individual worked for the sample firms' auditor immediately before being hired by the sample firm. The matched nonauditor firms are firms where the newly hired person did not work for any auditing firm immediately prior to being hired. The matched no new hire firms are firms where the firm did not hire a new financial executive in the three years surrounding the matching year. The nonmatched auditor no-firm relation firms are firms where the newly hired person did not work for the sample firms' auditor, but worked for a different public auditing firm immediately before being hired. Time (t) is the first year the newly hired individual worked for the auditor-firm relation firm. All other years ($t - 2$, $t - 1$, $t + 1$) are in relation to time t.

Act, we find no evidence, as manifest in changed levels of reported accounting accruals that companies hiring individuals directly from their external audit firm engaged in higher levels of earnings management than their peers do. Furthermore, the hypothesis that has deemed the revolving door as a problem has not been supported during the study. While slight increase has been observed in the rate of hiring, no relation with the higher level of earnings management has been found during the comparison of same companies in the earlier times. Moreover, a number of limitations were confronted during the study, as well as, during the empirical researches. Firstly, existence of a potential bias has been felt due to the inappropriate definition that is, SIC codes, of an industry, which is required for targeting well-organized accounting choice set for the firms that have been considered as samples during the study.

Secondly, while strength tests have been undertaken during the study for addressing concerns related to the optional accmals models that are subjected to the extreme financial performance, it has been recognized that earnings management cannot be detected perfectly with the help of models, such as, modified Jones model that was introduced in the year 1991, and has

been applied widely. Finally, it is not certain, and cannot be confirmed whether direct working on client's audit was being done by the professionals who left the same firm.

However, it has been given that before leaving the audit firm, senior positions were remained with the professionals, and it has been shown by a number of studies. For instance, Imhoff in the year 1978 showed that direct working on audit operations of a client has been done previously by the same professionals, and the same client firm is chosen by the majority of the professionals, which has been deemed as a wrong practice by various provisions.

Most importantly, these initial

TABLE 7

Change in Accruals: Comparison of Sample Over Subperiods

Panel A: Change in absolute accruals for sample firms: 1989–1994 versus 1995–1999

	Auditor-Firm Relation Firms 1989–1994 (n = 39)		Auditor-Firm Relation Firms 1995–1999 (n = 62)		Difference	Difference
	Mean	Median	Mean	Median	in Means	in Medians
Discretionary total accruals						
Time [$(t-1)-(t-2)$]	−0.0081	0.0026	0.0067	0.0071	0.0148	−0.0045
					(0.578)	(0.769)
Time [$(t)-(t-1)$]	0.0127	0.0064	−0.0171	−0.0007	0.0299	0.0071
					(0.233)	(0.296)
Time [$(t+1)-(t-1)$]	0.0010	0.0079	−0.0151	0.0077	0.0161	0.0002
					(0.509)	(0.790)
Nonoperating Accruals						
Time [$(t-1)-(t-2)$]	0.0191	−0.0005	−0.0063	0.0000	0.0255	−0.0005
					(0.274)	(0.299)
Time [$(t)-(t-1)$]	0.0089	0.0082	−0.0097	−0.0058	0.0186	0.0140
					(0.486)	(0.241)
Time [$(t+1)-(t-1)$]	−0.0085	0.0022	−0.0094	−0.0057	0.0008	0.0079
					(0.967)	(0.737)

Panel B: Change in absolute accruals for sample firms: 1989–1995 versus 1996–1999

	Auditor-Firm Relation Firms 1989–1995 (n = 48)		Auditor-Firm Relation Firms 1996–1999 (n = 53)		Difference	Difference
	Mean	Median	Mean	Median	in Means	in Medians
Discretionary total accruals						
Time [$(t-1)-(t-2)$]	−0.0045	0.0009	0.0060	0.0079	−0.0106	−0.0070
					(0.703)	(0.772)
Time [$(t)-(t-1)$]	0.0065	0.0062	−0.0166	−0.0009	0.0232	0.0071
					(0.376)	(0.412)
Time [$(t+1)-(t-1)$]	−0.0067	0.0081	−0.0107	−0.0093	0.0040	0.0174
					(0.874)	(0.886)
Nonoperating Accruals						
Time [$(t-1)-(t-2)$]	0.0097	−0.0009	−0.0022	0.0000	0.0120	−0.0009
					(0.630)	(0.500)
Time [$(t)-(t-1)$]	0.0060	0.0012	−0.0102	−0.0054	0.0162	0.0066
					(0.538)	(0.410)
Time [$(t+1)-(t-1)$]	−0.0103	−0.0003	−0.0079	−0.0028	−0.0023	0.0025
					(0.909)	(0.951)

The table shows changes in absolute discretionary total accruals and nonoperating accruals for the auditor-firm relation firms, split by event-year subperiods. Absolute discretionary total accruals and

TABLE 7 (*continued*)

nonoperating accruals are as a percentage of previous year-end total assets. Absolute discretionary total accruals are from the modified Jones (1991) model. Absolute nonoperating accruals are as described by Givoly and Hayn (2000). The auditor-firm relation firms are firms where the newly hired individual worked for the sample firms' auditor immediately before being hired by the sample firm. Time (t) is the first year the newly hired individual worked for the auditor-firm relation firm. All other years ($t - 2$, $t - 1$, $t + 1$) are in relation to time t.

Note that P-values are in parentheses. P-values for differences in means are calculated using a t test assuming unequal variances while differences in medians are calculated using a Wilcoxon signed-rank test.

Results regarding changed levels of reported accruals do not indicate a significant degradation of auditor independence as manifest in reported accounting accruals. Therefore, we find no empirical support for the congressional conjectures of heightened wrong-doing by this group of former auditors and their new employers. Several recent highly publicized company failures have involved "revolving door" hires; however, based on our analyses, there does not appear to be a pervasive problem regarding excessive earnings management associated with this hiring practice. Our findings of no increased earnings management around the time of hiring these former auditors may be an indication that, at least at the profession wide level, standards in place by the profession and individual firms may have been somewhat successful in addressing concerns in this area.

Our evidence is consistent with the proposition that this increased risk of impaired auditor independence, or heightened client reliance, may have been largely factored into audit firms' audit approaches in cases involving these relationships. While our study is the first to empirically assess whether hiring personnel from a company's external audit firm is manifest in differential reporting by examining possible increases in earnings management around these ex-auditor hires, we assess only one possible measure of impaired independence. Future research should address additional auditing and financial reporting issues to determine if our findings are robust across different decision contexts (i.e., company selection of accounting methods or

disclosures, or auditor reporting decisions) that could be impacted by the possible reduction in auditor independence. Future research could also assess whether the newly imposed one-year mandatory waiting period significantly alters reported financial information, auditors' risk assessments in this area, or deters this employment activity altogether.

Question 1

Some conditions and requirements that should be fulfilled and met are a part of most of the tax documentations and other purposes. Similarly, some of the essential requirements have been outlined by the SEC Accounting and Auditing Enforcement Release 108, which has also been referred as AAER. In this regard, there are some requirements related to the revenue recognition in the APB Statement No. 4, which must accept a bill and hold transaction, and this has been summarized in the AAER. In particular, following are some conditions that must be met for meeting the criteria related to the bill and holding of transaction:

* The buyer must be shifted with a number of risks, such as, ownership risk, etc.

* The purchasing of goods has been permanently committed by the customer. Moreover, some of the provisions have a requirement that a written documentation should be presented by the customer formally for the proof of the commitment.

* Request of transaction should be made by the buyer, and basis should be held. In addition, a considerable business objective should be presented by the buyer at the time of ordering the goods on a bill, as well as, at the time of holding basis.

* Existence of a fixed schedule should be present for the goods' delivery. In addition, a rational delivery date should be included in the abovementioned schedule, and proper relation can be made with the requirement of buyer's business objective.

* Complete processing should be done in the earnings. In particular, no obligations related to the specific performance should be remained with the seller.

* Moreover, inventory of the seller should be deducted with the ordered goods, and other customer orders should not be entertained with those items.

* Complete and ready equipment must be present, prior to the shipment.

However, the abovementioned regulations and requirements must be fulfilled by an SEC client. For instance, Chase Industries is not listed in the clients of SEC. Thus, the abovementioned regulations have not bound this company.

Conclusively, this paper has tried to define, understand, and evaluate a number of matters related to the earnings management that is one of the major fields related with the tax and financial statements reporting. Revenue recognition is one of the significant areas of abuse facing accountants today. This paper has discussed the criteria and methods used in revenue recognition. It has explored the issues and problems relating to revenue recognition. It has also discussed SARBOX's impact on revenue recognition. Companies with a higher market value per share are better able to engage in deal making and capital generation through borrowing on favorable terms. Such firms are also able to issue stock more easily and at better prices. A case study has been used to demonstrate how some firms sometimes adopt an aggressive revenue recognition strategy in hope to show better performance. The paper has further reported detailed evidence on how managers manage earnings.

References

AICPA, 1978, "Commission on Auditors' Responsibilities" (The Cohen Report), Report, Conclusions and Recommendations. New York: American Institute of Certified Public Accountants, (March): 45-63,

AICPA, 1991, *"Under the Rule of Conduct 102—Integrity and Objectivity."* Ethics Ruling No, 77. *Journal of Accountancy* (February): 111,

AICPA, 2002, *AICPA Professional Standards.* Vol. 2, Chicago, III: CCH,

Ball, R, and P, Brown. 1968, "An Empirical Evaluation of Accounting Income Numbers," *Journal of Accounting Research* 6 (Fall): 159-178.

Bartov, E,, D, Givoiy, and C, Hayn, 2002, "The Rewards to Meeting or Beating Earnings Expectations,"

Bartov, E,, F, A. Gul, and J, S, L, Tsui, 2000, "Discretionary—Accruals Models and Audit Qualifications," *Journal of Accounting and Economics* 30:241-252,

Beasley, M, S, 1996, "An Empirical Analysis of the Relation between Board of Director Composition and Financial Statement Fraud," *The Accounting Review* 71 (October): 443—465,

Beasley, M, S,, J, V, Carcello, and D, R, Hermanson. 2000, "Should You Offer Your Job to an External Auditor," *The Journal of Corporate Accounting and Finance* 11:35-42,

Beatty, A, L,, B, Ke, and K, R, Petroni, 2002, "Earnings Management to Avoid Earnings Declines across Publicly and Privately Held Banks," *The Accounting Review 11* (July): 547-570,

Beaver, W., R, Clarke, and W, Wright, 1979, "The Association between Unsystematic Security Returns and the Magnitude of Earnings Forecast Errors," *Journal of Accounting Research* 17 (Autumn): 316-340,

Becker, C, L., M, L, DeFond, J, Jiambalvo and K, R, Subramanyam, 1998, "The Effect of Audit Quality on Earnings Management," *Contemporary Accounting Research* 15 (Spring): 1-24,

Brown, L, 2001, "A Temporal Analysis of Earnings Surprises: Profits vs. Losses," *Journal of Accounting*

Carcello, J, V,, and T, L, Neal, 2000, "Audit Committee Composition and Auditor Reporting," *Accounting Review* 75 (October): 453-467,

Cheryl De Mesa Graziano. (2005) Revenue recognition: A perennial problem: financial executive magazine.

Clikeman, P, 1998. "Auditor Independence: Continuing Controversy," *Ohio CPA Journal* 57:40-43,

Collingwood, H, 2001, "The Earnings Game: Everyone Plays, Nobody Wins," *Harvard Business Review* (June): 65-74,

Dechow, P, M,, and D, J, Skinner, 2000, "Earnings Management: Reconciling the Views of Accounting Academics, Practitioners, and Regulators," *Accounting Horizons* 14 (June): 235-250,

Dechow, P, M,, R, G, Sloan, and A, P, Sweeney, 1995, "Detecting Earnings Management." *The Accounting Review* 70 (April): 193-225,

Dechow, P., R, Sloan, and A, Sweeney, 1996, "Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC." *Contemporary Account Research* 13 (Spring): 1-36,

DeFond, M, L,, and Park, C, W, 2001, "The Reversal of Abnormal Accruals and the Market Valuation of Earnings Surprises," *The Accounting Review* 76 (July): 375—404.

DeGeorge, F,, J, Patel, and R, Zeckhauser, 1999, "Earnings Management to Exceed Thresholds," *The Journal of Business* 72 (January): 1-33,

Douglas R. Carmichael. (1999) Hocus-pocus accounting: Journal of accountancy, ABI/INFORM global, p 59.

Erickson, M,, and Wang, S, 1999, "Earnings Management by Acquiring Firms in Stock for Stock Mergers," *Journai of Accounting and Economics* 27:149-176,

Evidence from SEC Staff Accounting Bulleting No. 101: the accounting review, Vol. 80, No. 2, pp. 373-401.

Firth, M, 1981, "Auditor-Client Relationships and Their Impact on Bankers' Perceived Lending *Decisions." Accounting and Business Research* 11 (Summer): 179-188,

Francis, J, R,, E, L, Maydew, and H, C, Sparks, 1999, "The Role of Big 6 Auditors in the Credible Reporting of Accruals," *Auditing: A Journal of Practice & Theory* 18 (Fall): 17-34,

Frankel, R, M,, M, F, Johnson, and K, K, Nelson, 2002, "The Relation between Auditors' Fees for

Givoiy, D,, and C, Hayn, 2000, "The Changing Time-Series Properties of Earnings, Cashflows and Accruals: Has Financial Reporting Become More Conservative?" *Journal of Accounting and Economics* 29:287-320,

Healy, P, M, 1985, "The Effect of Bonus Schemes on Accounting Decisions," *Journai of Accounting and Economics* 7:85-107.

Healy, P, M,, and J, M, Wahlen, 1999, "A Review of the Earnings Management Literature and Its Implications for Standard Setting," *Accounting Horizons* 13 (December): 365-383,

Imhoff, E, A, 1978, "Employment Effects on Auditor Independence," The *Accounting Review* 53 (October): 869-881,

Imhoff, E, A, 2003, "Accounting Quality, Auditing and Corporate Governance," *Accounting Horizons* 17 (Supplement): 117-128,

ISB, 2000, Independence Standard No, 3, *Employment with Audit Clients:* New York: Independence Standards Board,

Jennifer Altamuro, Anne L. Beatty, Joseph Weber. (2005) The Effects of Accelerated Revenue Recognition on Earnings Management and Earnings Informativeness

Jones, J, 1991, Earnings management during import relief investigations. *Journal of Accounting Research* 29:193-228,

Jubak, J, 2002, "Companies whose boards need a scare," IVISN Money Markets *Personal Einance.* Editor at http:// *www.thestreet.com/funds/jubak/IOOI55l7.htm\,* April 3, 2002,

Kaplan, S, E,, and S, M, Whitecotton, 2001, "An Examination of Auditor's Reporting Intentions When Another Auditor Is Offered Client Employment," *Auditing: A Journal of Practice & Theory* 20

Klein, A, 2002, "Audit Committee, Board of Director Characteristics, and Earnings Management," *Journal of Accounting and Economics* 29:85-113,

Koh, H, C, and P, Mahathevan, 1993, "The Effects of Client Employment on Auditor Independence," *British Accounting Review* 25:227-242,

Levitt, A, 1998, "The Numbers Game," Speech given at NYU Center for Law and Business, New York, September 28,

Mark W Nelson; John A Elliott; Robin L Tarpley. (2003) How are earnings managed? Examples from auditors Accounting Horizons; 17, ABI/INFORM Global

Matsumoto, D, A, 2002, "Management's Incentives to Avoid Negative Earnings Surprises," *The Accounting Review 11* (July): 483-514,

Moehrle, S, R, 2002, "Do Firms Use Restructuring Charge Reversals to Meet Earnings Targets?" *The Accounting Review 11* (April): 397—414,

Nadi Chlala and Suzane landry. (2001) Revenue recognition more stringent rules on the horizon: IVEY management services.

Nonaudit Services and Earnings Management," *The Accounting Review 11* (Supplement): 71- 105,

Parlin, C, J,, and R, W, Bartlett, 1994, "Prior Employment Effects and Independence in Fact," *Business and Professional Ethics Journal* 13:185-202,pg. 17.

Pitt, H, L, 2002, Written testimony before the Senate Committee on Banking, Housing and Urban Affairs, March 21,*Research* 39 (Spring): 221-241,

Reynolds, J, K,, and J. R, Francis, 2000, "Does Size Matter? The Influence of Large Clients on Office-Level Auditor Reporting Decisions," *Journal of Accounting and Economics* 30:357—400,

Richardson, S,, S, H, Teoh, and P, Wysocki, 1999, "Tracking Analysts' Forecasts over the Annual Earnings Horizon: Are Analysts' Forecasts Optimistic or Pessimistic?" Working paper. University of Michigan,

Rose Marry L Bukics. (2000) Improper revenue recognition: journal of accountancy, ABI/INFORM global, 70, 4, p9.

Rose Marry L Bukics. (2002) Revenue recognition it doesn't really concern you or does it? AFP exchange ABI/ INFORMAL global, p 92.

Sarbanes-Oxley and Revenue Recognition Practices: ReveriueRecognitian.com, financial executive benchmarking survey, Revenue Recognition Edition.

Schipper, K, 1989, "Commentary on Earnings Management," *Accounting Horizons* 3 (December): 9 1 - 102,

Schleifer, I, F,, and R, A, Shockley, 1990, "Policies to Promote Auditor Independence: More Evidence on the Perception Gap," *Journal of Applied Business Research* 2:10-17,

Securities and Exchange Commission (SEC), Office of the Chief Accountant, 2003, *Application of the January 2003 Rules on Auditor Independence: Frequently Asked Questions.* Office of the Chief Accountant, (Available at http://www,accountingweb,com/cgi-bin/item,cgi?id=97970,)

Teoh, S,, I, Welch, and T, Wong, 1998a, "Earnings Management and the Long-Run Market Performance of Initial Public Offerings," *Journal of Einance* 53:1935-1974,

Teoh, S,, t, Welch, and T, Wong, 1998b, "Earnings Management and the Long Run Underperformance of Seasoned Equity Offerings," *Journal of Financial Economics* 50:63-99,

Thomas J Philips Jr. Michael S, Luehlfing, and Cynthia M. Daily. (2001) The right way to recognize the revenue: journal of accountancy, ABI/INFORM global, p 39.

U, S, House of Representatives, 2002, Sarbanes-Oxley Act of 2002, 107th Congress, 2nd Session,

U, S, Senate, 2002, Hearings before the subcommittee on telecommunications and finance of the committee on energy and commerce, February 2,

Umav. Sridharan, Suzanne Summers, Harry Mcalum. (2003) The Case of MicroStrategy, Inc. SAB 101, Revenue Recognition, and Stock Valuation: journal of education for business, 78, 5, ABI/INFORM global p, 258.

Warfield, T, D, J, J, Wild, and K, L, Wild, 1995, "Managerial Ownership, Accounting Choices, and Informativeness of Earnings," *Journal of Accounting and Economics* 20:61-92,

Yermack, D, 1997, "Good Timing: CEO Stock Option Awards and Company News Announcements," *Journal of Finance* 52:449-76.