CHARACTERISTICS OF LARGE ACCELERATED FILERS WITH INTERNAL CONTROL WEAKNESSES

Yousef Jahmani, Savannah State University William A. Dowling, Savannah State University

ABSTRACT

In this paper, we examine a sample of large accelerated filers (experimental group) with internal control weaknesses to identify the characteristics of these firms. We matched the sample with firms with good internal control from the same sectors. These firms are required to report on effective of their internal control. Data for these firms were collected for the 2007 and 2008 Six variable were tested; firm's size as measured by total assets, return on assets, debt/equity ratio, restructuring, number of segments and revenue growth. ANOVA and logistic regression techniques were used. The results show that large accelerate filers with internal control weaknesses are smaller and less profitable. When firms with severe internal control weaknesses (experimental) segregated and tested against control group, the results show that experimental group are smaller, less profitable and to some extent have more segments.

Key words: internal control weaknesses, Large accelerated filers, Sarbanes-Oxley Act,

INTRODUCTION:

Sarbanes-Oxley of 2002 (SOX) imposed several requirements on public companies among them the establishment of effective internal control. Recognizing the difficulty of compliance with the requirement, its implementation was postponed by the Securities and Exchange Commission (SEC) more than one time. For the purpose of filing, the SEC classified companies as small firms, non-accelerated filers and accelerated filers. In December 2005, the SEC created new category called "large accelerated filers" which was generally defined as companies with a worldwide market value of outstanding voting and non-voting common equity held by non-affiliates of at least 700 million dollars. Large accelerated filers are required establish effective internal control and to report on it for the fiscal year ending on or after December 15, 2006 under Section 302 and Section 404 of SOX (Leech, 2003).

According to the Committee of Sponsoring Organization (COSO) of the Treadway Commission, internal control is "a process affected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives" (COSO, 1992).

🕻 للاستشارات





Public Company Accounting Oversight Board in its Auditing Standard No. 2 identifies three types of control deficiencies. These are:

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of their performing assigned functions, to prevent or detect misstatements on a timely basis (AS No. 2 paragraph 8).

A significant deficiency is a control deficiency or combination of control deficiencies that adversely affects the entity's ability to initiate, authorize, record, process, or report external financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of the company's annual or interim financial statement that is more than inconsequential will not be prevented or detected (AS No. 2 paragraph 9).

A material weakness in the internal control is a significant deficiency or combination of significant deficiencies that results in more than likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected (AS No. 2 paragraph 10).

In this paper, we only focus on the last type that is material weakness.

Effective internal control helps companies in providing reliable financial statements, safeguarding the company's assets, promoting efficient operations, and complying with laws and regulations.

Ashbaugh-Skaife *it al.* (2006) examined the determinants of internal control deficiencies prior to the SOX mandated audits. They found that firms with internal control deficiencies tended to be complex, were more often engaged in mergers and takeover, held more inventory and were fast growing. Kinney and McDaniel (1989); Doyle, Ge, and McVay (2007b); and Ashbaugh-Skaife, Collins, and Kinney (2007) point out that weak internal controls are likely to increase the probability of material errors in accounting disclosures and/or lead to low quality accounting accruals from intentional earnings management and unintentional accounting errors. Previous research used samples of firms that either disclosed material deficiency prior to the Section 404 required mandatory disclosure, Ashbaugh-Skaife, Collins, and Kinney (2007) or that disclosed material weaknesses during 404 mandatory disclosures Doyle, Ge, and McVay (2007a).

This research uses a sample of firms that disclosed internal control weakness after it became mandatory. Therefore, the purpose of the paper is to examine the characteristics of the large accelerated filer with internal control weaknesses. The Remainder of this paper is organized as follows, the next section covers related literature and Securities and Exchange Commission (SEC) firms classifications, section three covers hypothesis development and sample selection section four results analysis and finally summary and conclusion.



RELATED LITERATURE

Bryan and Lilien (2005) attempted to identify the characteristics of firms declaring a material deficiency and to determine the effects of the declaration of a material deficiency on the firm's stock price in the interval around and on the date of disclosure. The researchers identified a sample of 161 firms across 19 industrial categories that declared the existence of a material deficiency. Bryan and Lilen found that within their industry categories firms that had declared a material deficiency were smaller, weaker and had higher equity risk (betas) relative to the mean values within the industry. Interestingly Bryan and Lilien (2005) found that there was significant price variation in the three-day period around the announcement of the material deficiency (two days prior to the announcement and including the date of the announcement). Returns for the day of the announcement were significantly negative however the returns for the three day period were not significantly different from zero. Particularly relevant to this study, Bryan and Lilen found that in the case examined the existence of earnings management on the part of the firm. Specifically, they found that the market responded to "guidance" on the part of the firm through the provision of pro forma earnings in setting market expectations rather than the announcement of material deficiencies. The authors concluded that since the market responded to firm originated guidance rather than declared material deficiencies and restated earnings, the provision of guidance was evidence of earnings management on the part of the firm.

Doyle, Ge and McVay (2007a) also examined the simultaneity of material weaknesses and firm attributes. The firm characteristics studied were size, age, financial health, financial reporting complexity, number of reported segments and existence of foreign currency transactions, rapid growth (merger and acquisition as well as sales growth), restructuring charges and corporate governance. Their sample included 970 firms that reported at least one material weakness in the August 2002 to August 2005 interval. Doyle et al. (2007a) found that the presence of at least one material weakness was negatively associated with the characteristics of size, age, and financial strength. The presence of a material weakness was found to be positively associated with complexity, growth and the existence of and scale of restructuring charges. The research also categorized material weaknesses into account-specific weaknesses and companylevel weaknesses. Those firms with account-specific weaknesses were found to be larger, older and in better financial health than those reporting company-level weaknesses. Additionally firms with account-specific weaknesses tended to have higher rates of growth and were more segmented. Those firms reporting account-specific weakness with respect to complexity (segmentation) were larger, older and financially weaker than the average Compustat firm. Whereas firms with company-level weaknesses were said to be deficit in the resources and/or experience necessary to maintain effective control systems. For the latter group, Doyle et al (2007a) found that these firms were younger, smaller and financially weaker and reported losses more often than those reporting account-specific weaknesses.



Our paper defers from Doyle et al. (2007a) paper in three ways. First, their sample represents all companies that are required to file 10-Ks with the SEC. These include large accelerated filers, accelerated filers, non-accelerated filers, and small companies. Our sample consists only of large accelerated filers. Given that establishing and maintaining internal control is costly, large accelerated filers are assumed to have enough resources to establish and maintain effective internal control while smaller firms have no such advantage. Doyle et el. (2007a) find that firms with internal control weaknesses are more likely to be smaller, less profitable, more complex, growing rapidly, or undergoing restructuring. It is possible that large accelerated filers have different determinants of internal control weaknesses or some of the determinants found by Doyle et al. (2007a) are not valid for this group under consideration. Second, Doyle et al. (2007a) selected their sample from firms disclosing weaknesses in their internal control during the period from August 2002 to August 2005. During this period, the SEC extended the implementation of internal control requirements to November 15, 2004 for large accelerated filers and accelerated filers while for non-accelerated filers and small firms were deferred to later dates. In the population used by Doyle et al. (2007a), most of the firms identified as having internal control weaknesses voluntarily disclosed such information raising the issue of selfselection. Finally, the majority of the firms had little or no experience in establishing and maintaining effective internal control. Where such is the case, internal control weaknesses maybe attributed to the lack of experience. Our sample represents firms disclosing internal control weaknesses from January 2006 to January 2008. It is assumed that all firms have acquired the necessary experience prior to this period.

In the following section we present several hypotheses that we intend to test along with a brief explanation. Firms that experience substantial increases in revenues in a short period of time may need adjustments to sustain the unexpected increase in revenue. The adjustments may include increases in personnel, modification and adjustment of processes, and adjustment of and changes in technology to meet the increased demand on a timely basis. All such changes imply a need for increased managerial control. Some firms have ignored this fact and have even overridden or ignored existing controls. Kinney and McDaniel, (1990), Stice (1991), and Ashbaugh-Skaife, *et al.* (2007) indicated that fast growing firms may outgrow their existing controls and may take time to establish new and better controls. In order to establish and implement new and more effective controls additional personnel, processes, and technology are required. Therefore, our first hypothesis is:

H1: Firms that experience sudden increases in their revenues tend to have internal control weaknesses.

The establishment of effective of internal controls as stipulated by SOX Sections 302 and 404, requires additional resources to implement. It is assumed that large firms, whether measured by market capitalization or total assets, are more likely to have the resources, expertise and technology, and to enjoy economies of scale and can therefore, more likely satisfy SOX



requirements. In contrast, smaller firms are more likely to lack these necessary components to mobilize to fulfil the requirements of SOX Sections 302 & 404. Therefore, among those firms categorized the large accelerated filers, we expect the smaller firms within this group to have weak internal controls vis-a-vis the larger firms. Namely, we expect the lower layer smaller firms to have weaknesses in their internal control. Hence, our second hypothesis is:

H2: Small firms within large accelerated filers' category tend to have internal control weakness.

All firms operate in a dynamic environment and need to adapt by continually restructuring their operations to improve efficiency and reduce their costs with the goal of being able to more effectively compete in the market. Consequently, they may be required to eliminate unnecessary and unprofitable operations, departments, terminate employees, dispose of groups of assets or segments, and/or acquire new subsidiaries. These changes may not be accompanied simultaneously by the required changes in appropriate controls. Moreover, such restructuring may also require a firm to make complex estimates of accruals and adjustments (Dechow and Ge 2006). Thus, a consequence of restructuring may be that some processes are without controls or that the existing controls may become ineffective. Thus we posit the following:

H3: Firms that restructure their operations are expected to have weakness in their internal control.

The total debt/equity ratio is a measure of the relative proportions of shareholder's equity and debt used to finance a firm's assets. The mean value of the ratio differs from industry to industry but in general it should be less than 1, although though for capital intensive industry like auto industry it may reach 2. A high debt/equity ratio generally means that a company has an aggressive financing policy (high degrees of financial leverage). High financial leverage may lead to volatile earnings as a result of modest change in revenue. For short-term debt, a firm has to satisfy its obligations from current assets. For long-term debt, the firm has to pay periodic interest and the principal when it becomes due. If firms have a high debt/equity ratio, they may need to find and mobilize the majority of their resources to meet these obligations leaving little or nothing to meet other needs including those necessary for effective internal control. This is the basis of our fourth hypothesis:

H4: *Firms that have high debt/equity ratio tend to have weak internal control*

Profitability is a necessary condition for survival. Increasing profits provide firms with more resources to devote to meeting its needs including the allocation of resources necessary for effective internal control. If a firm incurs loss or if its rate of return is very low, it will have limited its ability to mobilize resources to establish good internal controls. DeFord and Jiambalvo (1991) finds that financial reporting errors are negatively associated with firm's performance while Krishnan (2005) finds that the existence of a loss is positively associated with



weak internal control in firms that change auditors. Therefore, we expect that firms with a low rate of return (ROA) on assets where ROA as a measure of financial health, to have weaknesses in their internal control. This is captured in our fifth hypothesis:

H5: Firms with low or negative rate of return on assets compared with other firms tend to have weaknesses in their internal control.

It is easier for a single segment firm to establish and monitor internal controls than it is for a multi-segmented firm. These multi-segmented firms have need for sophisticated internal control systems. The more segmented a firm has, regardless of the basis for segmentation (geographical or line of business), the more difficulties the firm will have in consolidating information for financial statements, as some segments or divisions may well operate in different institutional and legal environments. Thus, it is more likely that firms with multi-segments will have weak internal control. Thus, our sixth and final hypothesis is:

H6: Firms with more segments tend to have weak internal control.

SAMPLE SELECTION AND METHOD OF ANALYSIS

The Securities and Exchange Commission (SEC) categorizes firms that are required to file 10-Ks, into four categories based on firm size: large accelerated, accelerated, non-accelerated, and small reporting companies. Both accelerated filers and large accelerated filers are required to file a report on the effectiveness of their internal controls and provide control attestation of their 10-K. Large accelerated filers must file their annual reports on Form 10-K within 75 days for fiscal years ending before December 15, 2006 and 60 days for fiscal years ending on or after December 15, 2006. Beginning with fiscal years ending on or after November 15, 2004 the Management Report and the Control Attestation were to become a part of that annual report.

Large accelerated filers generally include companies with an aggregate market value of voting and non-voting common equity held by non-affiliates of the issuer (referred to as "public float") of more than \$700 million as of the last business day of the issuer's most recently completed second fiscal quarter. The definition of a large accelerated filer is based, in part, on the requirements for registration of primary offerings for cash on Form S-3. Previous researchers selected their samples from companies across all four categories. Since the small firms and non-accelerated filers were not required to report on the effectiveness of their internal controls during the period under consideration, they were excluded from our sample. Accelerated filers, on the other hand, have fewer resources than large accelerated filers and there is a question as to whether or not they will be able to maintain effective internal controls. Therefore, in the current research the authors chose large accelerated filers as their population of interest.



Sample selection consists of two phases; first the database search; and second, the screening process of the 10-Ks. The Accounting Research Manager is the database used to search for companies with internal control weaknesses. The database contains 1851 companies identified as large accelerated filers. The authors searched the database for large accelerated filers with material weaknesses disclosed in their 10-Ks between January, 2006 and January, 2008. This period was chosen for two reasons; first to avoid the recession period as a confounding variable; and second, the earlier period was excluded on the assumption that during that period these companies would not have sufficient experience to maintain effective internal controls. Three terms were used to search the database; "material weaknesses", "a deficiency or a combination of deficiencies" and "adverse opinion". The first two terms produced mixed results while the third one resulted in 183 firms that had the term in their 10-Ks.

Phase two began by individually screening each 10-K, specifically the management report on internal controls and the auditor opinion on effectiveness on internal controls. The final sample consists of 96 companies that disclosed material weaknesses in their 10-K and management report. Other companies had either effective internal control, were duplicates, lack sufficient data or were late in filing their previous 10-Ks in the period under consideration. Table 1 shows the distribution of these companies across each business sector. It is worth noting that more than one third of the experimental group comes from the technology sector. This finding is consistent with previous research (Bulkeley *et. al*, 2005). It may be difficult for technology firms to establish and monitor good internal control due to the fact that most of the controls in these firms are invisible. If some controls are either missing or are ineffective, they will not be detected. It is noteworthy that approximately 99% of both experimental and control groups were audited by big four.

Table 2 classifies the firms according to the type of internal control weaknesses. It is noteworthy that one third of these firms have weaknesses at the company level or in revenue recognition process. Anderson & Yohn (2002) argue that revenue recognition may be perceived by investors to be more intentional than restatements related to expense items. Firms appear to manage their earnings through the manipulation of revenue recognition. Dole *et. al.* (2007a) finds that firms with financial difficulty might decide to have internal control weaknesses over revenue recognition to be able to manage earnings. The same conclusion might apply to firms with internal control weakness at the firm level.

Table 1 Distribution of firms to different sector							
Sector	Experimental	Control	Sector	Experimental	Control		
Basic material	6	6	Service	13	13		
Consumer goods	8	8	Tech	33	33		
Healthcare	19	19	Utilities	5	5		
Industrial goods	13	13					
Total		·			97		

الألم للاستشارات

Academy of Accounting and Financial Studies Journal, Volume 17, Number 4, 2013

Page	60
I USC	00

Table 2						
Classification of Firms according to their type of weaknesses						
Type of Weakness	No	%*	Type of Weakness	No	%	
Revenue Recognition	10	10.3	Stock compensation	18	18.5	
Control environment	23	23.7	Complex transactions	25	25.7	
Tax	42	43.3	Segregation of duties	8	8.2	
Trained Personnel	30	31	Other accounts	28	28.8	
*Many firms have more than one	type of we	eakness; th	erefore the number of firms and the	percentage	e are more	

than 97 and 100% respectively.

The control group with effective internal controls was obtained to match the same number from each sector in the experimental group. We used the term "large accelerated filers" to search for control group. As we mentioned above, the database has annual reports for 1851 large accelerated filers. The auditor's reports included in these annual reports were used to identify the firms that received unqualified opinion for their internal control. The second step was to collect the same number of firms in each sector to match the experimental group. Once this requirement was satisfied, we collected the same variables collected for experimental group. Thus, the final sample includes 97 companies with strong or effective internal controls that represent the control group and 97 companies with weak or ineffective internal controls that comprise the experimental group.

We obtained the firms' data on the following: total assets for the year of disclosure, and total revenues for the year of disclosure and previous year, and the number of business segments. Return on assets was computed by obtaining net income for disclosure year scaled by average total assets. Restructuring charges were scaled by total assets for the same year, the ratio reflecting the size of restructuring. The debt/equity ratio was computed for the same year. We also collected income from operations and cash flows from operating activities adjusted for extraordinary items for both experimental and control groups. All these variables were obtained from 10-Ks of both experimental and control groups. Tables (1, & 2) show sector classification, and type of internal control weaknesses for both experimental and control groups.

EMPIRICAL RESULTS OF ONE-WAY ANOVA TEST

Table 3 presents the descriptive statistics for both the experimental and control groups. The mean value for total assets for the experimental group is approximately \$5 billion compared to the approximate \$17 billion value for the control group. Clearly firms with internal controls weaknesses tend to be much smaller than firms with good internal controls.

The mean value for the return on total assets for the experimental group is 4.51% relative to 7.29% for the control group. This illustrates that the experimental group is less profitable than the control group. The difference in mean values for the other variables is much less striking.



Table 4 presents the Levene Test of Homogeneity of Variance. The assumption for homogeneity of variance for the return on total assets, the debt/equity ratio, restructuring, the number of segments and the change in sales revenue is valid. The level of significance is greater than 5% for each of them with the exception of total assets. However, both the Welch and the Brown-Forsythe test show that the means for both total assets and the return on assets variables are different for our experimental and control groups.

	Table 3						
	Descrip	tive Stati	istics for both Exp	erimental and Co	ntrol Groups		
		N	Mean	Std.	Std	95%	
			(000)	Deviation	Error	Confidence	
				(000)	(000)	Interval for	
						Mean Lower	
						Bound (000)	
	.00	97	17276095	29695295	3015100	11291168	
Assets	1.00	97	5273082	9408127	955251	3376925	
	Total	194	11274589	22778337	1635389	8049059	
	.00	97	.0729	.05336	.00542	.0622	
RetOnAssets	1.00	97	.0451	.08323	.00845	.0283	
	Total	194	.0590	.07111	.00511	.0489	
	.00	97	1.7226	4.06341	.41258	.9037	
DebtEquity	1.00	97	1.6353	2.68929	.27306	1.0933	
	Total	194	1.6790	3.43689	.24675	1.1923	
	.00	97	.0026	.00669	.00068	.0013	
Restructuring	1.00	97	.0028	.00645	.00066	.0015	
	Total	194	.0027	.00656	.00047	.0018	
	.00	97	3.1959	2.06478	.20965	2.7797	
Segments	1.00	97	2.7938	1.85931	.18878	2.4191	
	Total	194	2.9948	1.96998	.14144	2.7159	
	.00	97	.1739	.24045	.02441	.1254	
ChaneInSale	1.00	97	.1945	.30275	.03074	.1335	
	Total	194	.1842	.27287	.01959	.1456	

Table 4						
Test of Homogeneity of Variances						
	Levene Statistic	df1	df2	Sig.		
Assets	27.937	1	192	.000		
RetOnAssets	1.127	1	192	.290		
DebtEquity	.047	1	192	.828		
Restructuring	.011	1	192	.917		
Segments	.013	1	192	.909		
ChaneInSale	.847	1	192	.358		



Page 62

The results of one way ANOVA support our prediction of mean differences for only the total assets and the return on total assets variables. Table 5 shows the results of ANOVA tests. The F test for both total assets and the return on total assets are significant with an F (1, 192) =14.402, P=.00, for total assets and an F (1, 192) = 7.689, P=00, for the return on total assets. The F-tests for the debt/equity ratio, restructuring, number of segments and change in sales revenue are found to be not significant.

		Table 5				
	ANOVA R	esults for both Experimental	and Cor	trol Groups		
		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	6987507020152607	1	6987507020152607	F S 507 14.402 (85 7.689 (7.689 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.000
Assets	Within Groups	93151049618032400	192	485161716760585		
	Total	100138556638185008	193			
	Between Groups	.038	1	.038	7.689	.006
RetOnAssets	Within Groups	.938	192	.005		
	Total	.976	193			
DebtEquity	Between Groups	.370	1	.370	.031	.860
DebtEquity	Within Groups	2279.383	192	11.872		
	Total	2279.753	193			
	Between Groups	.000	1	.000	.035	.851
Restructuring	Within Groups	.008	192	.000		
	Total	.008	193			
	Between Groups	7.840	1	7.840	2.031	.156
Segments	Within Groups	741.155	192	3.860		
	Total	748.995	193			
	Between Groups	ANOVA Results for both Experimental and Control Groups Sum of Squares df Mean Squares Between Groups 6987507020152607 1 698750702015 Within Groups 93151049618032400 192 48516171676 Total 100138556638185008 193 1 .038 Between Groups .038 1 .038 1 .038 Within Groups .938 192 .005 .005 .005 .005 Total .976 193 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 .005 <td>.021</td> <td>.276</td> <td>.600</td>	.021	.276	.600	
ChaneInSale	Within Groups	14.350	192	.075		
	Total	14.370	193			

	Та	ble 6			
	Robust Tests of	Equality of Means			
		Statistic ^a	df1	df2	Sig.
Assots	Welch	14.402	1	115.080	.000
Assels	Brown-Forsythe	14.402	1	115.080	.000
PotOn Assots	Welch	7.689	1	163.519	.006
ReiOnAssets	Brown-Forsythe	7.689	1	163.519	.006
DahtEquity	Welch	.031	1	166.562	.860
DebiEquity	Brown-Forsythe	.031	1	166.562	.860
Destructuring	Welch	.035	1	191.745	.851
Restructuring	Brown-Forsythe	.035	1	191.745	.851
Sagmanta	Welch	2.031	1	189.929	.156
Segments	Brown-Forsythe	2.031	1	189.929	.156
Chama In Cala	Welch	.276	1	182.637	.600
Chanemsale	Brown-Forsythe	.276	1	182.637	.600



LOGISTIC REGRESSION

The results of logistic regression reinforce the results of ANOVA. The mean differences in total assets and the return on total assets variables are significant. The Wald test for the difference in total assets means is 9.67 and P=00 and for the difference in return on total assets variables is 6.30 and P=01 while the Wald tests for the mean difference in the remaining variables are not significant (Table 7).

			Table 7				
	Variables in the Equation						
		В	S.E.	Wald	df	Sig.	Exp(B)
Step 1ª	Assets	.000	.000	9.686	1	.002	1.000
	RetOnAssets	-6.593	2.627	6.298	1	.012	.001
	DebtEquity	008	.044	.036	1	.850	.992
	Restructuring	4.997	23.768	.044	1	.833	148.014
	Segments	037	.082	.206	1	.650	.964
	ChaneInSale	.293	.574	.261	1	.609	1.341
	Constant	.872	.356	5.992	1	.014	2.391
a Variah	le(s) entered on step 1	· Assets RetOn	Assets Debt	Equity Restri	icturing Se	egments Cha	neInSale

The Omnibus tests of the model coefficients are significant, P=00. The Chi-square of Hosmer-Lemeshow goodness of fit is 10.27 and P=0.25. Both the Omnibus and Hosmer-Lemeshow test results support the model (Table 8).

Table 8 Omnibus Tests of Model Coefficients & Hosmer and Lemeshow Test						
Step 1 Chi-square df Sig.						
Step	28.622	6	.000			
Block	28.622	6	.000			
Model	28.622	6	.000			
Hos	smer and Lemeshow Test					
Step	Chi-square	df	Sig.			
1	10.267	8	.183			

Table 9							
Test of Homogeneity of Variances							
Levene Statistic df1 df2 Sig.							
Assets	7.884	1	128	.006			
ResOnAssets	.001	1	128	.980			
DebtEquity	.303	1	128	.583			
Restructuring	.027	1	128	.870			
Segments	.025	1	128	.876			
ChaneInSale	7.498	1	128	.007			



Page 64

ANOVA statistics were computed for firms with severe internal control weaknesses – lack control over revenue recognition or/and at the firm level- and for control group. As was the case with the logistic model, the F-tests for total assets, the return on assets and to some extent the number of segment are significant. However, the F-test for number of segments is not robust, as it value was 0.09 (Table 10). The lack of significance of the number of segments variable might be attributed to the fact that the FASB limited the maximum number of segment to be disclosed to ten.

Large accelerated filers vary widely in size as measured by total assets. It is assumed that larger accelerated companies tend to have access to additional resources and have a welldeveloped infrastructure that enables them to establish effective internal controls. This premise as the results indicate can be applied to the larger firms but not for smaller firms in the large accelerated filer category. Not unexpectedly, the costs of effective internal control for firms with more transactions, more segments, more customers, more foreign transactions and investments are higher than the costs for other firms lacking these attributes. These results show that smaller firms of the large accelerated filers' category lack sufficient resources and may have not as welldeveloped infrastructure relative to the larger firms. The combination of insufficient resources and less-developed infrastructure may well preclude the smaller firms from establishing good internal control. The larger accelerated filers in this category are more likely to enjoy economies of scale and scope along with the additional resources that make it easier to develop the procedures and policies such as segregation of duties that are necessary for good internal control.

Table 10							
		ANOVA					
		Sum of Squares	df	Mean Square	F	Sig.	
	Between Groups	3077234048262900.500	1	3077234048262900.500	4.380	.038	
Assets	Within Groups	89932657186954080.000	128	702598884273078.800			
	Total	93009891235216976.000	129				
	Between Groups	.044	1	.044	15.628	.000	
ResOnAssets	Within Groups	.364	128	.003			
	Total	.409	129				
ResOnAssets DebtEquity Restructuring	Between Groups	6.922	1	6.922	.447	.505	
	Within Groups	1981.476	128	15.480			
	Total	1988.398	129		F Si 4.380 .02 15.628 .00 .447 .50 .113 .72 2.987 .00 1.990 .10		
	Between Groups	.000	1	.000	F 4.380 15.628 .447 .113 2.987 1.990	.738	
Restructuring	Within Groups	.007	128	.000			
	Total	.007	129				
	Between Groups	12.448	1	12.448	F Si 4.380 .0 15.628 .0 .113 .7 .113 .7 .113 .7 .113 .1 1.990 .1	.086	
Assets Asset	Within Groups	533.521	128	4.168			
	Total	545.969	129		F Sig 4.380 .03 15.628 .00 .447 .50 .113 .73 2.987 .08 1.990 .16		
	Between Groups	.183	1	.183	1.990	.161	
Assets ResOnAssets DebtEquity Restructuring Segments ChaneInSale	Within Groups	11.747	128	.092			
	Total	11.930	129				



Additionally our research reveals that profitability is an important factor in determining the existence of internal control weaknesses. If a firm is profitable, it has the necessary resources to devote to establishing and maintaining effective internal control. Unlike the less profitable firms or those that incur losses. These firms may not be able to establish or maintain good internal control due to the lack of resources. More over these firms may find that they are willing to relax some controls thus enabling them to manage their earnings in order to meet financial analysts' expectations, achieve a desired profit level, or renew their contracts and/or achieve bonuses.

Comparing the results of this research with those of Doyle, *et al.* (2007a), we find that our results strongly re-enforce their results with respect to firm's size and profitability and to some lesser extent more segments. Thus large accelerated filers are able to sustain rapid growth, meet their obligations and restructure without disruption on their internal control.

SUMMARY AND CONCLUSION:

The Sarbanes Oxley Act of 2002 requires all public firms to establish and maintain effective internal control over financial reporting and to disclose any material weaknesses. The SEC classified these firms with respect to filing dates into four categories: small, non-accelerated filers, accelerated filers and large accelerated filers. Large accelerated filers are assumed to have well developed infrastructure and sufficient resources to devote to establishing and maintaining effective internal control. In this paper, we tested a sample of large accelerated filers matched with a sample of firms with strong internal control to identify the determinants of internal control weaknesses. Using ANOVA and logistic techniques, six variables were tested. These were total assets, change in revenue, number of segments, return on assets, debt-equity ratio and those that undergo restructuring. The results indicate that total assets and return on assets are significant in determining the internal control against the control group, profitability, total assets and the number of segments variables were significant though the number of segments was not robust.

The major limitation to the research is that these results may be specific to large accelerated filers only. Other categories of firms may have different determinants. These firms may have different characteristics depending on the resources available for internal control.

Another limitation is that we have used only financial variables in our model. This notwithstanding, our findings are important as they carry significant informational value for regulators, financial statement users, and auditors. That is, less profitable firms and/or small size of firms in the category of large accelerated filers tends to have weak internal control. Therefore, their financial statements may not be reliable. As a result, regulators may scrutinize the financial statements of these firms for possible intentional errors. The findings of this research may also alert financial statements users of the low quality of earnings of these firms. Auditors may

الم للاستشارات



expand their substantive tests to collect more and larger samples and carry the tests at different point of times.

REFERENCES

- Anderson, Kristen L. and Teri Lombardi Yohn, (2002). "The effect 10-K restatements on firm value, information asymmetries, and investor reliance on earnings." Georgetown University. Washington D.C., Working paper.
- Ashbaugh-Skaife, H., Collins, D., and Kinney, W. (2007). The discovery and reporting of internal control deficiencies prior to SOX-mandated audits." *Journal of Accounting and Economics*, Volume 44, issue 1-2. PP 16-192.
- Bryan, S. and Lilien, S. (2005). "Characteristics of firms with material weaknesses in internal control: An assessment of Section 404 of Sarbanes Oxley". Wake Forest University and City University of New York. Working paper.
- Bulkeley, William, M. and Robert Tomsho. (2005). "Kodak to Get Auditors' Adverse View." Wall Street journal, January 27, p 7.
- The Committee of Sponsoring Organization (COSO), (1992). Internal Control— Integrated Framework.
- Dechow, P.M., and W. Ge. 2006. "The persistence of earnings and cash flows and the role of special items: Implications for the accrual anomaly." *Review of Accounting Studies*, Vol.11, pp. 253-296
- DeFond, M., Jiambalvo, J., (1991). "Incidence and circumstances of accounting errors." *The Accounting Review* vol. 66, issue 3, 643-655.
- Doyle, J., Ge, W. and McVay, S. (2007a). "Determinants of weaknesses in internal control over financial reporting and the implications for earnings quality." *Journal of Accounting & Economics* (JAE), September. Vol. 44, pp.193-223.
- Doyle, J., Ge, W. and McVay, S. (2007b). "Accruals quality and internal control over financial reporting." *The Accounting Review*, Vol. 82, pp. 1141-1170, October 2007
- Eldridge, Susan W. and Kealey T. Burch, (2005). Sox costs: auditor attestation under Section 404, University of Nebraska at Omaha, Working paper.
- Kinney, W.R., Jr. and McDaniel, L. (1989). "Characteristics of firms correcting previously reported quarterly earnings." *Journal of Accounting & Economics* 11, 71-93.
- Krishnan, Gopal V. and Gnanakumar Visvanathan, (2007). "Reporting internal control deficiency in post-Sarbanes-Oxley era: The role of auditors and corporate governance." *International Journal of Auditing*, Vol. 11, pp. 73-90
- Leech, Tim (2003). "Sarbanes-Oxley Sections 302 & 404: A White Paper Proposing Practical, Cost Effective Compliance Strategies" http://www.sec.gov/rules/proposed /s74002/card941503.pdf
- Public Company Accounting Oversight Board (PCAOB), (2004). "Auditing Standard No. 2 An audit of internal control over financial reporting performed in conjunction with an audit of financial statements". PCAOB. March 9.
- Securities and Exchange Commission (SEC). (2005b). "SEC votes to propose changes in filing deadlines and accelerated filer definition; postpone 404 compliance date for non-accelerated filers; propose issuing Section 28(e) Interpretive Guidance." Press Release 2005-134, September 21.
- Stice, J. 1991. "Using financial and market information to identify pre-engagement factors associated with lawsuits against auditors." *The Accounting Review* 66 (3), 516-33.
- The Senate and House of Representatives of the United States of America (U.S. Congress). 2002. Sarbanes-Oxley Act of 2002. Public Law 107-204, 107th Congress.

Academy of Accounting and Financial Studies Journal, Volume 17, Number 4, 2013



www.manaraa.com

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

