

Association Between Firms Earnings and Accounting Restatement Resulting

from different sources of errors

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Abstract

Restatements of financial reporting arise from many sources including changes in accounting rules, changes in reporting entity, accounting errors, and fraud (or "irregularities"). Theory predicts that Firms earnings decline in the preceding years after restatement reporting. However, there has been no studies that have studied the rank or strength of the decline in firms earnings as a results of various sources or account restatatement errors when the board of the firm is involved in the restatement. The objective of this paper is to investigate and identify the most important source of account restatement error that will yield the largest decline in the preceding period after the declaration of restatement when the board of the firm is aware of the restatement. The board of directors (B of D) is the governing body of a company, elected by shareholders in the case of public companies to set strategy and oversee management. The board typically meets at regular intervals. Every public company must have a board of directors. Some private companies and nonprofit organizations also have a board of directors. To achieve the objective, account restatement data were extracted for the period 2000 – 2021 for the various industries listed in the US security and exchange commission. Restatement was recorded for firms in year preceeding earnings for both when board is aware and not aware



of restatement. The univariate and multiple regression analysis indicated that awareness of the board modifies the relationship between sources of restatement preceeding earnings but the effect is not significant. In addition, it was observed that the most important source of account restatement is fraud especially when the board is aware.

Introduction

The basis for economic growth is investment. Transparency in accounting disclosure has become increasingly important due to the growth of the global economy and the competing interests of numerous stakeholders. In making investment decisions and obtaining funding, accounting disclosure is one of the fundamental ideas and rules that is essential in enhancing the value of the data and information in financial statements. These statements are used by present and potential investors, analysts, tax authorities, creditors, and anyone who gain from the information supplied. The elimination of significant accounting errors from financial statements is one factor that has a significant impact on the credibility of financial statements. Financial restatement is the process of updating items on financial statements from prior years as a result of a balance adjustment or categorization change. Financial restatements are a possibility for most businesses (Callen et al., 2008). Accounting mistakes—intentional or not—are to blame for this. The corporation in question is required to correct the inaccuracies and update the financial accounts in this situation. The two main factors that lead to the restatement of financial accounts for a business are the modification of the accounting method and the repair of errors from earlier periods. The financial restatement would be necessary if there was a significant inaccuracy in the financial



statements of earlier periods and if the current period's accounting practices differed from those of the earlier periods (Callen & fang, 2015).

Investors react unfavorably when financial accounts are restated, according to Callen et al. (2006, 2008) Callen & fang (2015), since restating financial statements exposes an entity's deficient accounting system. The level of confidence in the presented data will be compromised by a significant accounting error in the financial statements, and in this scenario, financial restatements will be necessary to correct errors. Users of financial statements may conclude from financial restatements that there is a problem that management intends to conceal by financial restatements while manipulating in actual operations. One of the executive tools for managing earnings is the restatement of financial statements. In this sense, earning management refers to tampering with financial reports so as not to breach accounting norms and rules. Earnings management entails making adjustments to financial reports in order to deceive shareholders about an organization's financial situation or to influence the results of contracts that depend on the reported accounting data (Healy & Whalen, 1999). In other words, corporate executives use earnings management as a strategy for luring investments. By maximizing its profit, it presents an inflated picture of the company's performance in order to mislead investors and attract their funds. Thus, the objective of this paper is to investigate and identify the most important source of account restatement error that will yield the largest decline in the preceding period after the declaration of restatement

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Literature review and hypothesis development

Studies from the past have examined several factors that affect or are affected by earnings management. Regarding the nature of the relationship between restatement of financial accounts and earnings management as well as the outcomes of this relationship, different findings have been published. According to Richardson et al. (2002), companies that restate their earnings have considerable debt levels and high market expectations for future earnings growth. Additionally, the propensity for inexpensive external finance serves as the primary driver of earning manipulation. Additionally, businesses that have restated their financial statements work to sustain positive quarterly earnings and a continuous earning growth chain. The data in this regard is consistent with the demands on the capital markets, which encourage businesses to use aggressive accounting practices. Additionally, crucial indicators of earnings manipulation that lead to restatement are accruals data, particularly operational and investment accruals.

According to Callen et al (2006) .'s study, market reactions to restatement brought on by inaccuracies are typically unfavorable. Restatements during earnings declines or when earnings are lower than competitors in the same industry are linked to opportunistic managerial styles and operational issues. Their findings imply that not all restatement are the same. Corporate shareholders appear to be concerned about accounting mistakes, particularly if mistakes show a conscious effort on the part of management to deceive some, if not all, stakeholders. Restatements resulting from modifications to accounting principles

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are probably less predictive of earnings management. The restatement of financial reporting by firms has been progressively increasing in recent years (Gertsen et al., 2006). Restatement has weakened the public's trust in powerful firms, and in certain circumstances, it has even contributed to their demise.

Given the foregoing, it may be concluded that a company that has restated its financial statements is more likely to get the attention of auditors, managers, and analysts. The firm's market position suffers as a result, and the information symmetry increases. However, management should take action to enhance the situation of the market and reestablish user and investor confidence in financial statements. Information transparency and asymmetry are negatively correlated, according to earlier studies (Brown & Hilgist 2007; Ballesteros et al. 2017). Therefore, the ability to regulate earnings is compromised by reduced information asymmetry. Both Dadbeh & Mogharebi (2013) and Jiraporn et al. (2008) have corroborated these findings, and their findings support the notion that information asymmetry is favorably associated to earnings management. Therefore, in this study, various aspects of previous studies regarding the relationship between restatements and earnings management are investigated. Accordingly, the hypotheses of this study are as follows:

Hypothesis 1: Account Restatement resulting from accounting sources of errors is negatively associated with next period earnings when the board is not aware.

Restatement may be done when the board with the consent of the board especially if its due to clerical or accounting application error.*Hypothesis 2:* Account Restatement resulting from financial fraud is negatively associated with next period earnings when the board is not aware.



Hypothesis 3: Account Restatement resulting from clerical error is negatively associated with next period earnings when the board is not aware.

Sample and Research Design

Sample

We obtained our sample data from Audit which have been used in previous studies. We extracted data on account restatement from audit analytics for the period of 2000 to 2021. From the initial sample of 6,540 company-year observations across 886 NAICS listed industries, we eliminated 5,836 observations corresponding to industries with less than 22 observations (the total period reviewed). This reduces the to 704 company-year observations. A further exploration of the dataset revealed additional 123 missing observations across all variables in the dataset. This further reduced the sample used in the analysis to 581. The detailed sample selection table is presented below.

Panel A: Table 1: Sample Selection (the unit of observation is a company-year)

Listed number of observations during (2000 – 2021)	6,540
Observations from industries with less than 22 observations	(5,836)
Observations from missing values	(123)
Final sample	581

Model

 Accounting error (A_{it})

 Fraud (F_{it})

 Clerical error (C_{it})

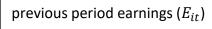
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Earnings (E_{it+1})





 (B_{it})



change in revenue (ΔR_{it})

current period assets (T_{it})

Figure 1: illustrates the suggested conceptual framework that shows the relationship between next period earnings (E_{it+1}) and current period restatement resulting from accounting error (A_{it}) , Fraud (F_{it}) , Clerical error (C_{it}) moderated by board involvement (B_{it}) while controlling for previous period earnings (E_{it}) , change in revenue (ΔR_{it}) , and current period assets (T_{it}) .

Here, it is assumed that restatement occurs at time t = 2000, and earnings is monitored at time t+1 = 2001. It is expected that there will be a decline in earnings at t+1 because of restatement at time t especially if the board is not aware and necessary adjustment is not done on t+1 earnings.

The multiple linear regression model for predicting next period earnings after restatement

moderated by board is given by

$$E_{it+1} = \alpha_0 + (\alpha_1 A_{it} + \alpha_2 F_{it} + \alpha_3 C_{it}) \times B_{it} + \gamma_1 E_{it} + \gamma_2 \Delta R_{it} + \gamma_3 T_{it} + \epsilon_{it+1}$$

where

$$A_{it} = \begin{cases} 1, & \text{Restatement due to Accounting error} \\ 0, & \text{otherwise} \end{cases}$$



 $F_{it} = \begin{cases} 1, & \text{Restatement due to Financial fraud} \\ 0, & \text{otherwise} \end{cases}$

 $C_{it} = \begin{cases} 1, & \text{Restatement due to Clerical error} \\ 0, & \text{otherwise} \end{cases}$

$$B_{it} = \begin{cases} 1, & \text{Board is involved in restatement} \\ 0, & \text{otherwise} \end{cases}$$

 $\Delta R_{it} = R_{it+1} - R_{it}$, α 's are main effects and γ 's are control effects, ϵ_{it+1} is the residual error of predicting next earnings using the variables and i = 1, ..., K firms, and t = 1, ..., Y, years. The variables E_{it} , R_{it} and T_{it} were all expressed in million (000'000).

Results

Panel B: Table 2: Univariate analysis results of the main variables and next period earnings when board is aware or not.

	Board aware		Board unaware			Difference	
	(n=1	51)	(n=409)				
Variable	Mean	SD	Mean	SD	Diff in Means	T-test	p-value
A _{it}	124.88	382.52	114.31	401.39	10.57	0.26	0.794
F _{it}	318.63	571.31	-12.76	67.88	331.38	1.51	0.179
C _{it}	278.83	252.47	183.71	281.13	95.12	0.58	0.582

Sig. 1% ***, 5% **, 10% *, >10%, SD: Standard Deviation.

Table 2 results showed that the next period earnings arising from accounting restatement sources is higher than next period earning arising from other restatement sources when the board is aware than when the board is unaware but the difference is not significant at 5% level. Similarly, results showed that the next period earnings arising from fraud restatement sources is higher than next period earning arising from fraud restatement sources when the board is aware but the difference is not significant at 5% level. Also, results showed that the next period earning at 5% level. Also, results showed that the next period earning at 5% level. Also, results showed that the next period earning at 5% level. Also, results showed that the next period earning at 5% level. Also, results showed that the next period earning at 5% level. Also, results showed that the next period earnings arising from fraud restatement sources is higher than next period earning are sources is higher than next period earning at 5% level. Also, results showed that the next period earnings arising from clerical error restatement sources is higher than next



period earning arising from other restatement sources when the board is aware than when the board is unawre but the difference is not significant at 5% level.

Variable	E_{it+1}	A _{it}	F _{it}	C _{it}	E _{it}	$\Delta \boldsymbol{R}_{it}$	T _{it}
E_{it+1}	1.000						
A _{it}	-0.007	1.000					
F _{it}	0.027	-0.379***	1.000				
C _{it}	0.009	-0.764***	-0.025	1.000			
E _{it}	0.205***	-0.024	0.091**	-0.015	1.000		
$\Delta \boldsymbol{R}_{it}$	0.079*	-0.005	-0.009	0.009	-0.083	1.000	
T _{it}	0.096**	0.000	0.050	0.005	0.540	-0.048	1.000

Table 3: Correlation Matrix

Sig. 1% ***, 5% **, 10% *, >10%.

Table 4: Multiple linear regression

 $E_{it+1} = \alpha_0 + (\alpha_1 A_{it} + \alpha_2 F_{it} + \alpha_3 C_{it}) \times B_{it} + \gamma_1 E_{it} + \gamma_2 \Delta R_{it} + \gamma_3 T_{it} + \epsilon_{it+1}$

	Expected Sign	Estimate	Std. Error	Т	P-value	Sig	Decision
(Intercept)		-88.626	235.724	-0.376	0.707		
A _{it}	+ve	187.030	233.591	0.801	0.424		NS
F _{it}	+ve	168.857	185.379	0.911	0.363		NS
C _{it}	+ve	211.321	252.142	0.838	0.402		NS
B_{it}	+ve	228.941	351.181	0.652	0.515		NS
$A_{it} \times B_{it} = 0$	-ve	-235.425	349.142	-0.674	0.500		NS
$F_{it} \times B_{it} = 0$	-ve	-309.819	341.498	-0.907	0.365		NS
$C_{it} \times B_{it} = 0$	-ve	-239.584	351.073	-0.682	0.495		NS
E _{it}	+ve	0.223	0.049	4.563	0.000	***	Accepted
ΔR_{it}	+ve	0.002	0.001	2.354	0.019	***	Accepted
T_{it}	+ve	0.000	0.001	-0.499	0.618		NS

Sig. 1% ***, 5% **, 10% *, >10%, NS: Not Significant. Year-2019 is the base year.

Table shows the multiple regression results which indicated that all the main effects are not significant but the direction of hypotheses were all satisified suggesting that there is no



much evidence of the tested hypotheses in the data. For accouting restatment and next period earnings, the results showed the next period earnings is about 187.030 million more than previously reported earning before adjustment due to accounting restatement when the board is aware. However, when the board is unaware of the accounting restatement, the next period earnings is about 235.425 million less than previously reported earnings. Also, for fraudulent restatment and next period earnings, the results showed the next period earnings is about 168.857 million more than previously reported earning before adjustment due to fraudulent restatement when the board is aware. However, when the board is unaware of the fraudulent restatement, the next period earnings is about 309.584 million less than previously reported earnings. Furthermore, for clerical error restatment and next period earnings, the results showed the next period earnings is about 211.321 million more than previously reported earning before adjustment due to clerical error restatement when the board is aware. However, when the board is unaware of the fraudulent restatement, the next period earnings is about 239.584 million less than previously reported earnings. Therefore, the awarenes of board on restatement modifies the relationship between sources of restatment and earnings by increasing the next period earnings when the board is aware compared to when the board is unaware.

Conclusion

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Several studies have considered different forms of restatement as it relates to next period earnings. However, there have not been any cosnideration of baord awareness as a moderating variable for the relationship between a restatements next period earnings. The objective of this paper was to investigate and identify the most important source of account restatement error that will yield the largest decline in the preceding period after the declaration of restatement when the board of the firm is aware of the restatement. The univariate and multiple regression analysis indicated that awareness of the board modifies the relationship between sources of restatement and next period earnings but the effect is not significant. In addition, it was observed that the most important source of account restatement is fraud especially when the board is aware.



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