

The Impact of Earnings Management Strategies on Accounting Information Relevance

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Abstract

This research aims to investigate the impact of earnings management strategies on accounting information relevance with the application to listed companies in Saudi stock exchange during the period from 2012 to 2016 using the balanced panel data methodology with a sample of 113 companies. Results indicate that earnings per share are of value relevance and that is a necessary condition and assumption to carry out this study. Results indicate that accounting accrual-based earnings management strategy is used to manipulate earnings downward but it is not of value relevance because it has no effects on share prices. On the other hand, real activities-based earnings management strategy is statistically significant and of value relevance and it is used to manipulate net income upward. Managers engage in real activities-based earnings management practices to increase net income but investors in Saudi capital market understand these practices and adjust for their decisions by reducing the value relevance of earnings when determining share prices. Low adjusted R squared of 0.11 requires interpretation of our results with caution.

Keywords: Accounting accrual -based earnings management strategy, real activities- based earnings management strategy, earnings per share, value relevance, Saudi stock exchange.

1. Introduction

The increasing use of accounting information by investors and financial analysts to aid in valuing stocks creates an incentive for managers to manipulate earnings to influence share performance. It is therefore interesting how capital markets participants respond to evidences of earnings management. Rahman, et. al (2013) stated that company's stocks are measured by the present value of its future earnings, investors and analysts look to earnings to determine the attractiveness of a particular stock. Companies with poor earnings prospects have lower share prices than those with good prospects. Therefore, Earnings management may play a key role in determining share prices of companies. Earning management practices made by managers may reduce the reliability of earnings and then reduce the value relevancy of the earnings. This paper contributes to the existing literature by investigating impact of earnings management strategies i.e. both accrual strategy and real activities strategy on the value relevance of the accounting Information for companies listed in Saudi stock exchange that apply GAAP- based Saudi national accounting standards.

2. Research Problem

There is evidence that management engages in earnings management by manipulation of accruals with no direct cash flow consequences. Examples include underestimating provisioning for non-performing bad debt, expenses and delaying asset write-offs, asset impairments and the salvage value of long-term assets. Management also can engage in earnings management by manipulating real activities through operating decisions during the year with direct cash flow consequences to meet certain earnings targets. Zhaohui Xu et al (2007) provided examples such as research and development expenditures, capital investments, over production, or sales and disposal of long-term assets. Roychowdhury (2006) defined real earnings management as “departures from normal operational

practices, motivated by managers' desire to mislead at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations.

Zhaohui et al. (2007) reveals that real earnings management has not been researched as much as accrual earnings management as it is expected not to be applied because it would be too expensive. On the other hand, the survey conducted by Graham et al. (2005) suggests that managers are much more willing to engage in real earnings management than in accruals management: 80% would decrease discretionary spending, 55% would delay a project, compared with only 28% who would draw down reserves and 8% who would change accounting assumptions. This survey evidence appears inconsistent with the higher cost assumption of real earnings management. The survey made by Graham, Harvey and Rajgopal (2005) reveals that managers prefer real earnings management to accrual earnings management.

Baber et al. (1991) and Bushee (1998) reveal that there are existing evidences on real activities manipulation whereas most of the evidences on real activities management focus on the reduction of research and development expenditures to reduce reported expenses. Thomas and Zhang (2002) indicate that real activities are manipulated by providing limited time discounts to increase sales toward the end of the year and building up excess inventory to lower reported COGS (overproduction). In the survey conducted by Graham et al. (2005) a large number of respondents rely more on reducing discretionary expenditures and/or capital investments than using other manipulation methods. In addition, Bartov (1993) documents those firms with negative earnings report higher profits from asset sales.

Habbash and Elghamadi, (2016) investigated the association exists between audit quality and earnings management in less developed economies, providing their various shortcomings and differences. Five different measures of audit quality (auditor size, auditor industry specialization, auditor opinion, auditor change and timeliness of auditor report) were examined based on a sample of 337 non-financial Saudi listed firms from 2006 to 2009. The absolute value of discretionary accruals is used as a proxy for earnings management by using a cross-sectional variation of the Kothari model. The results of this research indicate that only auditor opinion indicates earnings management practice. The results support the argument that auditors are powerless in front of managerial opportunistic activities.

Alshetwi, M. (2016), examined the relationship between the multiple directorship and stock ownership of audit committee members and companies' earnings management based on a sample of 98 Saudi nonfinancial listed companies. Study results indicate that the multiple directorship of audit committee members is not statistically associated with a reduction in the level of earnings management; however, the stock ownership of audit committee members is significantly related to a reduction in the level of earnings management. Habbash and Alghamdi, (2015) conducted a study to investigate the motivations of earnings management in Saudi listed companies because numerous motivations for earnings management proposed in the literature review have inconsistent empirical support. Therefore, this study tries to provide empirical evidence and support on motives of earnings management through using a qualitative research approach by using both questionnaire survey and interviews to obtain the different perceptions of respondents. Results indicate that four main incentives for Saudi managers to manage earnings are "to increase the amount of remuneration, to report a reasonable profit and avoid loss, to obtain a bank loan" and "to increase share price. Mohammed, A., (2010) conducted a study to provide evidence of the practice of deliberate earnings management on the part of managers in Saudi Arabia stock market. The empirical analysis is carried out using a sample of 46 companies listed on the Saudi Stock Market over the period 2005-2007 using the multivariate statistical analysis. Empirical results indicate that managers of Saudi listed companies that are large and have high ratio of foreign employees to total employees tend to manage earnings to avoid potential political costs.

As noted above all previous studies conducted on earnings management in Saudi Arabia examine the relationship between earnings management and corporate governance and audit issues rather than the association between earnings management and value relevance issues. Also, many studies conducted on value relevance of accounting information in Saudi Arabia such as Oraby, S., (2017); AL Barrak, (2011); Khanagha, (2011); AL Salman, (2003) did not examine the relationship between earnings management and the value relevance of accounting information. Therefore, this study is the first to bridge this gap in the literature through linking earnings management studies with value relevance studies in Saudi Arabia.

3. Objective of the Study

This study aims at investigating the impact of earnings management on the value relevance of accounting information in the case of Saudi Arabia through conducting an empirical study and using the relevant statistical tools to test research hypotheses.

4. Literature Review

Veldhoven, (2017) conducted a study on 13 Dutch companies that filed for bankruptcy in the period from 2004 to 2009 after receiving an unqualified auditor's report prior to the year they filed for bankruptcy. Results indicate that companies in financial distress overstate revenues, accounts receivable but not the inventory and show negative changes in cash flows from operations in comparison to the control group and those auditors could have been able to predict this if a financial distress model was used in their assessment.

Fattahi, et al. (2014) examined the impact of earnings management on the value of the accounting information by using Leuz model to determine the earnings management and a cumulative measure of earnings management based on four scales is used. Two variables of accounting information are used in this study, book value of equity and earnings. The study sample is composed of 63 firms listed on the Tehran Stock Exchange over the period from 2003 to 2011. By using the panel data approach to analyze data, findings reveal that there is no significant relationship between earnings management and value relevance of the accounting information.

Himma, (2013) examined the association between earnings management and the value relevance of the earnings and the book value. The researchers used return on assets to measure accruals. The study sample is composed of all firms listed on the Indonesian Stock Exchange over a period from 2009 to 2011. Results indicate that the earnings management leads to the reduction of value relevance of the earnings and book value.

Stefano (2012) examined the association between accounting information and stock prices in a sample composed of 103 firms listed on the Milan Stock Exchange. Overall results indicate that operating cash flows, discretionary accruals and non-discretionary accruals have different value relevance and this relevance decreased after the financial and economic crises.

Iman, S. (2012) investigated the earnings management behavior measured by real and accruals transactions i.e. abnormal cash flow of operation, abnormal production cost, abnormal discretionary, short-term discretionary accruals, and long-term discretionary accruals. The study applies a perspective of prospect theory to predict the earnings management behavior of the management. This theory predicts that managers tend to manage earnings to avoid negative earnings. Positive earnings around zero is an indication of earnings managed to avoid negative earnings. Results reveal that most of Indonesian public companies tend to manage earnings based on real transactions than accruals transactions.

Eman, (2010) investigated the impact of earnings management on the value relevance of both earnings and book values. Earnings management is defined as a combination of the real earnings management and earnings management of the accruals. Results reveal that the earnings and the book values are related to the share prices of the firms and that earnings management reduced the value relevance of earnings and book values in explaining share prices.

Studies Discussed Accounting Accrual -Based Strategy are Discussed as Follows:

Du Charme et al. (2001) ; Kimbro (2005) revealed a positive relationship between firm value at IPO date and discretionary accruals as a result an increase in income due to earnings management increases initial firm value. Beneish and Vargus (2002) concluded that in the short-term, income-increasing accruals are undetected by investors due to their perception that income-increasing accruals are of high quality, leading to positive market reactions on earnings management. Baber, Chen and Kang. (2006) stated that Accrual components that are less substantive in nature tend to deceive investors in the short-term. Cruz, and Luiz,(2015) provided evidence suggesting that earnings management does not significantly affect short-term stock returns. It is appeared that incentives around earnings management are already well understood by market participants and thus do not respond to evidences of earnings management. Furthermore, it is appeared that investors are able to "see through" financial information and thus, are able to manage their expectations in the presence of earnings management. On the other hand, Balsam, et al. (2002) reveal a negative stock price reaction to earnings management because investors re-evaluate reported accounting information using other financial information and therefore, make adjustment for investment decision as to stock prices.

Furthermore, other studies founded that market participants are aware of the incentives to manage reported earnings and they adjust for earnings management (Baberet, al.(2006).There are some other studies indicate THA that stock markets do not respond to evidences of earnings manipulation. Ching, et al. (2006) revealed that stock markets are not fooled by the use of discretionary accruals to manage earnings. The literature also showed mixed evidence. Firms that are experiencing earnings management using income-increasing accruals reverse these accruals in the subsequent years leading to investor disappointment which is eventually reflected through lower stock returns (DuCharme, et. al, 2001).On the contrary, Ching, et al (2006) said that earnings management is evaluated at a specific event date such as seasoned equity offerings and thus, subsequent stock returns in the long term are no longer affected and in the absence of a major event for the firm there is little incentive to engage in earnings management(Chou, et al. 2009).

Studies Discussed Real Activities –Based Earnings Management Strategy Are Discussed As Follows: In a survey conducted by Graham, et al. (2005)revealed evidence that top managers engage in real activities to manipulate earnings. Roychowdhury(2006) provided additional evidence indicating that managers manipulate sales, overproduce inventory and reduce discretionary expenses to avoid incurring losses or missing analyst forecasts. Mande, et. al, (2000); Beset. al, (2003); Pozza et. al, (2007) indicate that firms manipulate research and development expenditures and income from asset disposals. Roy Chowdhury,(2006) found evidence consistent with managers manipulating real activities to avoid reporting annual losses through suggesting price discounts to temporarily increase sales, overproduction to report lower cost of goods sold, and reduction of discretionary expenditures to improve reported margins.

Regarding market reaction to real activities-based manipulation strategy, firms engaging in real activities manipulation to meet earnings forecasts and to improve operating performance to be better than firms did not engage in real activities manipulation (Gunny, 2010).Real activities manipulation strategy has only short-lived benefits whereas firms that engaged in real activities manipulation witness worse operating and stock market performance in the long-term implying long-term negative consequences of real activities manipulation (Bhojraj, et. al, 2009). Finally it can be said that In order to fully capture the economic consequences of earnings management process it should not be investigated under one strategy (Fields, et.al,(2001) especially managers shifted from using accruals to real activities -based earnings management in one period to reduce the probability of regulatory scrutiny(Cohen et, al (2008). There is a tradeoff involved in the choice of either accounting-based or real activities-based earnings management depending upon the relative costs involved, accounting practice, scrutiny, firm characteristics, financial performance, and both strategies are used as substitutes (Zang, (2012).

5. Hypotheses Development

To conduct an empirical study to examine the impacts of earnings management on the value relevance of the accounting information, the study applies regression models to test the relationship between the dependent and independent variables..

1. There is a no a statistically relationship between earnings per share and the dependent variable stock price
2. There is no a statistically significant relationship between accounting accrual- based earnings management strategy and the dependent variable stock price.
2. There is no a statistically significant relationship between real activities -based earnings management strategy and the dependent variable stock price.

6. Methodology and Research Design

The Study sample is composed of all Saudi listed companies working in all economic sectors in Saudi stock exchange except for banking and insurance sectors because of the special nature of their activities and regulatory bodies that control them, in addition, they apply different accounting framework IFRS- based accounting standards. The study uses secondary data collected from the financial statements of the companies that are available on Saudi stock exchange website. In addition, stock prices of the companies are available on the same website. The study covers the period from 2012 to 2016 and applies the balanced panel data methodology. Therefore, the sample includes only companies that have complete data during the study period. Total study population involves 131 companies of which 18 companies have no the complete data covering the period under study, the remaining 113 companies with total 565 observations are incorporated in the sample because they have all data covering the time under study.

6.1 Measuring the Value Relevance of Earnings

To measure the value relevance of accounting information, regression models are used to capture the adjusted R squared that explain changes in stock prices by accounting information. The quality of accounting information such as earning or book value is measured by value relevance regression models that investigate the association between share prices as dependent variable and some accounting information such as earning per share, book value of equity as independent variables. Alali and Foote, (2012) defined value relevance as a statistical association between accounting information and share prices or returns. Furthermore, Dobija and Klimczak, (2010) set a rule that as long as accounting numbers provide investor with useful information the accounting numbers should be correlated with stock prices. In addition, Harris, et.al, (1994) measured quality of accounting information by investigating the relationship between earning and prices.

The common methodology used by the accounting literature to assess the value relevance of accounting information (the quality of accounting numbers) is to test its relevance to market valuation. It means that there is a statistically significant association degree between accounting information disclosed and the stock market valuation. Most empirical studies adopted the model of Ohlson, (1995).

$$SP_{it} = \alpha_0 + \beta_1 EPS_{it} + \epsilon_{it} \quad (1)$$

Whereas

α_0 is the intercept

β is the slope

SP is the price per share after three months of the date of the financial statements to allow dissemination of accounting information to investors for decision-making

EPS is earning per share at the date of financial statements and is measured as earnings after tax divided by number of shares outstanding

ϵ_{it} is other value relevant information (error term).

i indicates to firms-cross section

t indicates to years- time series

6.2 Measuring Accounting Accrual- Based Earnings Management Strategy

Discretionary accruals was used as a proxy for Accounting accrual- based earnings management strategy and it was measured as the difference between the firm's actual accruals and normal accruals. The Jones Model (1991) used by Zang (2012); Cruz and Luiz (2015) is adopted in this study to estimate the level of normal accruals as follows:

$$Total\ Accruals_{it} / TA_{it-1} = \alpha_0 + \alpha_1 (1 / \log TA_{it-1}) + \beta_1 \Delta RE_{it} / TA_{it-1} + \beta_2 PPE_{it} / A_{it-1} + \epsilon_{it} \quad (2)$$

Total Accruals = Non-Discretionary Accruals + Discretionary Accruals where Non-discretionary accruals can be defined as an obligatory expense that has yet to be realized but is already recorded in the financial statements but discretionary accruals can be defined as a non-obligatory expense that has yet to be realized but is recorded in the financial statements. From these definitions, it becomes clear that the discretionary accruals can be managed by managers and is therefore the focus of these studies.

Where:

Accruals = total accruals calculated as the difference between net income from continuing operations and net cash flows from operating activities reported in cash flow statement (See Collins and Hribar, 1999);

TA = the total assets in year (t-1)

ΔS = the change in net sales from year t-1 to t

PPE = gross property, plant and equipment at year t.

i indicates to firms-cross section

t indicates to years- time series

α, β = Coefficient of regression

ϵ = error term that may be a positive number, then it is an income increasing and if it is a negative number, then it is an income decreasing accrual.

All elements encompassed within the accruals expectations model are scaled by lagged assets in order to decrease heteroscedasticity.

6.3 Measuring Real Activities- Based Earnings Management Strategy

Following Roychowdhury (2006), real activities based manipulation will be measured through discretionary expenditures such as research and development (R&D), advertising and selling, general and administrative. A normal level of discretionary expenditures will first be estimated as follows

$$DISEXP_t / TA_{t-1} = \alpha_0 + \alpha_1 (1 / \text{Log} TA_{t-1}) + \beta_1 i (STI / A_{t-1}) + \epsilon_{it}$$

DISEXP_t = the sum of research and development expenses, advertising, market, sales and general expenses in year t

TA_{t-1} = the total assets in year t-1

St=the net sales reported in year.

α, β = Coefficient of regression.

ε = error term.

Roychowdhury,(2006) indicated that his model creates a problem because if firms manage sales upward to increase reported earnings in any year, they can exhibit unusually low residuals from the above regression in that year, even when they do not reduce discretionary expenses. To avoid this problem, discretionary expenses are expressed as a function of lagged sales. Therefore, to estimate normal discretionary expenses the following regression is estimated for the sample and the estimated residuals will be the proxies for real activities-based earnings management.

$$DISEXP_t / TA_{t-1} = \alpha_0 + \alpha_1 (1 / \text{Log} TA_{t-1}) + \beta_1 i (ST_{t-1} / TA_{t-1}) + \epsilon_{it} \quad (3).$$

Reducing discretionary expenditures such as R&D, advertising, and maintenance are expensed in the period they are incurred. Therefore, companies might reduce reported expenses, and increase net income by reducing discretionary expenditures. If management reduce discretionary expenditures to meet earnings targets, they should have unusually low discretionary expense. If discretionary expenses are generally in the form of cash, reduction such expenses lowers cash outflows and has a positive effect on abnormal cash flow from operation in the current period. To manage earnings upward, management direct their earnings if the realized levels of R&D are lower than the normal levels of discretionary expenses an so abnormal levels are negative.

7. Analysis of Results

In this section after estimating regression models, the results of these models are analyzed to test research hypothesis

7.1 Value Relevance of Earnings

$$SP_{it} = \alpha_0 + \beta_1 EPS_{it} + \epsilon_{it} \quad (1)$$

Table 1: Regression Results of Model 1

variable	Coef.	Std. Err.	t	P> t	Adjusted R squared	F	Prob> F
EPS	4.497373	.5536418	8.12	0.000	0.4803	65.99	0.0000

Source: out puts of SPSS. Dependent variable SP

Table1 indicates that earnings per share is statistically significant and is of value relevance with strong explanatory power of = 0.4803. As a result H 1 “There is a no a statistically relationship between earnings per share and the dependent variable stock price “is rejected.

7.2 Calculating Accounting Accrual –Based Earnings Management Component

$$\text{Total Accruals} / TA_{t-1} = \alpha_0 + \alpha_1 (1 / \text{Log} TA_{t-1}) + \beta_1 i (\Delta REV_{it} / TA_{t-1}) + \beta_2 i (PPE_{it} / A_{t-1}) + \epsilon_{it} \quad (2)$$

Table2: Correlation Matrix

variables	ACCTA	ΔREV	PPE	logTAt-1
ACCTA	1.0000			
ΔREV	-0.3445	1.0000		
PPE	-0.1653	0.9320	1.0000	
logTAt-1	0.3648	0.0150	0.0801	1.0000

Source: out puts of SPSS

Table2 indicates that total accounting accruals (ACCTA) are adversely correlated to the changes in revenues and the balance of fixed assets but the correlation degree is low. The Correlation coefficient between ΔREV and PPE is 0.9320 indicating a strong and positive correlation between these two independent variables. To overcome this problem, one of them should be eliminated from the model. PPE should be eliminated because it has lower correlation with total accounting accruals with correlation coefficient of -0.1653 than ΔREV with correlation coefficient of -0.3445. VIF test also indicates that autocorrelation exists in the model.

Table 3: Multicollarity

Variable	VIF	1/VIF
PPE	8.16	0.122587
ΔREV	8.11	0.123350
ogta1	.07	0.932439
Mean VIF	5.7	

Source: out puts of SPSS

Therefore, a modified model is developed as follows:

$$\text{Total Accruals} / \text{TAt-1} = \alpha_0 + \alpha_1 (1 / \text{Log TAt-1}) + \beta_1 (\Delta REV \text{ it} / \text{TAt-1}) + \epsilon_{it} \quad (2 \text{ modified})$$

Table 4: Correlation Matrix

variables	ACCTA	ΔREV	logTAt-1
ACCTA	1.0000		
ΔREV	-0.3445	1.0000	
logTAt-1	0.3648	0.0150	1.0000

Source: out puts of SPSS

Table 5: Multicollarity

Variable	VIF	1/VIF
ΔREV	1.00	0.999774
ogta1	. 1.00	0.999774
Mean VIF	1.00	

Source: out puts of SPSS

Table 4 and 5 results indicate that no auto correlation exists between independent variables in the modified model

2. Table 6: Regression Results of the Modified Model 2

variable	Coef.	Std. Err.	t	P> t	Adjusted R squared	F	Prob> F
ΔREV	-.5532479	0596806	9.27	0.000	0.2454	92.71	0.0000
logta1	251.2233	25.54651	9.83	0.000			

Dependent variable ACCTA Source: out puts of SPSS

Table 6 indicates that the model is statistically significant and according to Adj. R-squared, the model explains about = 0.2454 of changes in accounting accruals. Total estimated absolute values of residuals are negative indicating that earnings management practices using accruals aim at reducing net income. Large coefficient of log TAT-1 indicates that large accruals companies hold in previous periods result in low accounting flexibility to practice earnings management in current period by accounting accruals that should be reversed in next periods. This results support some previous literature that managers are constrained to manipulate earnings upward for several reasons as follows: First, the use of accounting accruals restricted by auditors' scrutiny in particular when using the Big Four accounting firms that have more experience, face more reputational risk and invest more in audit resources to detect accounting accruals in comparison with smaller audit firms (Becker et al. 1998). Second, the application of accounting accruals is constrained by a firm's accounting flexibility. Barton and Simko (2002) reveal that a firm's ability to manipulate earnings through accruals is constrained by the extent to which accruals have been applied in previous periods as they should be reversed in other periods.. Higher values indicate less accounting flexibility (Zang 2012).

7.3 Calculating Real Activities -Based Earnings Management Component

$$DISEXP_t / TA_{it-1} = \alpha_0 + \alpha_1 (1 / \log TA_{it-1}) + \beta_1 (ST-1 / TA_{it-1}) + \epsilon_{it} \quad (3)$$

Table 7: Correlation Matrix

variables	DISEXP	St-1 / TAt-1	1 / LogTAt-1
DISEXP	1.0000		
St-1 / TAt-1	- 0.3450	1.0000	
1 / LogTAt-1	0.3674	0.6942	1.0000

Source: out puts of SPSS

Table 7 indicates that there no auto correlation between independent variables.

Table8: Multicollarity

Variable	VIF
logTAt-1	1.93
st-1	1.93
Mean VIF	1.93

Source: out puts of SPSS

Before estimating regression model, the researcher made tests for multicollinearity (correlation between predictors) using Variance inflation factors (VIF) because multicollinearity can increase the variance of the regression coefficients, making them unstable and difficult to interpret. Table 8 indicates that there is no auto correlation between independent variables.

Table 9: Regression Results of Model 3

variable	Coef.	Std. Err.	t	P> t	Adjusted squared	R	F	Prob> F
St-1	.0530637	.0165037	3.22	0.001	0.1476		49.83	0.0000
logTAt-1	14.55494	3.184245	4.57	0.000				

Source: out puts of SPSS. Dependent variable DISEXPX

Table 9 results indicate that the model is statistically significant and explains about 0.1476 of changes in discretionary expenses. Regarding independent variables, all variables are statistically significant whereas sales is inversely correlated with discretionary expenses. The absolute residuals in the model are negative indicating that managers engage in income increasing real activities practices.

7.4 Estimating the Value Relevance of Accounting Accrual-Based Earnings Management Strategy

To test the value relevance of discretionary accrual, the regression model is developed as follows”

$$SP_{it} = \alpha_0 + DISAC + \epsilon_{it} \quad (4)$$

Results indicate that discretionary accruals peroxide by residuals is statistically insignificant and so it is not of value relevance. As a result H2 “There is no a statistically significant relationship between accounting accrual earnings management components and the dependent variable stock price” IS accepted.

Table 10: Regression Results of Model 4

variable	Coef.	Std. Err.	t	P> t	Adjusted R squared	F	Prob> F
DISAC	-.0131656	.052442	-0.25	0.802	0.0003	142.26	0.8019

Source: out puts of SPSS. Dependent variable SP.

Table 10 Results indicate that discretionary accrual model4 is insignificant and is not of value relevance. as a result H2 “There is no a statistically significant relationship between accounting accrual-based earnings management and the dependent variable stock price” is accepted.

7.5 Estimating the value relevance of real activities- based earnings management strategy

To test the value relevance of real activities- based earnings management strategy component, the regression model is developed as follows”

$$SP_{it} = \alpha_0 + RA + \epsilon_{it} \quad (5)$$

Table 11: Regression Results of Model 5

variable	Coef.	Std. Err.	t	P> t	Adjusted R squared	F	Prob> F
RA	-1.200496	6965197	-1.72	0.005	0.11	50.2	0.0000

Source: out puts of SPSS. Dependent variable SP

Table 11 results indicate that real activities based earnings strategy model is statistically significant and of value relevance. This component has inverse relationship with share price indicating that investor in Saudi capital market understand that managers engage in real activities earnings management practices upward to increase net income through reducing discretionary expenses and so they adjust their decisions through reducing the value relevance of earnings. As a result H 3” There is no a statistically significant relationship between real activities-based earnings management component and dependent variable share price “is rejected but low adjusted R squared of 0.11 requires interpretation of our results with caution.

8. Final Conclusions

This research aims to investigate the impacts of earnings management strategies on accounting information relevance with the application to listed companies in Saudi stock exchange during the period from 2012 to 2016 using the panel data methodology. Study sample is composed of all Saudi listed companies working in all economic sectors in Saudi stock exchange except for banking and insurance sectors because of the special nature of their activities and regulatory bodies that control them. In addition, they apply different accounting framework IFRS- based accounting standards. The study uses secondary data collected from the financial statements of companies that are available on Saudi stock exchange website. In addition, stock prices of the companies are available on the same website. Total research population involves 131 companies of which 18 companies have no the complete data covering the time under study, the remaining 113 companies with total 565 observations are incorporated in the sample because they have all data covering the time under study. To measure the value relevance of accounting information, regression models are used to capture adjusted R squared that explains changes in stock prices by accounting information Results indicate that earnings per share are of strong value relevance .Two earnings management strategies are investigated to determine their impacts on value relevance. Results indicate that accounting accrual- based earnings management strategy is not of value relevance because it has no effects on share prices but real activities accrual- based earnings management strategy is statistically significant and is of value relevance but low adjusted R squared of 0.11 requires interpretation of our results with caution. Management engages in real activities earnings management practices to increase net income but investors in Saudi capital market understand these practices and adjust for their decisions by reducing the value relevance of earnings.

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