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RESEARCH PAPER

Accounting Information and Value Relevance Nexus: Evidence from Pakistan

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ABSTRACT

This study aims at studying the value relevance of accounting information produced by large companies in Pakistan as there is a dearth of research in linking the returns on securities with accounting information produced by the companies in the Pakistan economy. For this purpose, the data was collected from 170 companies in the non-financial sector for 11 years (2006-2016). Panel data settings were used to regress the accounting information i.e., Earnings with Returns which are calculated using the Returns model. Empirical results prove that Earning figures are consistently value relevant throughout the period but the increase in value relevance of earnings is not significant. It is also shown that investors in Pakistan are giving more importance to Changes in Earnings over a sample period than to Earnings. This study is likely to highlight the importance of accounting information to investors in making their investment decisions.

KEYWORDS Accounting Information, Changes in Earnings, Value Relevance

Introduction

The main aim of the preparation of detailed financial statements by companies is to provide shareholders and other stakeholders a detailed, relevant, and timely information to enable them to make informed decision making about their stake in the company (Brigham, & Houston,2021). All the research carried out on value relevance so far has mainly been aimed at the question i.e. Do financial statements prepared by companies provide internal and external stakeholders with any quality, relevant, and reliable financial information for them to be able to make perfectly informed decision-making? The accounting research in the last decade or so has been aimed at examining the relationship of any accounting variable with the stock price i.e., whether accounting variables are value relevant and to what degree? (Beaver 2002)

Financial statements are supposed to have the fundamental characteristics for quality information to the users and that are Comparability, Verifiability, Timeliness, and Understandability (Alasbahi et al., 2021). These characteristics are necessary for preparing quality financial statements and issuing quality accounting information (IASB Conceptual Framework 2015). According to the framework, the main objective of preparing financial statements is to provide financial information about the entity to help investors, creditors, lenders, and other stakeholders in making informed decision making about committing their resources to the company (Conceptual Framework, 2015).

The main issue with the relevance of accounting information is that it has not been able to justify its importance in developing economies mainly because of the inherent limitation of market imperfection in these markets (Lopes 2002). This is mainly down to the fact that the scarcity of information resources makes it almost impossible for share prices in these markets to reflect all the information. (Lopes, 2002) also sees this weakness as the strength of accounting information for decision-making in developing economies as compared to other sources of information available in developed economies.

To address this problem of the value relevance of financial information in developing economies like Pakistan empirical research is of utmost importance to investigate the linkage of accounting information and share prices of companies (Mirza, Malek & Hamid.2019). Surprisingly this phenomenon couldn't get much attention from researchers in a developing economy like Pakistan therefore this study is aimed at bridging this gap and studying the compliance of International Financial Reporting Standards (IFRSs)/International Accounting Standards (IASs) and its effect on the share price performance of different companies listed on Karachi Stock Exchange (KSE) now known as Pakistan Stock Exchange (PSX). Although the data of this research is solely from Pakistani companies finding of this research are going to be useful for other developing & emerging economies especially those with similar economic features to Pakistan and who are facing similar economic challenges as Pakistan. Because of this research, it is expected that the importance of accounting information will gain more value to investors in those economies. The standard-setting bodies of those economies will also understand the importance of adopting IFRSs and the associated benefits they are going to achieve by producing good quality accounting information. As all the IFRSs are aimed at aiding the investors in making their investment decisions, so complying with the IFRSs' disclosure requirements is going to invest in Pakistani companies a more attractive and understandable option for investors from Developed markets e.g. Europe and America than those economies that haven't adopted IFRSs so far.

Theoretical Background

The role of the International Accounting Standards Board (IASB) has been defined as to develop a set of high-quality accounting standards that could form a unified set of accounting principles that are understandable to users of financial statements e.g. investors (Prather-Kinsey, Luca, & Phan, 2022). According to the theory of Efficient Markets, (Fama, 1970), the weak form of efficient market share prices should reflect all publicly available information. Therefore, published financial statements are expected to be value relevant i.e. able to help the investor in making his investment decision.

Tsoligkas and Tsalavoutas, 2011 studied the value relevance of accounting information of Research and Development (R & D) expenditure in profit and loss statement and its capitalized portion in its Statement of Financial Position reported in compliance with relevant accounting standards and found a significantly positive value relevance of R & D capitalized and vice versa for R & D expensed in the UK. Tsalavoutas, (2012) again tried in Greece to study the relationship between accounting information reported in compliance with International Financial Reporting Standards (IFRSs) and its value relevance using earnings as a proxy for accounting information but this time the results were insignificant. (Barth et al, 2008) argued with empirical evidence that when an entity adopts highly quality financial accounting standards this ultimately leads to improvement in the quality of financial accounting information which in turn leads to value relevance concerning earnings.

Kothari, (2000) has confirmed this relationship by emphasizing that financial accounting information is believed to be quality if it is produced by implementing IFRSs that are prepared to keep in view the quality requirement of the industry. This confirms that quality accounting information can only be produced if standard setters produce quality standards and enforcement bodies enforce those standards in true spirit.

The above discussion implies that when a firm produces financial statements that can be termed as quality then they are certain to be value relevant to all the interested groups in the market. (Francis et al, 2004) studied the main characteristics of quality financial statements and concluded that value relevance is the main characteristic of quality financial accounting information. This relationship was further confirmed by the Existence of quality accounting standards does play its part in producing good quality accounting information but is not the only factor influencing it rather proper enforcement of that good quality accounting standard is another pre-requisite for producing quality accounting information (Sumiyana, Hendrian, Effendi, Fitrijati, & Sriwidharmanely, 2021). Barth et al, (2008) emphasized that if financial accounting standards are not implemented in the true spirit, then it becomes almost impossible to produce good quality accounting information irrespective of the existence of high-quality accounting standards. A similar conclusion was reached by Hellstrom, (2006) who argued very strongly that it is not enough just to focus on preparing high-quality accounting standards to help produce good quality accounting information but proper care must be given in monitoring that those accounting standards are being implemented as they were meant to be to produce good quality accounting information. Considering Barth et al, (2008) and Hellstrom, (2006) it is important to analyze how effectively the monitoring system of compliance with accounting regulations is operating in Pakistan & whether the institutional environment in Pakistan is well equipped to ensure compliance with IFRS disclosure requirements in Pakistan and to produce the good quality accounting information as if it is not supported by results, then conclusion could be different from previous studies.

Literature Review

Beaver,(1968) produced the initial important work on studying the relationship between accounting information produced and its relevance to share prices. This work caught the eye of the following researchers and act as a guide to following researchers who produced a large number of studies to study the relationship between accounting information and value relevance. Negakis, (2005) In modern times the research has focused on one question i.e. how useful is the accounting information for investors and other stakeholders in making their investment decision in an enterprise?

Barth et al, (2001) summarized the essence of modern-day research on value relevance by narrating the purpose of research as an extension of knowledge of how reliable and relevant the accounting information is incorporated in share prices. Research on the value relevance of accounting information treats value relevance as a dependent variable and accounting information in financial statements as independent variables. Beaver, (2002) called the accounting information relevant if a significant relationship is found between independent and dependent variables.

(Barth et al,2001) sees research on the value relevance of accounting information as important for regulatory and standard-setting bodies of every country as for investors. Value relevance is the degree to which variations in various accounting figures attempt to illustrate the variations in stock prices Imhanzenobe, (2022); Thompson, Ashimwe, Buertey, & Kim, (2022).

The main aim and objective of the research on value relevance are to establish a link between values in financial statements to the value of a firm Dahmash & Qabajeh, (2012). Seven attributes of accounting quality have been desired namely "Value Relevance, persistence, accrual quality, predictability, smoothness and conservatism, and timeliness Bekheet, Faramawi, & Ezat, (2019). Francis et al, (2004) suggesting that alone relevance is not the only desirable attribute of financial statements but certainly one of the important and desired alt attributes of financial statements' ability.

Value relevance has been an important area of empirical accounting research for past decades (Beaver, 2002). Holthausen and Watts, (2001) discuss the value of value relevance literature in stathe standard-setting less and argue that existing literature on value relevance makes it a little difficult to infer standard-setting process from it and argue that most of the available literature on value relevance is based on the assumption that investors in equity instruments are most influential users of financial statements and they need information in financial statements as a valuable input in their investment decisions. This is found to be inconsistent with the purposes of the accounting standards-setting process which value the preferences of all types of stakeholders while Barth et al, (2001) are of a different opinion and see value in value relevance research for the standard-setting process. They claim that value relevance research is investor oriented but still it carries a valuable input in the accounting standard-setting process.

The literature suggests that the value relevance of accounting information varies with permitted choices by accounting standards (Misund, Osmundsen & Sikveland, 2015). The basic premise of research on value relevance is that it is capital market research and if accounting information is of any value then there will be a sudden shift in investor behavior and the market will witness a quick response via a change in share price Woo, Mai, McAleer, & Wong, (2020). So, information will be categorized as a value relevant if it results in changes in share price. Balachandran & Mohanram, (2011) interpreted the measures of value relevance as the total market share of the firm incorporated in the share price that is attributed to figures in financial statements.

Scott & O'Brien, (2006) narrates how the share prices behave after the issuance of financial statements which can be a suitable measure of value relevance of accounting information to investors noting that the ideal measure of value relevance of net income figure will be to observe the changes in share prices at the time when net income figure is made public. The author argues in support of this argument that it is perfectly rational for well-informed shareholders to revise their assessment of the future performance of the entity based on current levels of Earnings. As a result of these revisions acquisition or disposal of shareholding decisions are initiated to bring their portfolios to intended levels. If net income shows potential for stakeholders, then beliefs would be revised when received and buy or hold or sell decisions will be made and a change in share price will be witnessed. The author concludes by claiming that accounting information is perceived to be value relevant if it can force shareholders to change their course of action and the degree of usefulness of accounting information will be the extent of changes in share prices after the accounting information is released.

If the value relevance of accounting information is higher that would mean the investor can confidently use information in financial statements to make their investment decisions establishing a strong link between the firm's value and information in financial statements Lam, Sami, and Zhou, (2013).

In a semi-strong form of market efficiency according to efficient market hypotheses, the share price will adjust sharply and precisely in response to any information that is publicly available Fama, (1970). This implies that as soon as a piece of information is released it is promptly reflected in share prices. Since financial statements of any entity are considered an important and primary source of information about a company's affairs so the value relevance research assumes a semi-strong form of efficiency and so will be the assumption of this study.

Based on the empirical research, value relevance is categorized into two major classes for value relevance first being international and comparative research and the second being Intra country value relevance research. Since the current study is aimed at investigating within Pakistan, therefore, this research falls into the second category i.e. Intra country value relevance research.

Value Relevance Construct

Francis and Schipper, (1999) View the concept of value relevance from four different dimensions. The first dimension is that because share prices move towards their intrinsic value, therefore, accounting information is meant to capture the intrinsic values to help estimate the value relevance as gain generated from following trading rules based on accounting information.

The second dimension of value relevance explains the accounting information as value relevant if Earning can predict future probable Earnings, cashflows, dividend ratios, or book values i.e. variables of valuation models e.g. dividend valuation model, etc Ausloos,(2020); Nissim, (2022).

According to the third dimension accounting information is believed to be value relevant if based on information in these financial statements is enough to persuade investors to change their investment decision Widyatama and Narsa, (2022).

The ability of financial statements to capture the important information to affect the share price irrespective of the consideration of the source of that information depicts accounting information as value-relevant Dunham and Grandstaff, (2022). According to Francis and Schipper, (1999) this is the fourth dimension in which value relevance can be measured.

This study is an extension of the fourth dimension of studying value relevance as it studied the statistical significance of the relationship between accounting information and its impact on share prices.

Hypothesis Generation

The above literature review leads the research to develop the value relevance hypothesis as follows:

Two research focus points of this study are whether financial statements of sample companies that are supposed to be prepared by IFRSs/IASs are value relevant in our selected periods and if there is any change observed in their value relevance over the selected periods. These questions were selected to consider the entry or exit of any company in the selected sample, any increase in the number of players in the Pakistan Stock Exchange/Karachi Stock Exchange (PSX/KSE) probably due to allowance of foreign investment in PSX/KSE sample companies. Any improvement in PSX/KSE's information systems due to issuance, adoption, and any amendments in existing IFRSs/IASs' requirement of quarterly financial statements and any requirements to immediately publish any relevant information to the operations of the company or its financial position.

Gjerde et al (2005) stressed that while preparing standards and proposing any amendments to existing ones, the informational needs of shareholders and other participants should be considered as only a properly informed investor can assess whether financial statements are any value relevant or not. Some researchers claim that for financial information to be relevant, they have to be useful and more importantly timely Hellstrom, (2006). Like other attributes we studied earlier literature on value relevance also shows some mixed results. Collins et al, (1997) and Francis and Schipper,(1999) claim that the introduction and implementation of IFRSs/IASs' have positively affected value relevance, and on the contrary, Brown et al, (1999) and Lev & Zarowin, (1999) found no improvement in value relevance after the introduction and implementation of IFRSs/IASs.

Over the eleven years selected for this period 2006-2016, the regulatory and informational environment in PSX/KSE has evolved a great deal ensuring that now timely information is supplied to investors and other interested groups potentially improving the value relevance of accounting information for the investors. It is also evident in these twenty years the number of companies in the whole PSX/KSE has increased and this increase again coupled with an increase in investors would sure urge the need to improve the information system in PSX/KSE to better meet the informational demand of market participants making the financial statements more value relevant.

Thus, it is expected that any accounting information produced by sample companies during the eleven years concerning Earnings and changes in Earnings are actually value relevant and this value relevance has increased over these eleven years as a result of the better flow of accounting information to shareholders and other participants.

The above discussion helps in generating the following hypotheses

H1: Earnings in the period 2006-2016 were valued as relevant

H2: Value relevance of Earnings increased during the 2006-2016 period.

Material and Methods

Selection of Sample companies

The population of this study comprises all the companies (588) listed on Pakistan Stock Exchange on 31 Dec 2016 and the sample size is the top 5 companies concerning market capitalization from each of the non-financial sectors in Pakistan. The top five companies are selected as it is observed that the top five companies across the different sectors vary a lot in respect of variables chosen for this study so, being the leading companies from their respective sectors they are supposed to be the best representative of the rest of the companies in their respective sector for compliance score and value relevance. In case of any non-financial sector comprising less than 5 companies then that particular sector will be left out of the study in that particular year to achieve the main goal of meaningful comparison between sectors. And if a new company is listed in a particular sector and a total number of the companies in that sector.

Data to test Hypotheses for Value Relevance

In this section, different data collection methods and different empirical valuation methods will be discussed to test the value relevance hypotheses. These empirical valuation methods will be described in detail later but first sampling Criteria and data collection methods will be narrated. After that, different methods to test value relevance and to observe changes in value relevance over the selected period will be discussed and the different factors that affect the value relevance of accounting information e.g. Earnings and changes in Earnings will be discussed.

Time frame Sample and Data collection

The period selected for this study comprises of eleven years time spans ranging from 2006-2016. The reasons for selecting the period were that first Karachi Stock Exchange went through fundamental changes during this period and was better regularized and governance procedures were improved, The second reason was that during the military regime, Pakistan's economy experience a huge influx of capital and several companies grew considerably increasing number of players in the market but after the end of military rule, the PSX/KSE dipped and touched the low and then resurgence was witnessed after a tenure of political government so the period was considered as an ideal to study the share price movements. The third reason is the strictness of the Securities & Exchange Commission of Pakistan/ Institute of Chartered Accountants of Pakistan (SECP/ICAP) over audit firms thereby pressurizing the top audit firms to comply with strict audit rules thereby improving the quality of audit and last reason being PSX/KSE starting using e technology which affected the business positively and increased information resources for market participants by the end of the sample period.

The most relevant data for testing the value relevance of accounting information is considered to be Market prices of shares, net profits, net dividends, and the number of shares issued so far. The main source of data is the Security and Exchange Commission of Pakistan, page on Yahoo Finance, State Bank of Pakistan, Companies' financial statements, and annual reports obtainable from companies' websites.

All monetary information i.e. stock prices, dividend figures, and other accounting information is presented in PKR. For share prices and Earnings, per-share value is used to counter the problem of Heteroscedasticity and other scaling problems. All of the data was verified to validate any capital adjustment. This was in agreement with previous studies on the topic e.g. Barth et al, (1992); Kothari & Zimmerman, (1995).

As there are only 147-162 companies in the selected sample for 2006-2016 so the sample size is relatively small therefore following criteria were used to select the sample

1. Market values of shares must be available for the whole selected year.
2. Other related financial information that is considered important e.g. dividends, net profits, and the number of shares issued, etc. is also available for the year selected.

Value Relevance through Empirical Valuation models:

For this study two hypotheses H1 & 2 are meant to test how to value relevant accounting information i.e. Earnings and changes in Earnings over the selected periods of 2006-2016. The main thrust of research on value relevance is to study how different accounting variables affect share price movements Beaver, (2002). Al hogail, (2004) explains the theory of value relevance as a study to explore how much of a company's share's value is the result of accounting information i.e. to what extent the accounting information affects the share price and ultimately value of the firm itself. Therefore, it could be asserted that the main aim of empirical research on the value relevance of accounting information is to show whether accounting information does have an incremental effect on the market values of shares to be useful for stakeholders to make a rational investment decision.

Value relevance of accounting information can be studied by applying regression on share price and Earnings and changes in Earnings on all the sample years to explain the movement in share prices. As we have discussed and hypothesized before any statistical significance (R^2)of the relationship between accounting information and share price for one year is not decisive until we convert this cross-sectional analysis into time series to analyze the changes in value relevance over time. To find out the accounting information and value relevance have statistical significance is a sign that all the variables are associated i.e. financial statements are value relevant to investors.

As discussed previously there are two models available in literature which are universally acknowledged as valid and reliable i.e. Price Model and the Return model. Ohlson, (1995) used the price models to study the link between share price movement and Earnings and book values i.e. accounting information. Easton and Harris, (1991) used the returned model to study the relationship between return on shares with Earnings as accounting information. As is evident these models are based on the essence of accounting i.e. book values and Earnings. Since the book values study the fundamental value and are incorporated in Earnings therefore only Easton & Harris, (1991) Return model is used for the current study.

Barth et al, (2001) and Holshausen & Watts, (2001) narrated that both of the models have their pros and cons and it is tedious debate as to which one is better. A lot of research has been carried out to test this assertion e.g. Kothari & Zimmerman, (1995) claimed that if we use the price model then there will be less noise and bias in the Earnings coefficients but on the other hand if the Return model is used then relatively fewer econometric problems will be faced. Therefore, to encounter problems caused by econometric technicalities it is considered a viable option to use the Returns model to complete the analysis.

Returns Model

Ohlson (1995), price model studies how the changes in Earnings and book values affect the changes in stock prices and sets the tone for studying the dynamics of share prices. However, one of the shortcomings in this model was identified by Xu (2003) who narrated that this model is unable to explain the changes in returns in the stock market due to changes observed in independent variables i.e. Earnings and book values. Therefore, this study uses the Return model to further investigate the value relevance of accounting information.

Earlier empirical research that was conducted to study the relationship between Earnings and share returns was mostly based on assumption that share price is simply a multiple of Earnings. Beaver et al,(1980) and Collins, Easton & Harris, (1991) all the opinions that this model is simply an encouragement for other researchers to carry out empirical research to study the relationship between Earnings and Returns or between abnormal returns and abnormal Earnings. Easton and Harris,(1991) also add that Earning levels in addition to changes in Earnings can also be studied for their impact on share returns. They also note that transitory components are present in the previous year's Earnings and those Earning levels might well be related to them.

Ali and Zarowin, (1992) further studied this role of transitory components and Earnings and they claimed that these transitory components could disturb the coefficients of Earnings and could negatively link estimation error with persistence cross-sectionally if changes in Earnings are used as a proxy for abnormal Earnings. Thus, according to Ali & Zarowin, (1992) claims based on the previous argument that besides those components that feature in the Earning changes, the inclusion of Earning levels in the returned model is of utmost importance to capture the effect of those transitory components. In addition, the inclusion of Earning levels in the prescribed Return model is also important in reducing or eliminating measurement errors in abnormal Earnings Ohlson & Shroff, (1992).

Therefore, as a result of the above discussion both Earning levels and changes in Earnings, scaled according to opening share prices are included in the returned model for this study as used by Easton & Harris, (1991) who declared the value relevance as a function of both the Earning change, Earning levels and other factors.

$$R_{it} = \beta o + \frac{\beta 1EPSit}{Pit-1} + \frac{\beta 2\Delta EPSit}{Pit-1} + \varepsilon_{it} \qquad (1)$$

now this equation is further divided to investigate the individual impact of Earning change and Earning levels on the share price.

$$R_{it} = bo + \frac{b1EPSit}{Pit-1} + \varepsilon_{it} \qquad (2)$$

$$R_{it} = c0 + \frac{c1\Delta EPSit}{Pit-1} + \varepsilon_{it} \qquad (3)$$

Rit= Returns for 12 months up to the filing of accounts date after the year-end +net dividends/share-share price 12 months before the filing date/share price 12 months before the filing date.

Pit-1= share price 12 months before the filing date. EPSit/Pit-1= EPS of the firm i at time t excluding the effect of share price of the firm i at time t-1. ΔEPS/Pit-1= Change in EPS from t-1 to t excluding the effect of the share price of the firm i at t-1 t= 2006-2016 $\varepsilon it = other\ information$.

As with the price model the accounting information i.e. Earnings, in this case, is value relevant if a link can be found between Earning level, earning changes and returns and coefficients of independent variables are statistically significant. To find out the yearly association between returns and Earnings, again, R^2 is used for studying the value relevance of accounting information over the period.

Measurement of Changes in Value Relevance of Accounting information over time:

Researchers have suggested approaches that can be used to investigate changes in the value relevance of accounting information over time and now they are explained in detail

Lev and Zarowin,(1999) and Hellstrom, (2006) suggested splitting the selected periods into sub-periods to study the changes in R^2 of different periods as a measure of changes in the value relevance of accounting information over time and acknowledged this as a valid tool. Following this assertion from previous research the timetable chosen for this study is 2006-2016. In the first decade of the twenty-first century during the military regime, foreign investment grew tremendously and several listed companies in PSX/ KSE grew at a tremendous pace another effect was media attention and deep interest by financial analysts and PSX/KSE started to be noticed at the international scene. But then the curse of Terrorism hit Pakistan during the second leg of the first decade of the 21st century which was damaging to the business environment in general and resulted in an outflow of capital from the country and situation was further aggravated by Political and Geographic instability but after 2012-2013-2014 the situation started improving and PSX/KSE again was being appreciated around the globe for its performance so this period was considered important to see what impact does accounting numbers make on share price movements in Pakistan when the Stock market falls and rise again.

*A*djusted R^2 that is obtained by yearly, cross-sectional regressions of Return models is regressed on time trend variable as was tried by Collins et al, (1997) and Francis & Schipper, (1999) and is shown as under

$$R_T^2 = \alpha_0 + \alpha_{1time_t} + \varepsilon_t \quad (4)$$

$$R_E^2 = b_0 + b_1 time_t + \varepsilon_t \quad (5)$$

$$R_{\Delta E}^2 = c_0 + c_1 time_t + \varepsilon_t \quad (6)$$

Where R_T^2 is the values for adjusted R_t^2 obtained from the Returns models Time= 1-11 years from 2006-2016.

The changes in value relevance could be observed by the significance of the time coefficient. If the time coefficient is significantly positive then value relevance has increased at significance levels over time and vice versa. Francis and Schipper (1999) claim that a highly significant indicator of the value relevance of accounting information over time is the sign of the time coefficient in the regression model. According to Collins et al. (1997); Gjerde et al. (2005), a significant positive coefficient would indicate a rise in the value relevance of accounting information over time, while a large negative sign would indicate a reduction in the value relevance of accounting information over time.

Results and Discussion

Table No.1 presents the results of pooled and year-on-year cross-sectional regression analysis of returns on Earnings that are deflated and year-wise changes in Earnings. *F* Stats (172.21, $p < .01$) for pooled data incorporating Earnings and changes in Earnings depicting the high significance level of the model. The results also indicate both variables i.e. Earnings and changes in Earnings if combined explain almost explains 28% variation in the selected returns model. It is also highlighted that coefficients of both Earnings and changes in Earnings are showing positive signs when pooled together ($p < .01$). The results are almost similar when both Earnings and changes in Earnings are regressed for individual effect. When these models were tested for robustness it was confirmed via the averaging approach introduced by Fama & MacBeth,(1973).

Table No. 1 Pooled and Yearly Cross-Sectional Regressions of Annual Security Returns on Earnings

Year	*N*	β_1	β_2	AdjR_T^2	F. Stats	b_1	AdjR_E^2	c_1	Adj$R^2\Delta_E$
2006	50	4.01*** (5.62)	.51 (.51)	.502	14.01***	3.91*** (5.92)	.401	1.61 1.12	.071
2007	52	.79 (.61)	1.01 (.90)	.156	3.87*	1.72** (2.92)	.152	1.79** (2.95)	.162
2008	59	3.56*** (2.53)	-.52 (-.62)	.251	8.12***	2.62*** (3.42)	.259	.62 (.72)	.023
2009	67	2.92*** (3.59)	.29 (.71)	.252	10.10***	3.02 (3.71)	.261	.71 (1.20)	.048
2010	71	3.50*** (7.12)	-.27 (-.92)	.56	35.01***	3.12*** (7.56)	.536	.30 (.61)	.10
2011	76	2.77*** (5.30)	.07 (.62)	.401	22.35***	3.23*** (7.02)	.392	.51 (1.29)	.073
2012	80	.61 (1.23)	.41* (2.33)	.145	6.03	.81** (1.92)	.092	.61* (1.93)	.102
2013	78	3.1*** (7.10)	.41** (2.72)	.541	36.63***	3.12** (8.01)	.491	1.46*** (3.98)	.311
2014	81	1.81*** (4.12)	.46 (1.82)	.253	12.19***	1.91*** (6.12)	.263	.158** (3.98)	.172
2015	91	3.66*** (5.33)	1.04** (1.81)	.331	22.36***	4.01*** (7.21)	.301	2.99** (4.05)	.176
2016	109	3.02*** (5.92)	-.23 (-.56)	.278	19.22***	2.25*** (8.02)	.266	2.12*** (6.02)	.186
Pooled	814	3.10*** (12.12)	.49*** (4.29)	.277	172.21***	2.42*** (15.28)	.262	1.81*** (7.77)	.162
Fama-Macbeth Averages		2.70*** (7.81)	.289*** (2.23)			2.70*** (4.123)		1.224*** (4.021)	

Note: *** is significant at .01 level, ** is significant at .05 level, * is significant at .1 level

The year-on-year regression analysis of the individual effect of Earnings is highly significant at ($p < .01$) for the most of sample period with the exception being 2012 and 2013 where it was significant at ($p < .05$). Whereas changes in the Earnings coefficient showed significance at ($P < .01$) only in the year 2013 and 2016 and ($p < .05$) in years 2007, 14 and 2015 and ($p < .1$) in 2012.

These results confirm the first hypothesis (H1) of this study which hypothesized that Earnings were valued relevant in our sample period of 2006-2016. These results are almost in line with one of the major studies conducted recently by (Alfraiah, 2014) who found that 27% variations in returns were found by Earnings and changes in Earnings. The adjR^2 for yearly cross-sectional regression reported for PSX/KSE selected firms ranged from 14% to 56% which is just higher than (Alfraiah, 2014) who reported the adj$R^2$of 12 to 52% with almost a similar period showing similar value relevance of Earnings figures in less developed economies.

Changes in Value Relevance over a Sample period (2006-2016) incorporating Time Trend Variable

To find out whether any year-on-year change occurred in value relevance of accounting information i.e. Earnings over the sample period (2006-2016) and to find this phenomenon the yearly adj R^2s that were obtained from cross-sectional and yearly regressions of Earnings, changes in Earnings (combined and individually) on returns are regressed on a time trend variable in table No.2.

Table No. 2 Changes in Value Relevance over a Sample period (2006-2016) incorporating Time Trend Variable

a_0	$a_1 Time_t$	AdjuR^2	b_1	$b_1 Time_t$	AdjR^2	c_1	$c_1 Time_t$	AdjR^2
0.367***	-0.004	0.006	0.396***	-0.005	0.01	0.041	0.014**	0.33
(0.412)	(-0.41)		(0.432)	(-0.475)		(0.86)	(03.12)	

*** is significant at .01 level, ** is significant at .05 level. Heteroscedasticity and Autocorrelation were dealt with through Newey-West (1987).

Table No.2 shows that when yearly adjR^2s of the combined effect of Earnings and changes in Earnings were regressed on the time trend variable, $a_1 Time_t$, the coefficient showed a negative sign but was insignificant. The same was the case Earnings were regressed individually with yearly adj R^2s of the relevant model. But the situation is different when yearly adj R^2s of changes in the Earnings model were regressed on time trend variable $c_1 Time_t$ which showed a significant coefficient at ($p < .05$) meaning that during the sample period of 2006-2016, investors in PSX/KSE considered how is Earnings figure changing from year to year.

The main implication that can be drawn from these results in table No.2 is that since a lot of trading activity was witnessed in the later part of the selected sample period (2006-2016), especially in the tenure of then political Government where terrorism was reduced significantly the earning figure of the top performing companies was changing significantly therefore investors were paying more attention to how the earning figure was changing rather than earning figures itself.

These results can be supported by past research of (Francis and Schipper, 1999) and (Alfraiah ,2014). The results in table No.2 show that an increase in Earnings has an insignificant impact on value relevance so this brings forward the conclusion that Hypotheses 2 (H2) is not supported by empirical evidence and is therefore rejected.

Conclusion

The results of the returned model prove that investors in Pakistan consider both Earnings and changes in Earnings as significant variables in making their investment decisions with Earnings figures taking the lead over changes in Earnings.

A significant decline was observed in both Earnings and the combination of Earnings and earning changes as explanatory variables and was insignificant while a gradual increase was observed in a variable of earning changes and its explanatory powers were significant.

It was obvious that investors are giving more importance to the long-term prospects of the firms and value changes in Earnings as a more reliable figure than earnings itself probably because reported Earnings by firms are improving at a steady pace in the later part of the sample period of 2006-2016.

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