The Economic Consequences of Mandatory IFRS Reporting: Emerging Market Perspective

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Introduction

The value relevance of accounting information in the contemporary electronic and institutionally planned market environment has acquired considerable consideration since accounting regulators have positioned the value relevance as the primary feature of accounting information. Given such phenomenon, the existence of transparency related to accounting information in financial markets is a significant issue. IFRS standards have some prerequisite to get the maximum output in terms of getting quality reports. These prerequisites include investor protection, strictly enforced laws, transparency, and active stock market. This study investigates the economic consequences of mandatory IFRS reporting in the domain of value relevant of accounting information in Pakistan. We used panel data methodologies by incorporating the Ohlson (1995) price and product valuation model. The Study has utilized the data of one hundred and seventy (170) firms listed on the Karachi stock exchange from 2006–2010. The overall results show that both earnings per share and book value have positive and significant influence on the share price. Furthermore, the relationship between share price, book value, and earnings per share signifies that relationship tends to deteriorate with the passage of time following IFRS implementation. The study further finds that book value is more relevant than earning per share in pooled, fixed, and random effect.

Keywords: Value Relevance, Earning per Share, Book Value, IFRS, legal System, Emerging Market.
conclusions. Given that foreign investors stakes are involved and sizable financing sources in capital markets are composed of foreign investors that have raised the need of harmonized quality of financial information. This study intends to add to the accounting research in country specific context to unearth the degree of responsiveness of value relevance of accounting information following IFRS. We applied the panel regression method to examine the value relevance of financial reporting by the association of share price with earnings per share and book value per share using Ohlson model as a theoretical framework. In a second step, we performed the product model, which is used to control the non-linearity in the model. The product model extends the Ohlson model by taking the product of EPS and BV (Clarkson et al., 2011).

Selected Literature Review

Financial information plays a crucial role for different kind of users of financial reports. (Chen et al., 2010). Information is considered value relevant if it truly represents the value of the company (Francis & Schipper, 1999) and helps an investor to make investment decision and also enable financial managers to monitor the performance of a company (Young & Bryne, 2001). Various researches conducted on the subject of the quality of information following the IFRS adoption. Currently, there is dissimilarity in the findings of previous researches related to the value relevancy of accounting information. Several studies noted that quality of accounting information has improved following the IFRS, because IFRS provides fewer alternatives to the management and they have less chance to manipulate the financial statements. Additionally, IFRS facilitates and develops the legal enforcement in the country which eventually increases the relevance of accounting information (Capkun et al., 2008; Barth et al., 2008; Christensen et al., 2008; Chalmers et al., 2010; Chen et al., 2010; Byard et al., 2011; Gjerde et al., 2011; Chalmers et al., 2011; Jermakowicz, 2004). On the contrary, many researchers noted that quality of information has not been improved following IFRS, because IFRS is principle-based standards and provides greater space for management to manipulate the accounting information opportunistically (Hung & Subramanyam, 2007; Paananen & Lin, 2008; Goodwin et al., 2008; Barth et al., 2008; Kvaal & Nobes, 2010; Ahmed et al., 2010; Gaston et al., 2010). (Ely & Waymire, 1999) examined the relationship between two different accounting standard eras, which include APB era (1960–1973) and FASB era (1974–1993) by using two different models. They found that the relationship of share price to book value per share and earnings per share was increased when they applied price model and relationship is deteriorated when a return model is used. (Similarly et al., 1999) concluded that value relevance deteriorated due to the high fluctuation in the market using return model. Further, Gjerde et al., (2011) found that if changes in economic value relevance are controlled, then trend of overall value relevance increases. Alex et al., (2004) found that non-information based trading is the main factor which deteriorated the relationship of share price and accounting information.

Keeping in view different methodological approaches (such as firm fundamental value, relative and incremental approach, residual income approach, earning relevancy, time factor, and earning response coefficient) prior researches have investigated the efficiency of information contents of accounting data. For instance, (Kothari & Zimmerman, 1995) found that firm fundamental value is linked to the share price of the company. Whereas, El-Sayed (2012) used incremental and relative approaches to capture the relevance of accounting information and noted that though moving down through the income statement, net income have relative high value relevance as compared to the sale. The relative approach relates comparison of measures providing better information as compared to others as suggested by Holthausen (2000). Another way to view the value relevancy of accounting Information is the residual income valuation model, which states that investors price securities is the expected present value of future dividends. Ohlson (1995) used this model to measure the value relevance of accounting information. This approach takes the share price as the dependent variable affected by the book value per share and earnings per share. Likewise, Ben (2001) concluded that earning is more value relevant for large size firm while book value is more relevant for small size firm. Wallace (2000) found that the value relevance that is used to find out the financial position. Lev (1989) claimed that the quality of information present in the annual reports of the company is the main determinant of value relevance. He used earning response coefficient as a proxy of quality of accounting information and regressed the company earnings with the share price of the company.

The approach of Ohlson (1995) takes into account the share price as a dependent variable affected by the book value per share and earnings per share. Two different estimation approaches (pricing model and return model) are in the literature to estimate the value relevance using accounting information. Collins et al., (1997) found that incremental value of earning decreases with the passage of time, but there is an improvement in the accounting measure of book value per share. Further, he found the effect after jointly regress the book value per share and earnings per share by the share price of the company. The beta is positive for book value per share and earnings per share and it increases with the passage of time. Ben (2001) noted that earning is more value relevant for large size firm while book value is more relevant for small size firm. Ely & Waymire, (1999) also found the positive beta values for the period of sixty-six years from 1927–1993. Lev & Zarowin (1999), however, noted that beta value of earning per share (EPS), book value (BV) per share and cash flow declined over the period. Wallace (2000) found that the value relevance, which is used to find out the financial position and other financial aspect, are decreasing with the passage of time. Barth et al., (2001) concluded that these studies are fruitful for investor to evaluate the equity. Hand (2003) found that Balance sheet, income statement, and cash flow are value relevant when their accounts are in line with the share price of the company. Lev (1989) claimed that the quality of information present in the annual reports of the company is the main determinant of value relevance. He used earning response coefficient as a proxy of quality
of accounting information when he regresses the company earning with the share price of the company. Lev & Zarowin (1999) asserted that there is a weak association between share price and earning. Ou & Penman (1989) found that the accuracy of future earnings can be improved through enhancing the information contents of Balance sheet when they examined the relationship between financial ratios (fundamental analysis), stock prices, and future earnings.

Research Design, Sample, and Models Specification

Given that the adoption of IFRS potentially influence both the income statement and the balance sheet, there are alternative methodologies to capture the influence of IFRS adoption, we, however measured the value relevance of accounting information is an ability of earnings per share (EPS) and book value (BV) per share that affect share price. To examine the association of company share price with of earnings and book value, we used the Ohlson price model instead of return model. This choice was made on the argument that beta coefficient is highly biased in a return model as compared to price model (Kothari & Zimmer, 1995). Further, Ohlson model has been widely used in the literature (Burgstahler & Dichev, 1997; Collins et al., 1997, Hung & Subramanaym, 2007; Paananen & Lin 2008; Stergios et al., 2008; Barth et al., 2008; Christensen et al., 2008; Capkun et al., 2008; Chalmers et al., 2010; Chen et al., 2010; Byard et al., 2010; Ahmed et al., 2010; Gaston et al., 2010; Chalmers et al., 2011; Gjerde et al., 2011; Jermakowicz, 2004; Kvaal & Nøbes, 2011). Consistent with these studies, the model is specified as follows:

\[ P_{it} = b_0 + b_1 E PS_{it} + b_2 B V_{it} + e_{it} \]  

(1)

Whereas,

\[ P_{it} = \text{the share price for the firm } I \text{ measured three months following fiscal year } t; \]

\[ BV_{it} = \text{the book value of equity per share for firm } i \text{ at the end of period } t; \]

\[ EPS_{it} = \text{earnings per share for the firm } I \text{ during period } t; \]

In estimating the panel regression, we all allow coefficients (including intercepts) to vary across the periods and compare the EPS and BV value relevance slope coefficients, \(b_1, b_2, \ldots, b_n\), between the various periods. We then compared the estimates across different periods. For pooled regressions, the standard errors are clustered year wise. The Ordinary Least Square (OLS) regression model for the pooled data is given as:

\[ P_{it} = \beta_0 + \beta_1 V_{it} + \beta_2 E PS_{it} + \mu_{it} \]  

(2)

Whereas, the estimates from pooled regressions for panel type datasets are found to be biased, therefore, it is required to estimate random effects or fixed effects regression models. The two models depend on the nature of the regressors’ to be included into the estimation. If the regressors’ are vary over time, fixed effects model is best represented and if there are regressors which are constant over time, random effects model is the best.

Fixed effects model is given as:

\[ P_{it} = \beta_0 + \beta_1 V_{it} + \beta_2 E PS_{it} + v_{it} + \epsilon_{it} \]  

(3)

And the time demeaned model from the above regression is:

\[ \bar{P}_i = \beta_1 (B V_{it} - \bar{B V}_i) + \beta_2 (E P S_{it} - \bar{E P S}_i) + \epsilon_{it} \]  

(4)

On the other hand, random effects mode is given as:

\[ P_{it} = \beta_0 + \beta_1 B V_{it} + \beta_2 E PS_{it} + v_{it} + \epsilon_{it} v \]  

(5)

Where \( v_{it} \) is assumed as random variable or i.i.d. Random effects and Cov(\( x_{it}, v_{it} \)) = 0 and the estimates are consistent and can be estimated from Eq. (3). Using the pooled regression, but it is to be given on account that serially correlated error terms \( v_{it} \) and the standard errors are biased.

The following transformation is required to estimate the random effects model from the pooled regression:

\[ (P_{it} - \bar{P}_i) = \beta_0 (1 - \theta) + \beta_1 (B V_{it} - \theta \bar{B V}_i) + \beta_2 (E P S_{it} - \theta \bar{E P S}_i) + ((1 - \theta) v_{it} + (\epsilon_{it} + \theta \epsilon_i)) \]  

(6)

Where \( \theta = 1 - \sqrt{\frac{\sigma_v^2}{\sigma_v^2 + \sigma_\epsilon^2}} \). If \( \theta \) is equal to 1, RE estimation is similar to FE, but if it is equal to 0, the RE estimation is similar to pooled regression. Normally \( \theta \) is assumed to have va value between 0 and 1. If Cov(\( x_{it}, v_{it} \)) = 0, it is fine and the results are efficient and in case where it is not 0, the RE estimator turns to be biased and the degree of bias depends on value to \( \theta \). If \( \sigma_v^2 \gg \sigma_\epsilon^2 \), then \( \theta \) is expected to be close to 1, and the bias in the results tends to be lower.

In Second step, we executed the product model, which is used to control the non linearity in the model. Product model extension the Ohlson model by taking the product of EPS*BV (Clarkson et al., 2011)

\[ p_{it} = b_0 + b_1 earn_{it} + b_2 bv_{it} + b_3 eps_{it} * bv_{it} + e_{it} \]  

(7)

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**Summary Statistics of study Variable**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Results</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min.</th>
<th>Max.</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Price</td>
<td>Overall</td>
<td>1,752</td>
<td>4,680</td>
<td>0.01</td>
<td>46.65</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>Between</td>
<td>4,438</td>
<td>0.03</td>
<td>35.662</td>
<td>170</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Within</td>
<td>1,516</td>
<td>-14,141</td>
<td>14,998</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Earnings Per Share</td>
<td>Overall</td>
<td>0.150</td>
<td>0.459</td>
<td>-2.74</td>
<td>5.46</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>Between</td>
<td>0.330</td>
<td>-0.19</td>
<td>2.31</td>
<td>170</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Within</td>
<td>0.320</td>
<td>-2.965</td>
<td>4,350</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Book Value</td>
<td>Overall</td>
<td>0.732</td>
<td>1.411</td>
<td>-1.47</td>
<td>16.11</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>Between</td>
<td>1,356</td>
<td>-1,176</td>
<td>11,496</td>
<td>170</td>
<td></td>
</tr>
</tbody>
</table>

- 403 -
We used the product of EPS and BV in our Ohlson model. This adds the non-linearity in the model which control the accounting error due to transition from PGAAP (Pakistan GAAP) to IFRS. One important source of measurement error is contributed by a specific set of accounting standards. Consider, for example, the impact of law conservatism prior to IFRS adoption. This downward bias in book value and earnings is a source of measurement error induced by accounting standards (Beatty et al. 1999). As a second example, consider the move within IFRS towards more fair value accounting. As pointed out by Ohlson (2009), the ultimate use of fair value accounting is perfect mark-to-market accounting. In such a regime, earnings measure permanent (i.e., “expected”) earnings with considerable measurement error, while earnings perfectly explain returns, earnings do a poorly explain the level of price. This is a source of measurement error introduced by IFRS accounting standards. Making reasonable assumptions about the nature of this measurement error, there is support for the use of a non-linear pricing model that includes a cross-product term of some form.

Our sample is composed of listed firms of Karachi Stock Exchange (KSE). The data for share price, book value, and earnings per share study was gathered from the ThomsonOne Banker database. Total 170 companies were selected from Karachi Stock exchange for which the relevant data was available for 2006–2011. Since Pakistani listed public firms were required under notification from SECP to report under IFRS for the fiscal year ended in December 31, 2005, thus, resulting in 850 firm-year observations for the panel.

Table 1 summarizes the descriptive statistics of share price, book value per share and earnings per share. It is evident from the Table 1 that there are sizeable variations in the mean values of share price, earnings per share and book value. The mean value and standard deviation ($\mu=1.75, sd=4.68$) share price is higher than those of earning per share ($\mu=0.150, sd=0.459$) and book value ($\mu=0.732, sd=1.411$). However, the variance structure of share price and book value is relatively higher than earning per share denoting slight stability in data points as compared to the stock prices and book value.

### Analysis and Discussion

Before testing the panel model of regression to examine the impact of IFRS adoption on the value relevance of accounting information, diagnosis of consistency and validity of the parameter estimates is of much importance for parameter estimates and economic interpretations. To account analytical rigor in our analysis, various diagnosis tests are executed for possible statistical debugging. The results are reported in the Table-2. The Wooldridge test for autocorrelation in panel data, given fixed effects test is executed to locate the cross-sectional dependence, which entails that error term is serially correlated across the cross-section and serial correlation in the idiosyncratic errors of a linear panel-data model discussed by Wooldridge (2002). From the simulation, it is evident that the Wooldridge test for autocorrelation has a good power and size characteristics in reasonable sample sizes (Drukker, 2003). Further, we used modified Wooldridge test for autocorrelation in panel data, given fixed effects. The result supports the null hypotheses that there is no first order autocorrelation exist in the panel data.

In the next step, Modified Wald test for group wise Heterskedasticity is executed to locate constant variance across the cross section. The result shows that the null hypothesis is rejected ($P<.05$). To locate whether residual are correlated across the entities, we used Pasaran CD test with the null hypothesis that residual are not correlated, since cross sectional dependence can turn the estimates bias. The initial diagnose test statistics provide a favorable overview to proceed with testing and validating the model, however, to decide whether to use Pooled Ordinary Least Square (POLS) or simple ordinary Least square (OLS), we used Breush-Pagan Larange Multiplier (LM) test to decide either Simple Pooled OLS to be used or Random effect to be used. The result (reported in the Table 3) divulges that random effect is appropriate because significant difference exists across companies.

### Haussmann Specification

We have to select one model from fixed effect and random effect options (Hausman, 1978). The Hausman test statistic has been used to choose first a model between pooled and panel regression and then between the fixed effects and random effects. We used the Sargan-Hansen statistics, which has the advantage of overcoming the over-identification restrictions in panel data estimation using fixed and random effects models (Baum et al. 2003). The test statistic has a significant effect or test statistics are significant, ($\chi^2$ df.2 =125.87) which indicates the preferable use of results from the fixed effect. It is similar to the traditional Hausman test, but Sargan-Hansen statistic approach has its advantages over Hausman. Furthermore, we used yearly regressions and the results have been reported in Table 4. The results indicate that there is a positive relation between the price per share and earnings per share and book value per share for most of the years.

### Table 2

<table>
<thead>
<tr>
<th>Tests</th>
<th>Test Statistics and Critical value</th>
<th>Inferences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wooldridge test for Serial correlation</td>
<td>$F(1, 169) = 0.776$</td>
<td>Wooldridge test null hypothesis accepted that there is no first order correlation in the fixed effect model.</td>
</tr>
<tr>
<td>Modified Wald for Heterskedasticity test</td>
<td>chi2 $(170) = 6.3e+06$</td>
<td>The null hypothesis is homoskedasticity or constant variance. Result show that the null hypothesis rejected as p-value is less than 0.05 at degree of freedom 2.</td>
</tr>
</tbody>
</table>

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Ijaz Ur Rehman, Faisal Shahzad. *The Economic Consequences of Mandatory IFRS Reporting: Emerging Market Perspective*
The Table 3 summarizes the result of regression analysis when we used a pooled regression model, fixed effect model and Random effect model. The pooled regression result indicates that the effect of book value is significant and positive. The coefficient of EPS and BV is positive and significant in the entire three models. Further Coefficient of BV (1.23) is higher than Coefficient of EPS (0.88) in the pooled effect model. Likewise, coefficient of BV (0.86) is higher than Coefficient of EPS (0.77) in a fixed effect model. In addition, Coefficient of EPS (1.39) is higher than Coefficient of EPS (1.11) in the random effect model. All the models in Table -1 infer that that Book value (BV) is more value relevant than earning per share (EPS).

Regression Analysis of SP, EPS, and BV

<table>
<thead>
<tr>
<th>Dep. Variable Share Price (SP)</th>
<th>Pooled ( Pit = b_0 + b_1Eit + b_2Bit + eit )</th>
<th>Fixed effects ( Pit = b_1Eit + b_2Bit + ai + \mu \text{it} )</th>
<th>Random Effects ( Pit = b_1Eit + b_2Bit + ai + \mu \text{it} + cit )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings Per Share (EPS) ( Pit )</td>
<td>0.888***</td>
<td>0.777***</td>
<td>1.113***</td>
</tr>
<tr>
<td>t-stat</td>
<td>(4.63)</td>
<td>(3.95)</td>
<td>(5.34)</td>
</tr>
<tr>
<td>Book Value (BV) ( Pit )</td>
<td>1.231***</td>
<td>0.865***</td>
<td>1.394***</td>
</tr>
<tr>
<td>t-stat</td>
<td>(9.65)</td>
<td>(5.49)</td>
<td>(11.65)</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.717**</td>
<td>1.001***</td>
<td>0.563**</td>
</tr>
<tr>
<td>t-stat</td>
<td>(2.66)</td>
<td>(8.31)</td>
<td>(2.72)</td>
</tr>
<tr>
<td>N</td>
<td>830,000</td>
<td>850,000</td>
<td>850,000</td>
</tr>
</tbody>
</table>

*, ** and *** indicates significance at 10, 5 and 1% respectively. t-statistic is in parenthesis

The Table 4 summarizes the result of yearly as well as pooled regression of stock price against earnings and book value per share. The R-squared values for the yearly and pooled regression indicate that earnings and book value per share explain the sizeable variation in stock prices which is approximately 79.3 percent (2006), 66.8 percent (2007), 42.9 percent (2008), 55.6 percent (2009), 38,0 percent (2010), and 79.2 percent (pooled). The results further show that the regression coefficients of earnings per share are significantly positive at p < 0.001 level in year 2006, year 2007, year 2009, year 2010 except in the year 2008, which is significant at 5 %. Likewise, book value per share is statistically significant during the years of 2008 and 2009 at the 1 % level of significance.

Years Wised Pooled Regression Results (n=170) \( Pit = b_0 + b_1Eit + eit \) and \( Pit = b_0 + b_1Bit + eit \)

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings Per share ( Pit )</td>
<td>10.353***</td>
<td>10.353***</td>
<td>1.802**</td>
<td>3.749***</td>
<td>4.809***</td>
</tr>
<tr>
<td>t-stat</td>
<td>(13.62)</td>
<td>(11.07)</td>
<td>(3.04)</td>
<td>(7.18)</td>
<td>(6.67)</td>
</tr>
<tr>
<td>Book Value</td>
<td>-0.134</td>
<td>0.256</td>
<td>1.959***</td>
<td>1.582***</td>
<td>0.361</td>
</tr>
<tr>
<td>t-stat</td>
<td>(-0.63)</td>
<td>(1.16)</td>
<td>(7.92)</td>
<td>(8.68)</td>
<td>(11.38)</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.011</td>
<td>0.317</td>
<td>0.021</td>
<td>0.178</td>
<td>0.214</td>
</tr>
<tr>
<td>t-stat</td>
<td>(0.06)</td>
<td>(1.15)</td>
<td>(0.06)</td>
<td>(0.77)</td>
<td>(0.69)</td>
</tr>
<tr>
<td>AIC</td>
<td>727.483</td>
<td>881.944</td>
<td>933.675</td>
<td>812.018</td>
<td>909.809</td>
</tr>
<tr>
<td>BIC</td>
<td>736.891</td>
<td>891.351</td>
<td>943.082</td>
<td>821.426</td>
<td>919.217</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.793</td>
<td>0.668</td>
<td>0.429</td>
<td>0.556</td>
<td>0.380</td>
</tr>
<tr>
<td>F</td>
<td>319.465</td>
<td>168.371</td>
<td>62.768</td>
<td>104.422</td>
<td>51.154</td>
</tr>
</tbody>
</table>

*, ** and *** indicates significance at 10, 5 and 1% respectively.

Product Model Regression Results \( Pit = b_0 + b_1EPSit + b_2BVit + b_3 E^*B+eit )

<table>
<thead>
<tr>
<th>Dep. Var. P</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings Per share ( EPS )</td>
<td>21.222**</td>
<td>24.86***</td>
<td>36.76**</td>
<td>10.15 ***</td>
<td>9.05***</td>
</tr>
<tr>
<td>Book Value ( BV )</td>
<td>-2.16</td>
<td>-1.72</td>
<td>-3.79 ***</td>
<td>-5.79 ***</td>
<td>-5.79 ***</td>
</tr>
<tr>
<td>Product of ( EPS^*BV )</td>
<td>-0.94</td>
<td>-3.02</td>
<td>-9.57 ***</td>
<td>-5.79 ***</td>
<td>-5.79 ***</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.831</td>
<td>0.734</td>
<td>0.692</td>
<td>0.829</td>
<td>0.480</td>
</tr>
<tr>
<td>F</td>
<td>69.29</td>
<td>38.31</td>
<td>31.59</td>
<td>68.09</td>
<td>275.02</td>
</tr>
<tr>
<td>p-value</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*, ** and *** indicates significance at 10, 5 and 1% respectively.
In a next step, we used the product of earning per share, and book value per share, which is subsequently in the regression model. The reason behind this modification is to control the non linearity in the model occurred due to the transition of accounting standards reported by Capkun et al., (2010). The result of Table 5 show that values of $R^2$ decline from year 2006–2008 ($R^2_{2006}=0.83$, $R^2_{2007}=0.73$, and $R^2_{2008}=0.64$) and upward movement in 2009($R^2_{2009}=0.82$) followed by downward trend in 2010 ($R^2_{2010}=0.39$). It is imperative to note that the R-squared trend driven in Table 5 is similar to the trend of R-squared derived from the product model reported in Table 5 yields no methodological differences in trend capturing perspectives. Further, it is evident from the Table 5 that the beta coefficient of earning per share have positive and significant influence of share price at 1% level of significance, however the relative size of beta’s coefficient ($\beta_{2007}=10.15$, $\beta_{2010}=9.05$) are decreased form the year 2009–10 respectively showing relatively low degree of strength with share price for that particular period. It is worthy to articulate that during that period Karachi Stock Exchange remained a range bound with a predominantly declining trend because of many economic and political factors. The beta coefficients of book value yield negative relationship with the share price and relative size of the beta coefficient decreases over time, whereas the beta coefficient of products of book value and earning per share ($e^*b$) is only statistically significant in the year 2008. For rest of the years, product of book value and earning per share yields positive impact on share price; however, the impact is not statistically significant.

As results of study demonstrate that the value relevance of accounting information is declined after the period of 2006 following the IFRS implementation for both price and product models. Comparatively, earnings per share are providing better results than book value following the IFRS implementation. The findings are consistent with the earlier studies of (Francis & Schipper, 1999; Collins et al., 1997; Wallace, 2000). Predominantly, it includes high fluctuation in the market, non-information based trading, enhancement of agency problems, managers perseverance of their self-interest, compliance costs associated with IFRS transition, volatility to financial statements through bad and good information, absences of real governance, enforcement mechanisms and discretionary accruals. For example, Francis & Schipper (1999) reported the same result when they used price and return model and concluded that the value relevance of accounting information deteriorated due to the high fluctuation in the market. Dontoh et al., (2004) argued that non-information based trading is the one of the factors which deteriorated the relationship of share price and accounting information. Subsequently, Gaston et al., (2010) postulates that accounting standards reduce the association between share price and earnings per share and book value per share and the decline is due to enhancement of agency problem which is generated due to IFRS (Hung & Subramanaym, 2007). Likewise, Ahmed et al., (2010) asserted that agency problem one of the causes of low quality information due to fewer guidelines provided in the IFRS.

Further, IFRS provides greater space to the mangers so they can report information in such a way, which preserve their self-interest. Collins et al., (1997) found that incremental value of earning decrease with the passage of time, but there is an improvement in the accounting measure of book value per share. (Tendeloo & Vanstraelen, 2011) are of the view that IFRS do not compel a considerable limitation on earnings management as considered by discretionary accruals. Nevertheless, IFRS seems to enhance the size of discretionary accruals. Their results further indicate that low earning management and the adopter of IFRS cannot be associated. Further, it is suggested that quality standards adoption is not an enough condition to presenting high-quality information in code-law countries with relatively little investors’ protection rights. (Tendeloo & Vanstraelen, 2011) are of the view that IFRS do not compel a considerable limitation on earnings management as considered by discretionary accruals. Nevertheless, IFRS seems to enhance the size of discretionary accruals. Their results further indicate that low earning management and the adopter of IFRS cannot be associated. Further, it is suggested that quality standards adoption is not an enough condition to present high-quality information in code-law countries with relatively little investors’ protection rights. IFRS standards have some prerequisite to get the maximum output in terms of getting quality reports. These prerequisites are the portfolio of high investor protection; laws are strictly enforced, higher transparency, and active stock market. As Pakistan has a low transparency of reporting, the law is poorly enforced by the law enforcement agency. Further, there is no protection of small shareholders in the economy. Lack of these prerequisites will not allow IFRS to report relevant information in the financial reports. In addition, accountants are not fully aware of these new set of standards. Still, there is a gap existed between the standards and practices. In spite of all, auditors are not well aware of the new international financial reporting standards. All these factors provide an opportunity to manipulate the earnings as well as book value per share and it lead to decline in the value relevance of accounting information in Pakistan. Both approaches used in the study, i.e., Ohlson price and product model asserted the relationship of share price to book value per share. The association, however, shows the declined in the value of $R^2$ after the reformed has been made in Pakistan. It means changes in accounting standard will get the earning quality poor and provide an upper hand to management to camouflage the information. Changes in the intensity of the price, which is associated with accounting number one of the major reasons for finding the decline trend in the value of $R^2$.

Conclusion

The aim of this study is to investigate the value relevance of accounting information following the IFRS implementation for the period of 2006–2010 in Pakistan financial market. Using sample of firms listed on the Karachi stock exchange, we document the following findings. For the overall sample, the response coefficients
of earnings per share and Book value are positive and statistically significant in the pool, fixed and random effect models. Comparatively, beta coefficient of book value is higher than the beta coefficient of earnings per share in the pooled effect model, fixed effect model and random effect model. Further, we document that, for the overall sample, book value (BV) is more value relevant than earning per share (EPS) following IFRS. For sub-sample on yearly basis using price and product model, value relevance of accounting information following the IFRS in 2006 has twisted decline trend after 2007. The possible reason for the declined-shape trend is because during that period Karachi stock exchange remained volatile due to many economic and political factors and particularly of speculative bubbles as it can be observed from the year basis results that after 2008, the earning per sharing has gained momentum. However, the momentum captured by the estimation is relatively less. This may indicate that accounting information may not be relevant in the volatile and bearish period. Further, we document the evidence of positive and statistically significant effect of earnings per share on share price. This study supports the initiative of sound regulatory environment, transparency of reporting, full disclosure, and enforcement of IFRS, since it will facilitate the transparent financial reporting system, which tends to be less based on rumors and speculations and more on real accounting figures in a country bearing both code and common law regulatory environment. Future studies are required to offer qualitative insights rather applying the conventional methodologies to cater the factors that affect the value relevance of accounting information following IFRS implementation. The perceptions of regulators, auditors and accountants needs to be captured concurrently, which may facilitate locating the difference among the stakeholders to level the accounting information harmonization to facilitate the cross-border investment and to protect the investor.

References


- 408 -


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