

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE AND MANAGEMENT

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VALUE RELEVANCE OF ACCOUNTING INFORMATION: EVIDENCE FROM SRI LANKA

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ABSTRACT

The purpose of this paper is to investigate the value relevance of accounting information at Colombo Stock Exchange (CSE) in Sri Lanka. The study use earrings per share (EPS), book value per share (BVPS) and return on equity (ROE) as the independent variables and market price per share (MPS) as the dependent variable. Sample of the study includes 129 companies selected from 6 major sectors at CSE. Cross sectional and time series cross-sectional regressions are used for the data analysis. Study finds that EPS, BVPS and ROE have positive value relevance on market value of securities. However, the explanatory power of combined variables is below average. Value relevance of EPS and ROE has slightly increased when the sample include only accounting variables with positive values. But, BVPS does not comply with that finding. EPS is the most valve relevant variable out of the three variables, in Sri Lanka. Further, explanatory power of EPS and ROE has considerably improved after the new information technology adoption at CSE. However, reverse trend is visible for BVPS. This study is unique because this is the first study which examines the impact of technological advancements on value relevance of accounting information related to the CSE.

KEYWORDS

Accounting information, Book value per share, Earnings per share, Return on equity, Value relevance.

INTRODUTION

The main objective of financial reporting is to assist investors in valuing equity. For financial reporting to be value relevant, it is a condition that accounting numbers should be related to current company value. If there is no association between accounting numbers and company value, accounting information cannot be termed as value relevance.

The concept of value relevance can be defined in a number of ways. For instance, Francis and Schipper (1999) discuss four different interpretations of value relevance (see, section 3 - different perspectives on value relevance). This study follows the their forth definition: "A statistical association between accounting information and market values or returns, particularly over a long window, might mean only that the accounting information in question is correlated with information used by investors". According to the above definition, value relevance is measured as the degree of statistical relationship between information included in accounting statements and market values (prices) or returns. Further, this study focuses value relevance on long term yearly observations.

Value relevance research in Sri Lankan context goes back to mid 1990s. In 1997, Nimal as well as Samarakoon in their individual attempts to test the validity of Capital Asset Pricing Model (CAPM), find as a by-product that earnings to price ratio is positively related with the stock returns. Further, they find that book value to market value has no significant relation with value of securities. Since 1997, there was no evidence found to investigate the value relevance of accounting information in Sri Lanka. In the mean time accounting environment has drastically changed by the adoption of the information technology to accounting process as well as to deliver accounting information to end users.

Nowadays, most of the firms use software packages like QuickBooks to improve the accounting performance. Unlike in manual accounting system under a computerized system, regular financial reports generate automatically. Therefore, the quality of the accounting information has significantly increased during the recent past. Further, financial accounting information delivery system has been affected by information technology (IT). CSE introduced a new website in October 2007 to provide quick, more accurate and timely market based and other public information of each company. With this facility, all investors could access to financial statements of each company through the new website and earlier, financial reports were transferred by mail. Therefore, it is important to re-examine the value relevance of accounting information in Sri Lanka.

Value relevance researchers are interested in identifying the significance of accounting information on market values of equity. Hence, this study has three objectives. First, to study how accounting information is related to market value of equity. The second objective is to study how much accounting information explains the variation in equity values and the third objective is to see the impact of new technology adoption at CSE on value relevance of accounting information. The pooled data analysis regression is used to analyze the data.

This study is important to many stakeholders. It provides new knowledge to investors to make and revise their investment portfolios. The value relevance of accounting information in Sri Lanka may have direct implications for other stakeholders such as financial accountants, standard setters, educators, and auditors whose common goal is to improve the value relevance of accounting information by altering the current financial reporting models.

The remaining of the paper is organized as follows. Section 2 gives a brief description of CSE while Section 3 explains different perspectives to value relevance. The Section 4 presents the review of literature. Section 5 explains sample and methodology and Section 6 contains results of the analysis followed by discussion. The last Section is conclusion of the study.

COLOMBO STOCK EXCHANGE (CSE)

Although share trading in Sri Lanka commenced in 1896, formalization of the market was started with the establishment of the "Colombo Securities Exchange (GTE) Limited" in 1985, which took over the operations of the stock market from the Colombo Share Brokers' Association. It was renamed as 'Colombo Stock Exchange' (CSE) in 1990. The CSE is a company limited by guarantee, established under the Companies Act No. 17 of 1982 and is licensed by the Securities and Exchange Commission of Sri Lanka (SEC).

The Colombo Stock Exchange (CSE) has 234 listed companies representing 20 business sectors as at September 2010. CSE recorded its highest market capitalization of Rs. 1380.9 billion (approx. US \$ 12 billion) on the May 2010. At present CSE is one of the best performing markets in the

world. During the period 1990 to 2009 All Share Price Index (ASPI) recorded an average annual return of 23.04 percent and in the last year (2009) it was 103.10 percent which is one of the highest when compared with worldwide exchanges.

The CSE was one of the first Exchanges in the region to successfully automate its clearing and settlement functions in 1991, with the installation of a Central Depository and an Electronic Clearing and Settlement System for share transactions, and an Automated Trading System (ATS) in 1997. Further in 1991 CSE took measures to liberalize the investment in the stock market with the abolition of 100 percent transfer of property tax on share purchase by non-nationals. In the year 2009 foreign trading was 54 percent of the total value of annual transactions.

Internet trading was started by one brokerage firm in June 2003. At present internet trading at the CSE is facilitated via eighteen broker firms. The new CSE website, www.cse.lk, was launched in October 2007. This web site provides access to a comprehensive array of real time market information, order book information and includes charts and graphs of market and company financial statements in order to help existing and potential investors to make investment decisions. The new website is designed with the view of making primary communication channel for the CSE and most information with downloadable facilities with the formats of Excel, Concurrent System Versions (CSV) and Hyper Text Mark-up Language (HTML). With the introduction of this new web site, the annual financial reports of listed accompanies are provided online for investors. Before the introduction of this facility investors get annual reports of listed companies after longer time of the financial year. Further, under the new technology adoption, investors can access to financial information of all the listed companies even if they have not invested money. Therefore, this technology adoption should increase the value relevance of financial information.

DIFFERENT PERSPECTIVES ON VALUE RELEVANCE

Francis and Schipper (1999) and Nilsson (2003) define value relevance from four perspectives: (a) Fundamental analysis view of value relevance - intrinsic value of the firm is measured without referring to market value. According to this approach value relevance focuses on the usefulness of accounting information in equity valuation. Information in financial statements is relevant for valuation if portfolios based on this information generate abnormal returns. This study does not follow fundamental analysis view because this interpretation assumes that prices do not reflect intrinsic values but it is done accounting numbers and the measures of intrinsic values are not readily available. Therefore, the author believes that prices reflect intrinsic value. (b) The predictive view of value relevance – the accounting number is relevant if it can be used to predict future earnings, dividends, or future cash flows. According to this interpretation, accounting numbers are used to predict the variables in a valuation model. Since this is not directly relating to value measures of accounting information, this interpretation does not adopt in this study. (c) The information view of value relevance - where the value relevance of accounting information is measured in terms of market reactions to new information. In order to test this interpretation some specific accounting news information should be related firm value. Since it is out of the scope of the study to test the impact of specific accounting news on share prices, this interpretation is also kept aside. (d) The measurement view of value relevance - the financial statement is measured by its ability to capture or summarize information that affects equity value. Both price and returns can be used for value relevance under measurement view approach. Nilsson (2003, p. 5) states that "If an accounting item has a reliable association with a market matrix, then the accounting matrix captures or aggregates the information that is used by market participants to determine prices or returns". According to this interpretation, value relevance is measured as the ability of financial statement information to capture and summarize information, irrespective of their source, that reflect in share prices. The author adopts this interpretation because it is not necessary to use specific first hand accounting information for the analysis.

REVIEW OF LITERATURE

Most of the early empirical studies in the field of market based accounting research focus on BVPS and EPS and are usually concern with response coefficient that relates to returns and prices. Lev (1989) reports that earnings have generally very low explanatory power, and he suggests that the practical values of reported earnings are in doubt.

Hayn (1995) examines the effect of loss cases on the returns—earnings relation and its cross-sectional validity. Sample of the study consists of all firm years which earnings data are available on the Conspustats, primary, supplementary and tertiary active and research files. It contains 85919 pooled observations over the period 1962-1990. The results of the study show that the overall sample earnings are positively associate ($\beta = 0.95$, $R^2 = 9.3\%$) with stock returns. When pooled data of only profitable firms are considered, stock price movements are much more strongly linked to current period earnings. Excluding loss cases results in almost a tripling of both the one year response coefficients (2.62) and its explanatory power ($R^2 = 16.9$) of annual earnings with respect to contemporaneous returns. However, when the sample consists of only of loss cases, the magnitude of reported losses do not correlate at all with the returns ($\beta = 0.01$, $R^2 = 0.00$).

Collins, Maydew and Weiss (1997) examine the value relevance of earnings and book values of equity over 40 years from 1953-1993. The sample includes 119383 firm-yearly observations from NYSE, AMEX and NASDAQ. They decomposed the explanatory power of earnings and book value in to: (1) the incremental explanatory power of earnings, (2) the incremental explanatory power of book values, and (3) the combined explanatory power of both earnings and book values. They find that both earnings and book value significantly relate with the market value and combined coefficient of determination (R^2) is 54%.

Frankel and Lee (1998) explore relationships between share prices and accounting variables using data from 20 countries including US and Japan. They use current earnings, current book value and earnings forecasts to see the value relevance of accounting information including dependent variable as share prices. The explanatory power of the model is high, 88% for US and 72 for other countries combined. They find that all the variables significantly relate with the market price.

King and Langli (1998) examine relationships between share prices with BVPS and EPS variables with data from Germany, Norway and the United Kingdom. Their findings reveal that both BVPS and EPS are significantly related to share prices in all three countries. However, the combined explanatory power of three variables is about 70% in the United Kingdom, 60% in Norway and 40% in Germany. They further find that explanatory power of variables are differs in the accounting systems of the three countries. Book values explain more than earnings in Germany and Norway but less than earnings in United Kingdom.

Barth, Beaver and Landsman (1998) examine whether the relative roles of BVPS and EPS depend on the financial health using data from US. They find that the relative explanatory power of the BVPS increases and explanatory power of EPS decline. Further, the authors find that explanatory power of earnings and book value variables systematically varies across industries.

Bao and Chow (1999) examine the relative value relevance of two sets of accounting information of listed Chinese companies called B-shares. The two sets of accounting information are: (1) financial statements based on Chinese accounting regulations domestic (GAAPs) and the other

based on International Accounting Standards (IASs). The authors adopt Ohlson (1995) model with BVPS and EPS as main independent variables and stock price as the dependent variable. Extreme left and right 1% in the sample for either EPS or BVPS ratios is removed from the sample to control for outliers. Using 213 firm-yearly observations from 1992 to 1996, the study finds that both earnings (β = 2.84, t =5.50) and book value (β = 0.35, t =1.97) based on domestic GAAPs are significantly associated with B-share prices explaining jointly 21% of the variation of stock price. The reported earnings based on IASs are significantly related (t= 6.31) to share prices but book value based on IASs is not significant at conventional level (t=0.814). However, the joint explanatory power of both variables is 24%.

In another study of international accounting differences, Graham and King (2000) examine relationships between share prices and accounting variables in Indonesia, Malaysia, Philippine, South Korea, Taiwan and Thailand. They use MPS as dependent variable with BVPS and current residual income as explanatory variables. They find that coefficients of these variables are statistically significant for all the countries. The explanatory power of the model ranges from 24% in Thailand to 90% in Philippines.

Overinde (2009) examines the value relevance of accounting data in the Nigerian Stock Market. His model uses average price per share as dependent variable with EPS, earnings yield and ROE as independent variables . The sample consists of top 30 companies from 2001 to 2004 in Nigerian Stock Market. The author finds that the relationship between share price and EPS is high but the ROE is very low. However, combined model of all the variables reflects very high level of R² value of more than 95% each year.

Among Sri Lankan findings, Nimal (1997), Samarakoon (1997) and Perera and Thrikawala (2010) are worth to notice. Nimal (1997), investigates the relationships between stock return and selected fundamental variables (Beat, Size, E/P and B/M) in the CSE using yearly data for the period 1991 to 1996. He finds that only E/P is significantly relate with the stock returns. Samarakoon (1997) also verify the above finding. Perera and Thrikawala (2010) examines the value relevance of accounting information on CSE taking 6 commercial banks listed in CSE from 2005-2009. Using the model used by Oyerinde (2009), they find that EPS and ROE are significantly related with share price and only EPS reflect higher explanatory power on market price.

The following papers examine the changes in value relevance of accounting information over time. Collins, Maydew and Weiss (1997) find that both EPS and BVPS have a joint explanatory power of 54% and the combined value relevance has not declined during the 40 years period but increased slightly. However, incremental value relevance of earnings has declined but it is overcome by the incremental value relevance of book value. This view is accepted by the Francis and Schipper (1999). They also report that value relevance has declined (increased) for earnings (book value) getting R2 value 27% (22%) in 1952 (1953) to 16% (54%) in 1994. Brown, Kim and Lys (1999) find that value relevance as measured by R² has declined significantly when controlling for different scale effect. Lev and Zarowin (1999) suggest that the value relevance of book value, earnings and cash flows have decreased over the past 20 years. They further report that value relevance deterioration more pronounced for cash flows than earnings.

SAMPLE AND METHODOLOGY

SAMPLE

Total sample of the study consists of 129 companies from 6 largest sectors in terms of number of companies at CSE. Companies selected for the study under each sector and percentage of sector market capitalization out of total is given in table 1.

Sector No of companies % of market capitalization Bank, Finance and Insurance 27 17.88 Food and Beverage 15 11.96 Hotel 27 9.89 Manufacturing 28 5.88 Plantation 17 1.73 Land and Property 15 1.77 Total 129 49.11

Table 1: Classification of the sample

Source: CSE data library 2009

METHODOLOGY

The idea of value relevance research is to establish a relationship between market values of equity and accounting variables. This can formally expressed as follows.

$$MVE = f(AI) \tag{1}$$

MVE = market value of equity AI = accounting information

This study adopts the Ohlson model framework (1995) and concluded association tests between share price and three sets of variables. The following valuation model is consisting of the variables used by Collins, Maydew and Weiss (1997), Bao and Chow (1999) and Oyerinde (2009). In order to ascertain the joint impact of accounting variables on marker price, the following cross-sectional time series model is specified.

$$P_{it} = \beta_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \beta_4 ROE_{it} + \varepsilon_{it}$$
(2)

BVS= book value per share EPS= earnings per share

ROE= return on equity

i = company

t = time (year)

In order to avoid look-ahead bias problem recognized by Banz and Breen (1986) the dependent variable is taken as price of shares 3 months after the end of financial year. Look-ahead is a bias caused by using data which are not yet available but assumes to be available. Actually, accounting information will come to investors' hand when they receive the annual report of the company and not at the last date of financial year.

In order to test the relation between stock price and each variable in isolation, the following regression models are established.

$$P_{it} = \beta_0 + \beta_1 BVPS_{it} + \varepsilon \tag{3}$$

The equation 3 examines the relationship between price of share and BVPS.

$$P_{it} = \beta_0 + \beta_1 EPS_{it} + \varepsilon \tag{4}$$

The equation 4 examines the relationship between price of share and EPS.

$$P_{it} = \beta_0 + \beta_1 ROE_{it} + \varepsilon \tag{5}$$

The equation 5 examines the relationship between price of share and ROE.

RESULTS

Prior research has shown that negative earnings are less value-relevant than positive earnings (e.g.

Hayn, 1995 and Basu, 1997). Therefore, this section presents findings on overall sample as well as on the subsample of companies with only positive earnings and book value.

DESCRIPTIVE STATISTICS

Table 2 and 3 provide the pooled 2005-2008 minimum, average, maximum and standard deviations and correlation matrix for the variables used in the study.

As per Collins, Maydew and Weiss (1997), to control the outliers for all tests, observations having standardized residuals greater than 4 are removed. The following table shows the descriptive statistics after controlling for the outliers.

ROE MPS BV **EPS** 65 Mean 55 Standard 59.88 11.31 20.41 81.56 deviation Maximum 352 70 95 673 -49 Minimum -49 -127 1

Table 2: Descriptive statistics

Source: Annual reports of each company and CSE data library 2009

Table 3 provides correlation matrix for the independent variables. As indicated in the table 3, BVPS is marginally positively correlated with EPS (r = 0.53). Further, correlation between EPS and ROE is below average (r=0.42). Therefore, the correlation matrix appears to suggest that there is no serious multicolinearity problem among independent variable.

Table 3: Correlation among independent variables

	BV	EPS	ROE
BV	1	0.53461271	0.11650601
EPS		1	0.42086143
ROE			1

VALUE RELEVANCE OF BOOK VALUE PER SHARE

This section reports the findings of value relevance equation 3. Panel A of the table presents regression parameters for the total sample while the Panel B presents regression findings for the sample of companies with only positive accounting figures.

Panel A as well as panel B of the table 4 show that BVPS has a positive impact on the market value of shares. All the regression coefficients are statistically significant at 1% level of significance. The aggregate period regression coefficient (β) is 0.758 with the explanatory power of adjusted $R^2 = 30.88\%$. The explanatory power of the model ranges from 24.42% in 2009 to 38.75% in 2007.

Panel B of the table shows that all the regression coefficients are positive and statistically significant at 1% level for the sub sample with positive accounting variables. For the aggregate sample explanatory power is 27.07% which is little lower than that of the total sample in Panel A (adjusted $R^2 = 30.88\%$). The explanatory powers of the model reported in panel B range between 17.95% in 2009 to 32.92% in 2008.

Table 4: relationship between BVPS and market value

Year	Number of observations	β	Adj-R ²			
Panel A						
2006	129	0.876***	32.47			
2007	127	0.780***	38.75			
2008	126	0.595***	33.28			
2009	123	0.820***	24.42			
Aggregate	505	0.758***	30.88			
Panel B	Panel B					
2006	109	0.848***	29.74			
2007	106	0.715***	31.38			
2008	102	0.630***	32.92			
2009	83	0.746***	17.95			
Aggregate	400	0.739***	27.07			

Notes: * p<.05, ** p<.01, *** p<.001

VALUE RELEVANCE OF EARNINGS PER SHARE

Panel A of the table 5 shows the regression results for the equation 4 where the independent variable is EPS. For the total sample, regression coefficients in all years are extremely high. It seems that EPS highly associate with market value of share. For the aggregation of all years, regression coefficients are 4.48 with the explanatory power of 38.55%. Further, explanatory power of the model has continuously increased from 28.71% in 2006 to 69.38% in 2009.

Table 5: Relationship between EPS and market value

Year	Number of observations	β	Adj-R ²
Panel A			
2006	129	4.03***	28.71
2007	127	3.20***	19.66
2008	126	3.93***	53.68
2009	123	7.33***	69.38
Aggregate	505	4.48***	38.55
Panel B			
2006	109	4.00***	25.86
2007	106	4.51***	31.15
2008	102	4.17***	54.03
2009	83	8.31***	73.27
Aggregate	400	5.05***	41.76

Notes: * p<.05, ** p<.01, *** p<.001

As in the panel A, regression coefficients for the sub-sample of positive accounting numbers also large and statistically significant at a conventional significance level of 1%. The regression coefficient for the aggregate sample is 5.05 and it is higher than regression coefficient of aggregate sample in panel A (β = 4.48). The explanatory powers of the model in panel B are always higher than that in the panel A except for the year 2006. The explanatory power of aggregate sample in panel B is higher than that of Panel A by 3.21%.

Both panel A and B show that value relevance of EPS has gradually increased over the time. This trend is clear in the panel B. Where, the explanatory power of the model has increased consistently from adjusted $R^2 = 25.86\%$ in 2006 to 73.27% in 2009.

VALUE RELEVANCE OF RETURN ON ASSTES

Panel A and Panel B of the table 6 show that the regression results of equation 5 which explain the relationship between ROE and MPS. Panel A of the table reports the regression results for the total sample where as panel B reflects the regression results only for the companies with positive accounting numbers.

Table 6: Relationship between ROE and market value

Year Number of observations		β	Adj-R ²
Panel A			
2006	129	0.87***	4.93
2007	127	0.82***	4.28
2008	126	1.39***	15.05
2009	123	2.40***	18.30
Aggregate	505	1.18***	8.58
Panel B			

2006	109	1.17**	3.02
2007	106	1.02**	3.06
2008	102	2.04***	13.45
2009	83	2.93***	12.02
Aggregate	400	1.53***	6.18

Notes: * p<.05, ** p<.01, *** p<.001

All the regression coefficients are positive and statistically significant in the panel A and it implies that there is a positive impact of ROE on MPS. However, not like other two variables (BVPE and EPS) explanatory powers of the model are relatively low (for example, the aggregate companies in panel A adjusted R^2 is 8.58%).

Panel B of the table also confirm the same results as in the panel A. The regression coefficient of aggregate firms is 1.53 with the adjusted R^2 of 6.18%.

Table 7 presents the regression results of the combined independent variables of BVPS, EPS and ROE as per equation 2. Similar to table 4, 5 and 6, panel A reports regression results for the total sample and panel B shows the regression results for the sub-sample with only positive accounting figures.

Table 7: Relationship between combined variables and market value

Year	Number of	fβ			Adj-R ²
	observations	BVPS	EPS	ROE	
Panel A					
2006	129	0.61***	2.06***	0.21	37.71
2007	127	0.69***	1.00*	0.53**	43.06
2008	126	0.24***	2.82***	0.53**	57.37
2009	123	0.25***	6.54***	0.12	70.81
Aggregate	505	44.58***	2.96***	0.34***	45.99
Panel B					
2006	109	0.82***	1.85**	0.49	34.43
2007	106	0.55***	2.39***	0.90**	43.45
2008	102	0.23**	2.90***	1.31***	58.71
2009	83	0.27***	7.18***	1.61***	76.94
Aggregate	400	0.39***	3.50***	0.82***	46.59

Notes: * p<.05, ** p<.01, *** p<.001

Panel A shows that all the regression coefficients for BVPS, EPS and ROE are positive and statistically significant except for ROE in 2006 and 2009. Explanatory power of the aggregate sample is 45.99%. The explanatory powers in yearly models have gradually increased from 37.71% in 1996 to 70.81% in 2009.

Almost all of the regression coefficients in the panel B of the table are positive and statistically significant for all the independent variables. As in panel A, explanatory powers of yearly models have gradually increased from 34.43% in 2006 to 76.94% in 2009.

Further, the table reflects that in almost all the cases explanatory powers of the sample with positive accounting numbers are higher than the explanatory powers of the total sample. The explanatory power of aggregate companies in the total sample is 45.99% but the explanatory power of aggregate companies with only positive accounting numbers is 46.59%.

CHANGES IN VALUE RELEVANCE OVER TIME

This section examines how value relevance of accounting information has changed over the four years time from 2006-2009. The sample period has been divided into two for the analysis of change in value relevance of accounting information. 2006 and 2007 is identified as the period before new information technology adaption at CSE and the period of 2008 and 2009 is identified as the period after new information technology adaption at CSE. Table 8 presents average adjusted R²s (in %) of regression equation 3, 4, 5, and 2 for the independent variables BVPS, EPS, ROE and the combination respectively.

The panel A of the table shows that average explanatory powers of the four models for the total sample and the panel B shows average explanatory powers of the four models for the subsample of companies with only positive accounting numbers.

Table 8: Incremental value relevance after technology adoption

Period	BV	EPS	ROE	Combined		
Panel – A	Panel – A					
2006-2007 (1)	35.61	24.19	4.61	40.38		
2008-2009 (2)	28.85	61.53	16.68	64.09		
Difference (2-1)	-6.76	37.35	12.07	23.71		
Panel –B	Panel –B					
2006-2007 (1)	30.56	28.50	3.04	38.94		
2008-2009 (2)	25.44	63.65	12.74	67.83		
Difference (2-1)	-5.12	35.15	9.70	28.89		

Table 8 shows that average explanatory power of BVPS for the total sample (for the sample with only positive accounting figures) has decreased by 6.76% (5.12%) after the new website is launched. Contrary to BVPS average explanatory power of EPS has increased substantially for the total sample after the new website is launched. Average explanatory power of EPS has increased by 37.35% from 24.19% to 61.53% after the new website was launched by the end of the year 2007. This value relevance increment is 35.15 for the sub sample of companies with only positive accounting figures. The change in value relevance of ROE is also as same as the change in value relevance of EPS. The combination of the variables also reports that value relevance of the combined accounting variables has substantially increased after the adoption of new information technology at CSE.

DISCUSSION

Both panels A and B of the table show that BVPS has a positive relationship with the MPS. This finding is contrary to the earlier Sri Lankan finding of Nimal (1997) and Samarakoon (1997). However, agree with the Perera and Thrikawala (2010). All the reported literature in the study except Bao and Chow (1999) in their IASs study, find the same results. The explanatory power of the variable is well below average. Perera and Thrikawala (2010) found that BVPS has a very high explanatory power on MPS. However, their sample is extremely few companies to generalize findings.

Similar to the BVPS both panels A and B of the table show that EPS has a statistically significant positive relationship with the MPS. Nimal (1997), Samarakoon (1997) as well as Perera and Thrikawala (2010) also find the same results. Findings of this study are inconsistent with Lev (1989) who reports that value relevance of earnings is negligible. All the international studies reported find the same positive relation between EPS with MPS or stock returns.

ROE also has a significant relationship with MPS in total sample as well as the sub-sample with only positive accounting variables. However, the explanatory power of the variable is very low. This is similar to the Oyerinde (2009).

The joint explanatory power of the combined model of all the independent variables is 45.99% for the total sample and 46.59 for the sample of companies with only positive accounting variables. This result is somewhat similar to the Collins et al Maydew and Weiss (1997) who find that joint value relevance of earnings and book values is 54% for the US listed companies and King and Langli (1998) for their Norway sample ($R^2 = 40\%$) However, some studies find that value relevance of accounting information is very low. (Bao and Chow,1999; Lev, 1989;Hayn , 1995). At the same time, there are studies, Frankel and Lee (1998), King and Langli (1998) in their US and UK sample, Oyerinde (1999), Perera and Thrikawala (2010), reflect high value relevance of accounting information.

Hayn (1995) reveals that the value relevance of positive earnings information is much higher than that of the negative earnings. This study also finds that value relevance of EPS is always higher for the sample of companies with only positive earnings than value relevance of EPS of the total sample. However, this pattern is reversed for the BVPS and ROE variables.

This study finds that value relevance of accounting information has dramatically changed during the sample period concerned. Value relevance of EPS and ROE has substantially increased in the years 2008 and 2009 than in the previous two years. This is contrary to the results of Collins, Maydew and Weiss (1997), Francis and Schipper (1999) and Lev and Zarowin (1999) they find that value relevance of earnings has declined over the period. However, the increasing value relevance of earnings in this study may be due to the impact of new information technology adoption at CSE. But, the value relevance of BVPS has decreased over the time and this is contrary to the Collins, Maydew and Weiss (1997) and Francis and Schipper (1999). However, Lev and Zarowin (1999) find that value relevance of BVPS has decreased over the period.

SUMMARY AND CONCLUSION

Value relevance is one of the key major areas in market based accounting research. Past studies have shown that among other variables book value and earnings have significantly related with the market price of stocks. Some studies have shown that value relevance of accounting information has changed over the time due to changes in accounting as well as business environment.

This paper examines the value relevance of BVPS, EPS and ROE for selected 129 companies at CSE over the period 2006-2009. This paper has three main objectives. The First objective is to study how accounting information is related to market value of equity. Second, how much accounting information explains the variation in equity values and the third objective is to see the time varying pattern of value relevance specially the impact of new technology adoption at CSE on value relevance of accounting information.

Study uses cross-sectional regression as well as pooled regression techniques for the analysis. This study finds that BVPS, EPS and ROE have a positive and statistically significant relationship with market price per share. However, their explanatory powers differ from each other (Adjusted R²s are 30.88%, 38.35% and 8.58% respectively for the total sample). New technology adoption has considerably increased the value relevance of accounting based earning information (EPS and ROE) in Sri Lanka. However, the incremental value relevance of the BVPS is negative during the period considered for the study. This study has not been designed to examine the possible reason for the negative trend in BVPS. Among the three variables most sensitive and most value relevant variable is EPS for the Sri Lankan data.

REFERENCES

Banz, R. (1986), "Sample dependent results using accounting and marketing data: Some evidence", *Journal of Finance*, vol. 41, no. pp. 779-793. Bao, B.H. & Chow, L. (1999), "The usefulness of earnings and book values for Equity valuation in emerging capital markets: Evidence from Listed companies in the People's Republic of China", *Journal of International Financial Management and Accounting*, vol. 10, pp. 85-104.

Basu, S. (1997), "The conservatism principle and the asymmetric timeliness of earnings", *Journal of Accounting & Economics*, vol. 24, no. 1, pp. 3-27

Barth, M.E., Beaver, W.H. & Landsman, W.R. (1998), "Relative valuation roles of equity book values and net income as a function of financial health", *Journal of Accounting and Economics*, vol. 25, pp. 1-34.

Brown, S. (1999), "Use of R² in accounting research: measuring changes in value relevance over the last four decades", *Journal of Accounting & Economics*, vol. 28, no. 2, pp. 83-115.

Collins, D.W., Maydew, E.L. & Weiss, I.S. (1997), "Changes in the value-relevance of earnings and book values over the past forty years", *Journal of Accounting & Economics*, vol. 24, no. 1, pp. 143-181.

Francis, J. & Schipper, K. (1999), "Have financial statements lost their relevance?", Journal of Accounting Research, vol. 37, no. 2, pp. 319-352.

Frankel, R. & Lee, C. M. C. (1998), "Accounting diversity and international valuation, Working paper, University of Michigan and Cornell University.",

Graham, R. (2000), "Accounting practices and the market valuation of accounting numbers: Evidence from Indonesia, Korea, Malaysia, the Philippines, Taiwan, and Thailand.", *The International Journal of Accounting*, vol. 35, pp. 445-470.

Hayn, C. (1995), "The information content of losses", Journal of Accounting & Economics, vol. 20, no. 2, pp. 125-153.

King, R.D. & Langli, J.C. (19998), "Accounting diversity and firm valuation", International Journal of Accounting, vol. 33, no. 4, pp. 529-567.

Lev, B. (1989), "On the usefulness of earnings and earnings research: Lessons and directions from two decades of empirical research", *Journal of Accounting Research*, vol. 27, no. 3, pp. 152-193.

Lev, B. & Zarowin, P. (1999), "The boundaries of financial reporting and How to extend them", *Journal of Accounting Research*, vol. 37, no. 2, pp. 353-385.

Nilsson, H. (2003), Essay on value relevance of financial statement information, Print and Media.

Nimal, P.D. (1997), "Relationship between stock returns and selected fundamental Variables: evidence from Sri Lanka", *Sri Lanka Journal of Management*, vol. 2, no. 3, pp. 267-287.

Ohlson, A.J. (1995), "Earnings, book values and dividends in security valuation", Accounting Research, vol. 1, pp. 1661-1688.

Oyerinde, D.T. (2009), "Value relevance of accounting information in emerging stock market in Nigeria, Proceedings of the 10th Annual International Conference of International Academy of African Business and Development (IAABD)", ISBN. 0-9765288-4-3, 19-23 May 2009, Uganda., vol., no. pp.

Perera, A.A. & Thrikawala, S. S. (2010), "An empirical study of the relevance of accounting information on investor's decisions, proceedings of international research conference on business & information", , ISBN 978-955-8044-91-8, 4th June 2010, Sri Lanka., vol., no. pp.

Samarakoon, L.P. (1997), "The cross-section of expected stock returns in Sri Lanka", Sri Lankan Journal of Management, vol. 2, no.3, pp. 233-250.

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