THE IMPACT OF INTERIM FINANCIAL STATEMENTS ANNOUNCEMENT ON STOCK PRICES: EVIDENCE FROM SELECTED LISTED COMMERCIAL BANKS IN SRI LANKA

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ABSTRACT

The interim report is one of the crucial instruments that help companies communicate with their shareholders promptly. These reports support investors in deciding whether to hold, buy or sell their shares. Investors/ potential investors will react according to the available information. In Sri Lanka, several studies are available to identify the various events and their impact on share prices even though no one studies interim reporting enouncement and share price reaction using event study methodology. Therefore, the purpose of the study is to assess the impact of interim financial statement announcements on the stock price of licensed commercial banks in Sri Lanka. The study es on the top three licensed commercial banks as a sample. The required data were obtained from Colombo Stock Exchange (CSE) from 2016 to 2019; thus, the study includes 42 quarters and used event study methodology. The estimation window was from day 50 to day 10 of the pre-announcement period. Using the risk-adjusted model, the Abnormal return (AR) and Cumulative Abnormal Return were measured during an event window of 15 days. According to this study, the interim financial statement announcement caused changes in stock return, and thus the information disclosed by the companies were valuable in valuing shares. Further, the studystudy results proved that average abnormal return (AAR) and cumulative abnormal return (CAR) were changed before and after the interim report announcement date. The study concluded that the share prices responded to interim financial statement announcements, and thus the study supported the semi-strong form efficient market hypothesis since stock prices adjust to the available public information.

***Keywords**:* *Average Abnormal Returns (AAR), commercial banks, Cumulative Abnormal Return (CAR), interim financial statements, stock prices*

INTRODUCTION

For several years, the researchers have discussed the relationship between various information available to the potential shareholders and stock price reflection. The Efficient Market Hypothesis (EMH) discusses the relationship between available information and the reaction of share prices. Fama (1970) introduced EMH; accordingly, the stock prices should reflect all available information. All public announcements made by the organizations regarding the performance, dividend and bonus share announcements, administration changes and other organization related forecasting provide information to shareholders for decision making.

The investors/potential investors will gain most of the company's information from the public announcement that may be year-end or interim financial reports which offer more details for the decision making on investment in a particular company's stock. Therefore, the year-end and interim reports have emerged as an essential source of information that provides users with timely information for investment decisions that influence the stock price. The International Accounting Standards Committee (IASC) published "Interim Financial Reporting- IAS 34". The interim financial statement may contain either a complete set of financial statements or condensed financial statements for an interim period. It might be announced quarterly, semi-annually or for any other period following the accounting standards of the country concerned. For example, in Sri Lanka, "Sri Lanka Accounting Standard-34" (LKAS-34) provides information on interim financial statements, and most of the listed companies publish their quarterly reports regularly. Timely disclosure of accounting information has its roots in efficient market theory, which supports the management of a company to provide information to investors and other stakeholders with appropriate economic criteria, allowing them to predict better the company's future profitability and cash flow (Scott, 1997).

According to the EMH, interim reports support the investors in getting timely information used to make an investment decision. However, recently stakeholders have become more interested in these reports because they believe they have crucial information that guides them to make economic decisions. Moreover, before getting annual reports, the interim reports provide the trend of the financial data; therefore, interim financial statements significantly influence share price (Abeyrathna 2016; Shores 1990; McNichols & Manegold 1983).

Various researchers (Edirisinghe 2017; Jayakody 2017; Kalainathan 2018; Kumara & Fernando 2020) studied the impact of various information on stock price reactions in Sri Lanka. However, Abeyrathna (2016) analyzed interim financial statements and stock prices even though that study did not use event study methodology. Therefore, the study examines the impact of interim financial statement announcement on share price indices by using event study methodology in CSE and provide fruitful insights to the investors to make the investment decision.

LITERATURE REVIEW

EMH initially discussed the reflection of share prices according to the available information. In addition to EMH, researchers discussed three forms of EMH such as weak form, semi-strong form and strong form. The weak form specifies that the past information determines today's stock price. According to the semi-strong, the new information decides stocks prices, and the strong form argues that the share price includes all public and private information. According to the available information, these three forms of EMH reflect stock price reaction even though the investors' reaction differs based on the stock market efficiency.

Economic, political, and unexpected events affect stock prices, and one of the economic events in the interim report announcement. Interim financial statements announcement has some different features than other events because it is a scheduled event and provides the information generated in making sound financial and investment to the current and potential investors and lending institutions of shares traded. Cuijpers and Peek (2010) proved that the quarterly reports contained helpful information to investors, which leads to support for better decision making. Therefore, the information in interim reports causes fluctuation in stock prices and stock returns. This stock price reaction to interim financial statements showed a mixed trend in the pre and post-announcement period, indicating the semi-strong form efficient market hypothesis since stock prices adjust not fast enough to public information through investors cannot earn an above-normal return by trading during post announcement. However, after some period, the announcement led to above average returns (Ngure, 2014).

Behrouzi et al. (2013); Dahmash et al. (2012) proved that publishing quarterly financial statements changes stock prices through stock prices would increase or decrease one week before and after reporting date. Consequently, the interim report announcement has a positive relationship with stock returns around the announcement date and a significant relationship between trading volume and stock returns around the announcement date. Kiger (1972) investigated the effect of quarterly reports on the volumes and share prices of listed companies on the New York Stock Exchange and concluded that quarterly reports information affects the volume and price of traded shares.

Afego (2011) examined the stock price response on the earnings announcement, and the results showed a cumulative abnormal return 20 days before the interim earnings announcement date. They concluded a portion of the market reaction was due to private and possibly, abuse of information by the insider, and thus stock market was not efficient. Qabajeh et al. (2012) also proved a significant relationship between interim financial reports announcement and stock returns around the announcement date.

In Sri Lanka, several unexpected and regular events and stock price reaction was studied even though there are no studies to measure the impact of interim statement announcement and stock price reaction in the short term. Abeyrathna (2016) examined the influence of dividend announcements and interim financial statements on share price though; the researcher used correlation analysis and regression analysis. Therefore, the purpose of the study is to test the impact of interim report announcements on stock price in CSE.

RESEARCH METHODOLOGY

In Sri Lanka, 24 licensed commercial banks are doing their operations, and the top three (03) commercial banks (Commercial Bank of Ceylon PLC, Sampath Bank PLC and Hatton National Bank PLC) selected for the study purpose, which contributes more than 5% of market capitalization in CSE. The study period was from 2016 to 2019; therefore, the study included 42 quarters. The event study technique was adopted, and the interim financial statement uploaded date at the CSE website is the event day (t=0). The event window was t -10 to t +5 to measure pre-and post-announcement reaction on stock return. The estimation window was from t-50 and t-10.

Using the following equation, the daily stock return of each sample company.

$$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}} \quad (1)$$

Where: R_{it} = Stock Return i on period t

P_{it} = Stock Price i on period t

P_{it-1} = Stock Price at period t-1

The following equation shows the individual sector abnormal return calculation based on the risk-adjusted return model,

$$AR_{it} = R_{it} - E(R_{it}) \quad (2)$$

Where: AR_{it}= the abnormal return for the stock i in period t

$E(R_{it})$= the expected return for stock i in period t

$$E(R_{it}) = \propto_i + \beta_i R_{mt} \quad (3)$$

Where: $\propto_i$= The intercept term

β_i= Stock Beta coefficient

Average Abnormal Return was measured as:

$$ARR = \frac{1}{n}\sum_{i=1}^{n} AR_{it} \quad (4)$$

Where: ARR = Average Abnormal Return for the period t

n = Number of sample companies

The following equation used to calculate the t-statistic significance level.

$$t_{AAR} = \frac{AAR_t}{\sigma_{AR}/\sqrt{n}}$$

(5)

Where: T_{AAR}=The t-statistic

σ_{AR}= The standard deviation of abnormal return at time t

The CAAR is calculated as follows:

$CAAR_t = CAAR_{t-1} + A$

(6)

The following t-statistic formula was used to calculate the significant value of overall CAAR:

$$t_{CAR} = \frac{CAAR_t}{\sigma_{CAR}/\sqrt{n}}$$

(7)

Where: t_{CAR}= The CAR t-statistic

σ_{CAR}= The abnormal return's cross-sectional standard deviation for the sample companies at time t

According to Ngure (2014), the study used the volume of traded shares as a natural log of the number of daily traded shares. This study used CSE daily reports studying the volume of traded shares measured by the Average return of Trading Volume (ARTV).

The following equation was used to measure the daily trading volume of each company.

$$R_{it} = \frac{T_{ij} - T_{it-1}}{T_{it-1}}$$

Where: R_{it} = Return of trading volume i on period t

P_{it} = Volume of trading i on period t

P_{it-1} = Volume of trading at period t-1

DATA ANALYSIS

The daily share price indices of selected banks and the banking industry measure abnormal returns (AR) and cumulative abnormal return (CAR). The difference between actual return and expected return of selected company at event window scrutinized to establish the abnormality of returns following interim financial statements announcement. The abnormal return specifies the stock market reaction due to the investors' reaction to an event. The following figures show the fitted time plot of the AAR of the selected sample banks.

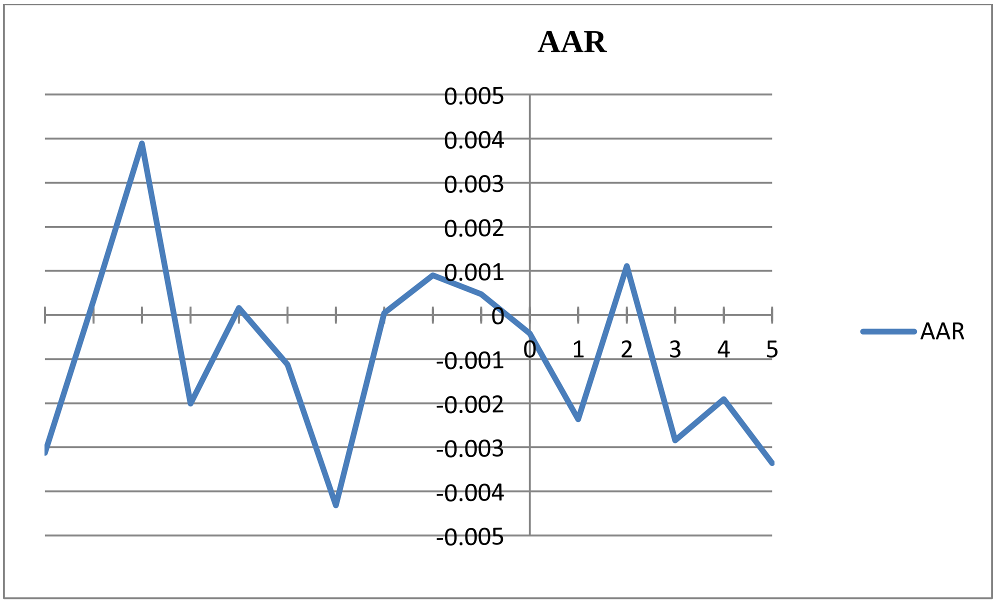

Figure 1: Average AR of Commercial Bank of Ceylon PLC

Figure 1 displays the AAR fluctuation during the pre and post-event period, and the trend reveals that investors take time to analyze information contents of interim financial statements. As a result of the analysis, there was a sudden increase in stock returns from day 2 of post interim financial statement announcement.

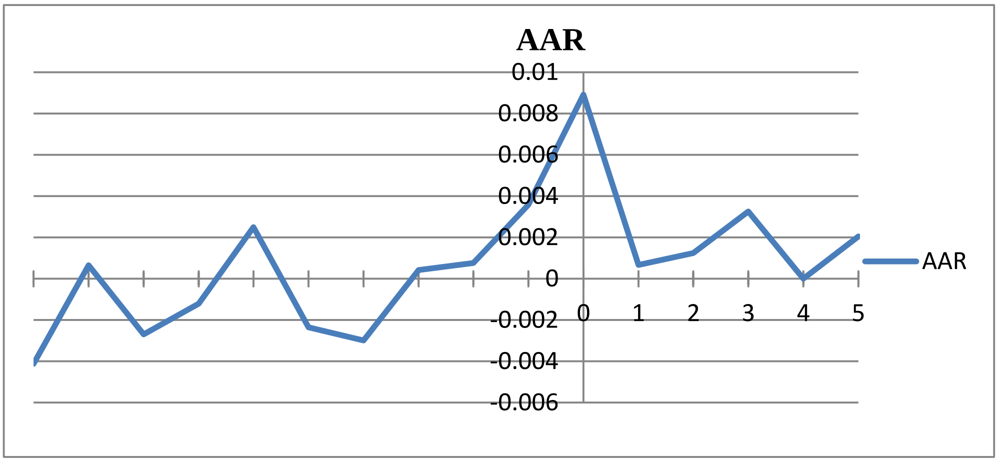

Figure 2: Average AR of Sampath Bank PLC

Figure 2 indicates there was leakage of relevant information to investors causing abnormal returns on the event day. Figure 3 presents those investors take time to analyze the interim announcements before the investment decisions, or otherwise interim financial statements contain unfavourable information, thereby not attached more investors

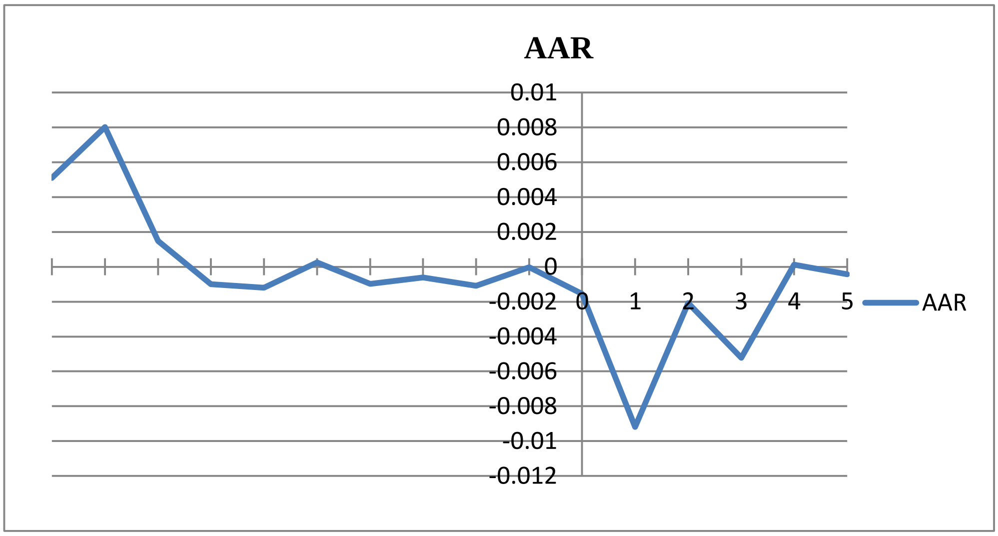

Figure 3: Average AR of Hatton National Bank PLC

Table 1 presents the results of Average Abnormal Return (AARs), t-statistic of AARs, Cumulative Average Abnormal Return (CAARs) and t- statistic of CAARs for 42 quarters' interim financial statements announcement for each of the 16-days event window. Lastly, 1%, 5% and 10% significant levels were analyzed.

Table- 1: AAR, CAAR and t Statistics

Event Day	AAR	t(AAR)	CAAR	t(CAAR)
-10	-0.000715	-0.451572	-0.000715	-0.232426
-9	0.003003	1.896230*	0.002288	0.743571
-8	0.000900	0.568564	0.003188	1.036212
-7	-0.001400	-0.884160	0.001789	0.581132
-6	0.000489	0.308473	0.002287	0.739904
-5	-0.001075	-0.678560	0.0012012	0.390647
-4	-0.002759	-1.741974*	-0.001557	-0.505952
-3	-0.000046	-0.029549	-0.001604	-0.521161
-2	0.000193	0.122047	-0.001410	-0.458343
-1	0.001344	0.848540	-0.000066	-0.021596
0	**0.002317**	**1.462742**	**0.002250**	**0.731282**
1	-0.003625	-2.289121**	-0.001375	-0.446937
2	0.000089	0.055914	-0.001287	-0.418157
3	-0.001604	-1.012732*	-0.002890	-0.939414
4	-0.000595	-0.375729	-0.003485	-1.132804
5	-0.000574	-0.362736	-0.004056	-1.319505

* Significant at 10% level, ** Significant at 5% level, *** Significant at 1% level

According to Table 1, the AARs values expose the positive and negative fluctuations during the event window period. AAR value on the event day was 0.0023% and specifies that the investors closely observe interim financial statements' information content for their investment decision. For the even window period, the AARs values were negative for most pre and post event day, indicating interim financial statements announcement negatively impacts stock prices. Therefore, in during the event periods, the investors can make negative stock returns, or otherwise, investors take time to analyze available information. The significant values of AARs are during the pre-event window periods divulge the information contents of interim financial statements leak before the interim financial statements publishing and post interim financial statements publishing days. Therefore, the information has a significant influence on stock return.

The CAAR from -10 to +5 indicates the behaviour of the stock prices during the event window period. CAAR of the stock price of the CSE turn negatively from -4 to the event day, and this is the day the stock prices start to react to anticipate the interim financial statements announcement effect. The CAAR changes move more severely from +1day, and it continues up to +5 day due to negative signals to investors from interim financial statements announcement or otherwise investors take time to analyze the information.

Figure 4 shows the results of the Average Return of Trading Volume

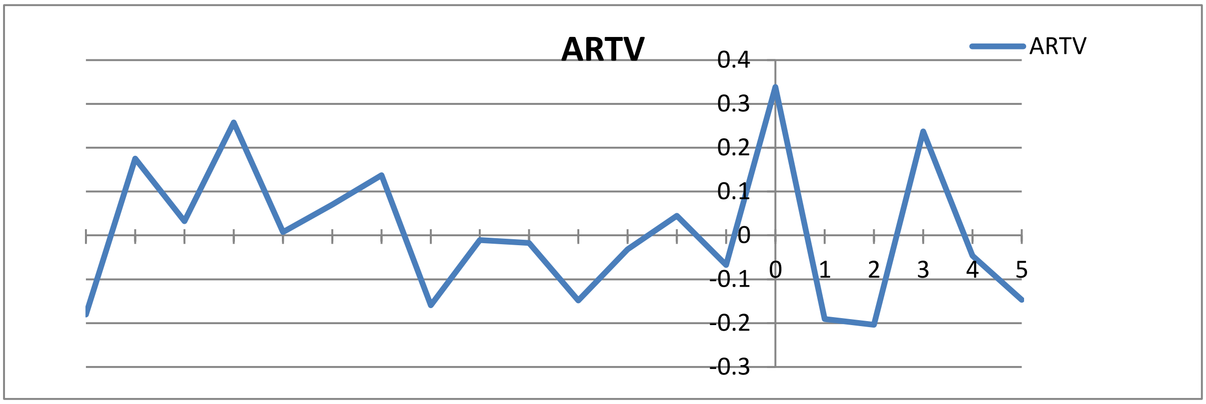

Figure 4: Average return of trading volume

Figure 4 showed that the average return of trading volume at the announcement date demonstrated a sharp increase due to anticipated positive results. On days 1 and 2 after the announcement, investors take time to analyze the information contents of interim financial statements. The maximum after the announcement illustrated an increase in ARTV at day three that was better reflecting the firms' financial results. Therefore, the interim financial statement announcement significantly impacts the volume of shares traded.

CONCLUSION

The study examines the impact of interim financial statements announcement on the stock price of selected Licensed Commercial Banks in Sri Lanka. The data consists of daily share price indices from selected licensed Commercial Banks and the banking industry. In addition, the stock price reaction for interim financial statements announcement was measured using event study methodology. Finally, the study evaluates the abnormal stock return and trading volume on pre and post interim financial statements announcement period in licensed Commercial Banks listed in CSE.

Interim financial statements announcements were informational-expected events that caused stock price fluctuation; therefore, the study concludes that interim report announcement causes an increase or decrease in stock returns and trading volume. Further, the licensed Commercial Banks' share returns exhibited erratic positive returns before and after the announcement. This stock price change clearly with interim financial statement announcement from day 3. Hence, the information made by the companies helped value the securities. The study also found that some investors made abnormal returns during the post-announcement period, most likely using the interim financial statements.

According to the risk-adjusted return model (Table 1), CAARs shows an insignificant effect on stock price, and AARs indicate a significant mixed trend from the event window. Therefore, the study concludes that the stock prices react to interim financial statements. The results support the semi-strong form efficient market hypothesis since stock prices adjust to public information though not fast enough that no investor can earn an above-normal return by trading during the post-announcement period, especially between days 1 and 3. However, some periods after the announcement have above-normal returns.

The main limitation of this study is that it does not consider other exogenous effects which affect the stock market indices. Hence, the study recommends that researchers can continue similar studies on other corporate events like bonus issues, merger and acquisitions, cross-listing, rights issues to determine how the stock market reacts to be in a position to conclude whether the Sri Lankan stock market is efficient in the semi-strong form as different events convey different information. In addition to that, different sectors may react differently because of the tax imposition or tax concessions and exemption. Therefore, sector-wise comparison also will provide more depth knowledge.

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