

Do Sell-Side Security Analysts Act as Prophets?

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Abstract

The investment banks, brokerage houses, and pension funds spend large amounts of capital to hire security analysts to predict earnings, stock recommendations, and target prices for their customers and public investors. These observations raise a compelling empirical motivation for the researcher to investigate Do Sell-Side Security Analysts (SSSA) can forecast earnings, stock recommendations, target prices, and particularly consensus prices (average target prices) accurately. The population of the study includes public listed companies in Colombo Stock Exchange which are of interest to the SSSA in their equity research studies but all the listed companies cannot be considered as the population since there are companies that haven't used in the stock market research or equity research studies of the brokering firms. The number of companies qualifying for the study is based on the sample selection criteria to limit the analysis to a realistic level. There are 22 listed companies, qualified for the study from 2012 to 2018. In calculating monthly stock returns, the researcher assumes that any form of declaration of remittances such as dividends, bonus issues, stock splits, and right issues encourage investors to purchase the stock and it causes the price of a stock to increase. In general, the increase is about equal to the amount of the benefit, however, the actual price change is based on market activity. Finally, the results of hypothesis testing through multiple regression models discuss to achieve the research objectives. The findings of the study have important implications for diverse users to formulate their future policy decisions for the development of the stock market and the economy. The investigation reveals that there is a statistically significant positive relationship between R_{it} and R_{CP} .

Keywords

Security Analysts, Stock Return and Consensus Return, Regression Models, Prophets

1. Introduction

Observations raise a compelling the empirical motivation for the researchers to investigate Do Sell-Side Security Analysts (SSSA) can forecast earnings, stock recommendations, target prices and particularly consensus prices (average target prices) accurately. If so, do investors have the ability to earn abnormal returns using SSSA forecasts? Security analysts make predictions on earnings forecast long term share price trends and try to anticipate future share prices. Thus, the prediction of a share price is an interesting area over the past years by economists, statisticians and teachers of finance through “chartist” or “technical” analysis and “fundamental” or “intrinsic” value analysis. Further, security analysts engage daily in the operations of the stock market and have contacts with both the business and financial communities with extensive information, so that they have monopolistic access to private information to execute their exceptional artistic skill in forecasting (Fama, 1991). Forecasting is a tedious task, once an American writer Mark Twain describes it is an art, where he uses the specific word to describe it as “prophecy”, particularly in terms of the future. The security analyst acts as a “prophet” in this regard, they predict future states of a firm based on information, most of which are not available to an ordinary investor. However, the ability to generate abnormal returns using security analysts’ forecasts depends on the stock market definition.

1.1. Sell-Side Security Analysts Forecasts and Abnormal Returns

Müller-Bloch and Kranz (2014) state that there are conflicts of ideas in research findings in the empirical studies. Scholars from the domain of finance literature give insights about the different outcomes of the empirical studies done to test the ability to earn abnormal returns using security analysts’ recommendations, earnings forecasts, and target price forecasts. The studies by Barber et al. (2003) find that investors are not able to earn abnormal returns using security analysts’ forecast. In the contrary Asquith et al. (2005) conclude that investors can earn abnormal returns based on analyst forecasts. Thus, the researcher recognizes the gap in prior research after careful examination of conflicting arguments raised by the scholars concerning the ability to earn abnormal returns using security analysts’ recommendations, earnings forecasts, and target price.

1.2. Public Information vs Private Information

The empirical findings suggest that investment professionals including pension fund managers, mutual fund managers, and investment managers able to earn extra returns over the benchmark since their forecasts are based on private information (Potocki & Swist, 2012). A domineering argument made by McNichols (1989), states that investors have information about a firm’s future earnings beyond that of its management by accessing information sources through SSSA. The argument suggests that security analysts possess information to foresee the future of the firm better than its management. Similarly, there is evidence

that SSSA tends to disclose recommendations and target prices in favor of the management to access private information (Rees, Sharp, & Wong, 2017). However, once the target prices or consensus prices and stock recommendations publishes online on financial service companies' websites such as Wall Street Journal, Financial Times, Reuters, Dow Jones, CNN, and Bloomberg, all the information including private information gather by the SSSA eventually become publicly available to all investors in the market (Stickel, 1995; Womack, 1996). So that anyone who has an interest in obtaining the information regarding stock recommendations and target prices of securities can access the information without incurring an additional cost.

Nevertheless, in the Sri Lankan context, Colombo Stock Exchange (CSE) is categorized as a frontier market by the Financial Times Stock Exchange (FTSE) and Morgan Stanley Capital International Index (MSCI). Further, the study by Abeysekera and Nimal (2017) considers CSE as a frontier market based on economic growth and development that prevails in the country during the study period. The MSCI (2018) states that in a frontier market "the cost of information" is high when it compares to the developed and developing markets. Thus, in the Sri Lankan context, even though security analysts' forecasts publish online on financial service companies, (e.g., Bloomberg, Thomson Reuters, and FactSet) it is costly to get access to such information by an ordinary investor. The validity of the argument develops by the researcher ensures the soundness of the efficient market model where the researcher needs to ask whether access to such private information pays for the average investor or the average economist to spend resources to search out the unknown information (Fama, 1970). Thus, a stock is worth analyzing only when its information value above a certain minimum value decided by the investor after taking into account, the opportunity cost and benefit of including a particular stock into the investment portfolio (McNichols & O'Brien, 1997).

One possibly will argue that insider trading based on private information prohibits in Sri Lanka as well as most of the countries in the world. However, the findings of the empirical studies do not recognize market professionals as corporate insiders (Haddock & Macey, 1987). Notably, they propose that market professionals should allow trading on private information since it creates more liquidity in stock markets and stimulates competition in the acquisition of information, thus SSSA does not use the private information to earn an abnormal return for themselves. The discussion fetches empirical evidence concerning the subject under discussion through four avenues. Thus, in the present study, the researcher's exertion is to test whether investors can earn abnormal returns using the information contained in the SSSA consensus price. Moreover, the consensus price information can be accessed only to limited investors and categorize as "private information" in the context of Sri Lanka. To synchronize the variables, use in the methodology the consensus return used as a proxy for consensus price in the study. Thus, in the present study, the researcher's exertion is

to examine the relationship between the information contained in consensus return and stock return. The research question formulates to address the research problem “Is there a relationship between stock return and consensus return in the context of Sri Lanka?” with the research objective articulate from research question is “To examine the relationship between stock return and consensus return in the context of Sri Lanka”.

2. Significance and the Main Contribution of the Study

The significance and potential contribution of the present study can be discussed from both theoretical and practical standpoints. The study contributes to the new knowledge by “bridging the knowledge gap” that exists in the practice into the finance theory by arguing SSSA forecasts are comprised of or private information. The findings of the empirical studies, i.e., public availability of SSSA forecasts conduct in respect to developed and developing stock exchanges cannot be generalized into CSE, which is a frontier market. The empirical evidence suggests factors to distinguish between different markets as the number of investors and their behavioral characteristics, liquidity levels, legal and regulatory framework, institutional framework, and market’s operational bottlenecks (Osei, 1998). The study has important implications for investors (local and foreign), stock brokering firms, security analysts, mutual fund managers, companies listed in CSE, regulatory authorities including government and academics. Moreover, from the investor’s perspective, the findings of the study enhance the trustworthiness of the institutional, local, and foreign investors in formulating investing strategies. Investors, especially foreign investors rely heavily on SSSA forecasts i.e., consensus prices publish on online financial service companies such as Bloomberg, Thomson Reuters, and FactSet. The accuracy of consensus prices enhances investor confidence concerning the fortification of the value of their investment. The findings are valuable from the perspective of companies listed in the CSE to formulate suitable policy decisions. So, the inefficiency of CSE provides insight to market participants to create innovative financial products that improve investors’ active market participation and develop the CSE and thereby Sri Lankan economy in the long run.

3. Data and Methodology

The purpose of the study is to identify the relationship between stock return (R_{it}) and consensus return (R_{CP}) of individual securities. Based on that the study also attempts to investigate the investors’ ability to earn abnormal returns using consensus price and to test whether the companies listed in the S&P SL20 Index of CSE support for strong form market efficiency.

3.1. The Population and Sample of the Study

A population is the totality of cases that conform to some designated specifications, which could be people, events, or things of interest to the researcher (Se-

karan, 2006). The population of the study includes public listed companies in CSE registered in a reputed financial service company, which is of interest to the SSSA in their equity research studies. Thus, all the listed companies cannot be considered as the population since there are companies that haven't used in the stock market research or equity research studies of the brokering firms. The stock picking by the SSSA is based on the attractiveness of the stock to investors. The consensus price data is available in the research office of the reputed financial service company and for 44 public listed companies in Sri Lanka. The financial service company's research team collects target price data from the written and electronic reports of registered brokerage firms and the system calculates the average target price i.e., consensus price and disseminates the information to required stakeholders. The unit of analysis (element) of the present study is at the individual company level. CSE is an emerging market with a small number of listed stocks (Kongahawatte & Nimal, 2015). Thus, the sample consists of all the companies of which the consensus information available. The number of companies qualifying for the study is based on the sample selection criteria to limit the analysis to a realistic level. The study period or Sample period was from 1st October 2012 to 30th September 2018. The data availability of the sample, the consensus price data should be available for at least three months or more for a year under study, i.e., a listed company should be under a research study by any registered stockbroker for a period of three months or more. Thus, in the present study, the sample selection is based on the criteria given above, disregarding whether the firm is a financial firm or a non-financial firm based on the empirical evidence. There are 22 listed companies, qualified for the study from 2012 to 2018.

3.2. Data Collection and Administration

The data used in the present study mainly consists of secondary data sources and data corresponding to CSE retrieve from data library CD publish by the CSE. The monthly consensus price data is also a secondary data source and not available to the public, which stores in a reputed financial service company in Sri Lanka. Access for those data obtained on a special request and approval. The consensus price automatically generates from the financial company's software-based on manual and electronic research reports of stockbrokers. The information regarding the constituent changes (inclusions and exclusions) to the S&P SL20 index obtains from the CSE press release data on the CSE website. The three-month Treasury Bill Rate (TBR) takes as a risk-free rate published by the Central Bank of Sri Lanka (CBSL).

3.3. Variable Definition and Hypothesis

The empirical studies have evidence that there is a direct relationship between stock return and consensus return. Hence, the hypothesis develops by the researcher to examine the relationship postulate in the present study between R_{it} and R_{CP} (Description given in **Table 1**). Here hypothesis is H_1 : There is a statistically

Table 1. Construct/concept definition.

Key concepts	Description
R_{it}	Stock return
RF_t	Risk free rate
α	Abnormal return

Source: Researcher's construction.

significant relationship that exists between R_{it} and R_{CP} .

3.4. The Relationship between Stock Return and Consensus Return

Fundamentally, the consensus price is the average target price forecast by all the SSSA in the market for a given stock (Nasdaq, 2018). There is evidence in the literature that SSSA predicts the consensus price through technical analysis, fundamental analysis, and using different sources of private information about a firm. Thus, investors' intention to purchase or sale of stocks is purely base on the SSSA consensus prices and it has a direct impact on the actual stock returns (Antônio et al., 2017).

$$R_{it} = C + R_{CP} + \varepsilon_t$$

where, R_{it} : Realize stock return for the stock i for the month t .

R_{CP} : Return based on consensus price for the stock i for the month t .

C : Constant.

ε_t : Error term.

The new variable, consensus return recognizes as a variable that affects the direction and strength of the relationship between dependent and independent variables. Thus, the consensus return (R_{CP}) is the percentage change in the consensus price estimate in the month t and month ending $t-1$.

$$R_{cp} = \left(\frac{CP_1 - CP_0}{CP_0} \right) \times 100$$

where,

R_{CP} : Consensus return for the stock i for the month t .

CP_1 : Consensus price of the stock at the end of the month t .

CP_0 : Consensus price of the stock at the end of the month $t-1$.

3.5. Measurement of the Dependent Variable

The dependent variable of the present study is monthly R_{it} . So, the monthly share prices at the end of each month of the S&P SL 20 companies listed on the CSE use to calculate R_{it} . In the year 2006, Nimal (2006) uses a formula in his study to adjust the daily stock returns in the form of remittances such as dividends, bonus issues, stock splits, and right issues, with the assumption that any form of remittances is reinvested at the earliest possible time in the same stock (Abeysekera & Nimal, 2016, 2017). Thus, evidence suggests that the selection of

return calculation method is depending on the assumptions made by the researcher. In calculating monthly stock returns, the researcher assumes that any form of declaration of remittances such as dividends, bonus issues, stock splits, and right issues encourage investors to purchase the stock and it causes the price of a stock to increase. In general, the increase is about equal to the amount of the benefit, however, the actual price change is based on market activity. Thus, it is reflected in the share price appreciation and incorporates into the return calculation.

$$R_{it} = \left(\frac{P_1 - P_0}{P_0} \right) \times 100$$

where, R_{it} : Return of the stock i for the month t .

P_1 : Price of the stock at the end of the month t .

P_0 : Price of the stock at the end of the month $t-1$.

3.6. Measurement of Market Return

The empirical evidence suggests that SSSA do not consider all the listed companies in a stock market in the analysis and are based on the attractiveness of the stock to investors (Lehavy et al., 2011). Thus, the study confines only to the S&P SL20 as evidence suggest i.e., companies representing the characteristics of high liquidity and high market capitalization among 299 listed companies in CSE. In the present study, the individual stock return calculates as a percentage change in monthly share prices assuming that capital gains, dividends, and other forms of remittances are reinvested at the earliest possible time in the same stock. So, the percentage changes in the S&P SL20 Index used as a proxy to the market return to better represent the market fluctuations. The present study sample limits S&P SL20 companies thus, it accurately represents the market return of securities listed in the S&P SL20 Index. As a proxy for the market return to better represent the stock return.

$$RM_t = \left(\frac{\text{S\&P SL20}_t - \text{S\&P SL20}_{t-1}}{\text{S\&P SL20}_{t-1}} \right) \times 100$$

where, RM_t : Return of the market portfolio at month t .

S\&P SL20_t : Value of the S&P SL20 Index at the end of month t .

S\&P SL20_{t-1} : Value of the S&P SL 20 Index at the beginning of month $t-1$.

4. Analysis and Discussion

Do Sell-Side Security Analysts act as Prophets? Has to be carefully examined through understanding the relationship between the information contained in consensus return (R_{CD}) and realized stock return (R_{it}). Then the researcher attempts to explain the findings of the study from a different perspective giving novel insights to the existing literature. The research question outlined, guides the researcher throughout starting with descriptive analysis concerning the variables of the study. Then aims to ensure statistical assumptions underlying in the estimation model through a test of validity and reliability with stationarity,

normality, heteroscedasticity, multicollinearity, and autocorrelation. The R_{it} , R_{CP} , MRP, SMB(FF3), SMB(FF5), WML and CMA have Jarque-Bera t -statistic value greater than critical value as per the statistical results interpret and thus, the researcher can reliably assume that standardized residuals are approximately normally distributed for all the variables in the analysis except for HML and RMW. The time-series data is tested for each regression output using Breusch-Godfrey (BG) serial correlation test. The observed R squared for BG has a high probability chi-square value which is greater than the critical value, thus, the researcher can presume that there is no serial correlation in basic asset pricing models at 15 percent significance level and asset pricing models with R_{CP} at 5 percent significance level. The multicollinearity is tested for all the independent variables in the regression using the variance inflation factor (VIF) and statistical results are summarized and VIF identifies the correlation between independent variables R_{CP} , MRP, SMB(FF3), SMB(FF5), WML, CMA and the strength of that correlation. The low values of VIF indicate a high multivariate correlation between independent variables. Thus, as per the information VIF it can presume that the multicollinearity issue does not exist in any combination of the variables. Finally, the results of hypothesis testing through multiple regression models discuss to achieve the research objectives.

4.1. Descriptive Statistics

The descriptive analysis aims to provide an overview of the variables under the study based on the sample data to make a general conclusion. Accordingly, **Table 2** shows the average value of stock return, consensus return, and risk factors together with their standard deviation values and t statistics. The information evidence that the mean value of the R_{it} is 1 percent per month and the average value of R_{CP} is 1.1 percent per month. The average value of R_{it} is significant and different from zero at a 10 percent significance level, whereas R_{CP} is significant at a 5 percent level.

Table 2. Descriptive statistics.

	R_{it}	MRP	SMB FF3	SMB FF5	HML	WML	RMW	CMA	R_{CP}
Mean	1.0%**	-2.3%***	0.0%	-0.2%	-1.8%***	0.8%**	1.3%***	0.6%	1.1%***
Std. Dev.	4.6%	4.1%	3.3%	2.8%	4.3%	3.5%	3.5%	4.1%	2.4%
t -statistic	1.682	-4.335	-0.073	-0.557	-3.291	1.862	2.824	1.224	3.510

Note: R_{it} is the monthly stock return and R_{CP} is the monthly consensus return. MRP represents market factor where the market risk premium above the S&P SL20 price index over risk free rate of return (i.e., three-month government treasury bill rate). SMB(FF3) and SMB(FF5) are the monthly size factor for Fama and French Three-factor model and Five-factor model respectively. HML, WML, RMW, and CMA represent monthly value factors, momentum factors, profitability factors, and investment factors respectively. The t -statistic represents the value of the hypothesis test: mean equals zero. The statistical significance symbolizes *, **, *** at the 10 percent, 5 percent, and 1 percent levels respectively. *Source:* Researcher's construction.

4.2. Inferential Statistics

The test of the hypothesis is the main focus under inferential analysis. Based on the hypotheses establish, statistical test conduct for their acceptance or rejection and facilitate the achievement of the research objectives and ultimately address the research problem of the study.

The Relationship between Stock Return and Consensus Return

The empirical studies have evidence that there is a direct relationship between stock return and consensus return. Hence, hypothesis 1 developed by the researcher to test the relationship postulate in the present study. The descriptive statistics was relevant to the regression analysis represented in **Table 3**.

The regression output in terms of the relationship between R_{it} and R_{CP} shows that there is a positive significant relationship between the two variables. The adjusted Rsquared value of 52.17 percent shows the overall model suitability in terms of the dependent and independent variables. It is required to observe the relative strength and statistical significance of the co-efficient of R_{CP} (independent variable) on the R_{it} (dependent variable). However, the researcher unable to find any evidence in the empirical studies to the best of available knowledge to grasp the direct relationship between R_{it} and R_{CP} . The consensus price defines in the literature as the average target price forecast by all the SSSA in the market for a given stock (Nasdaq, 2018). Thus, the researcher's effort is to find evidence in terms of SSSA recommendations and target price forecasts and incorporate consensus price to the existing literature to recognize the relationship with stock return.

There is evidence in the literature that SSSA forecasts once they publish affect share prices. Specifically, Brav and Lehavy (2003) states that approximately 54% of SSSA target prices realize in the actual market. In terms of SSSA recommendations, Womack (1996) finds that buy recommendations lead to a +2.4% change in share price in a short term, whereas sell recommendations lead to a -9.1% change in share price in long run. The evidence reveals that there is a relationship between SSSA forecasts and returns of securities. Thus, the researcher can reliably assume that there is a direct relationship between return R_{it} and R_{CP} .

5. Findings of the Study

The efficient functioning of a share market is critical for economic development since it gives companies the ability to quickly access capital it needed for investments through stock markets. Financial security analysts are an important

Table 3. The relationship between R_{it} and R_{CP}

	R_{CP}	t -statistic	R^2	Adjusted R^2
R_{it}	1.386***	8.084	0.529	0.522

Note: R_{it} is the monthly stock return and R_{CP} is the monthly consensus return. The statistical significance symbolizes *, **, *** at the 10 percent, 5 percent and 1 percent levels respectively. Source: Researcher's construction.

element of financial decision-making in the Stock Exchanges throughout the world. Accordingly, SSSA act as middleman between investors and the stock market by reducing the information bridge. The empirical studies evidence that SSSA use all the available information in their equity research such as past price information, publicly available information, and notably the private information in deriving at the consensus prices to deliver a fair estimate about future share prices ensuring market efficiency (Jagadeesh et al., 2001). Thus, investment banks, brokerage houses, and pension funds, spend large amounts of capital to obtain the service of SSSA to generate forecasts (stock recommendations, target prices, and consensus prices) for their investors. However, though SSSA uses all the available information in deriving at consensus prices, actual prices might deviate harshly from the consensus prices. The ambiguous performances identify in above creates an excitement in the researcher to conduct the present study to solve the research problem, Do Sell-Side Security Analysts (SSSA) act as Prophets?

To address the research problem, twenty-two listed companies selected for the period from 1st October 2012 to 30th September 2017. The number of companies qualifying for the study bounds by the sample selection criteria to limit the analysis to a realistic level. Further, in the study of the direct relationship between share price and consensus price, the researcher deliberately transforms the unit of measurement from price to return. The investigation reveals that there is a statistically significant positive relationship of 1.386 ($t = 8.084$) between R_{it} and R_{CP} . The incorporation of R_{CP} into asset pricing models continues the association nevertheless in a lesser magnitude. The R_{CP} decrease from 1.386 ($t = 8.084$) to 0.342 ($t = 1.938$) in CAPM and Further, diminishes to 0.265 ($t = 1.518$) in FF5 model with the introduction of risk factors MRP, SMB, HML, WML, RMW, and CMA in each asset pricing model.

The SSSA is more interest in declaring favorable predictions on growth (high B/M) firms with high market risk and less favorable predictions about value (low B/M) firms with low market risk (Barber et al., 2001; Brav & Lehavy, 2003). SSSA predictions (recommendations, target price revisions, and consensus prices) already reflect in the MRP and incorporation of R_{CP} into the asset pricing model modifies the magnitude of the coefficient of MRP without any change to the factor significance. However, asset pricing model significance measured in terms of adjusted R^2 , enhance from 79.6 percent (in CAPM) to 83.7 percent (in FF5) with the incorporation of R_{CP} to the basic asset pricing model.

The inclusion of a new factor into an asset pricing model is problematic for the reason that the average return describes by the new factor reflects from the existing factors and vice versa as recognize in the Fama and French (2015). Thus, in the following phase researcher's effort is to recognize the impact of R_{CP} on other risks factors in the asset pricing models, thus there is a significant difference in HML factor ($\Delta 0.009$ in FF3, $\Delta 0.011$ in C4F and $\Delta 0.007$ in FF5) WML factor ($\Delta 0.007$) and RMW factor ($\Delta -0.014$) after incorporating R_{CP} into the basic

asset pricing models. However, the researcher notifies that MRP, SMB and CMA factors are static concerning the introduction of R_{CP} , where factor significance remains the same irrespective of the changes in coefficient values. The reason justifies in the empirical study of Barber et al. (2001) consistent with the conventional wisdom that SSSA interest in issuing forecasts for larger firms. Hence, the study sample comprises of the highest capitalization firms in the CSE, thus MRP and SMB factors are insensitive to the SSSA forecasts concerning big firms in a portfolio (Barber et al., 2001; Brav & Lehavy, 2003). Similar reasoning is generalized into the CMA factor as well.

Fama (1998) states that “The long-term return anomalies are fragile. They tend to disappear with reasonable changes in the way they are measured” (p. 304) known as the “bad model problem”. In that, the researcher’s effort in using prominent asset pricing models CAPM, FF3, C4F, and FF5 are to test the methodological illusion in the asset pricing models use in estimation of long-term abnormal returns. The analysis reveals that it is unlikely the results generate are attributable to a poor asset pricing model. Where all the models reveal that R_{CP} absorbs an equal portion of the unexplained abnormal return. The researcher notifies a difference (Δ) in the abnormal return of 0.009 in the CAPM model with R_{CP} . The difference (Δ) in abnormal return is 0.006 for the rest of the asset pricing models (FF3, C4F, and FF) after incorporating the new variable R_{CP} . Thus, the researcher presumes that the argument raises by Fama (1998), “long-run return anomalies to market efficiency tend to disappear with a reasonable change in the asset pricing model use” is unreciprocated. Thus, based on the findings of the study, the researcher exemplifies that there is no significant difference in the estimation of long-term abnormal returns using different asset pricing models.

In the present study, the researcher’s exertion is to examine the relationship between R_{CP} and R_{it} . Further, the researcher employs the knowledge gathered from the examination to test the abnormal return predictability, the measure by the magnitude and significance of the regression intercept. The aforementioned discussion evidence that the new variable R_{CP} absorbs an unexplained portion of the abnormal return pertains to the basic asset pricing models. Hence, the parameter estimates of the multiple regression models for the portfolio consider in the study and the time series regression analysis show that R_{CP} has predictive power in explaining the cross-section of average returns. Consequently, the coefficient of alpha diminishes in each asset pricing model after integrating the R_{CP} by the researcher. Thus, the researcher précises the findings of the study as follows; there is a statistically significant relationship that exists between the R_{CP} and R_{it} . The measurement of return predictability in asset pricing models reveals that the relationship between R_{CP} and R_{it} further exists in lesser magnitude even after the introduction of risk factors i.e., MRP, SMB, HML, WML, RMW, and CMA in each asset pricing model. However, a fragment of the relationship in R_{CP} and R_{it} represents through HML, WML, and RMW factors however, MRP, SMB,

and CMA factors are insensitive to R_{CP} . Based on the analysis and discussion, the researcher exemplifies that there is no significant difference in the estimation of long-term abnormal returns using different asset pricing models i.e., CAPM, FF3, C4F, and FF5. All the asset pricing models used in the study reveals that R_{CP} absorbs an equal portion of the unexplained abnormal return.

The sole interest of the present study is the “abnormal return” measure by the magnitude and significance of the regression intercept (Fama, 1998; Brav & Lehavy, 2003; Kothari & Warner, 2007; Fama & French, 2015). The new variable, R_{CP} absorbs an unexplained portion of the abnormal return pertains to the basic asset pricing models. Thus, the researcher believes it is more likely that analysis evidence of a market that is informationally inefficient. Accordingly, the researcher reserves the right to define “consensus return” as a potential anomaly to market efficiency.

5.1. Implications and Conclusions of the Study

In a globalized world, the role of academic inquiry to discover new knowledge is significant to have a knowledge-driven community. In that, the implications of the present study discussed from the perspective of academics, investors, public listed companies itself, SEC, and government of Sri Lanka as follows; The consensus price is probably the next level of security analysts’ forecast, the most notable output of the financial analysis where limited attention receives from the academics, teachers of finance and students. Specifically, the results generated from the study contribute to the theory that it is possible to earn abnormal returns by using sentiments based on SSSA consensus price, especially by constructing portfolios using the methodology followed in the study. Thus, the findings of the study benefit the academics and students by fetching the finance practice into theory. Moreover, the study has important implications for both local and foreign investors. The information publishes online on financial service companies like Bloomberg, Thomson Reuters and FactSet, directly impacts the trustworthiness of the local and foreign investors in formulating their investing strategies. Additionally, both private and institutional investors can get insights based on SSSA consensus prices to construct portfolios that consistently beat the market and earn abnormal returns. The government plays an important role in this regard, as evidenced in the study of Antônio et al. (2017) finds that the greater the government effectiveness, the greater the forecast accuracy of target price estimates and consensus prices issue by the SSSA.

The findings are valuable from the perspective of companies listed in the CSE to formulate suitable policy decisions. The accuracy of favorable consensus price forecasts enhances the reliability of the investment. Thus, investor inspires to trade based on the SSSA consensus price and increases the liquidity of the stock, improves the firm valuation, and reduces the cost of equity of the company. In contrarily, unfavorable consensus price forecasts give signals to the company about their near future, thus the management can plan future uncertainties and

better evaluate its operational and financial restructuring alternatives. Further, there is an increasing trend between investors investing in emerging stock markets due to higher risk and return and exploit profit through market inefficiencies. Additionally, the inefficiency of CSE provides an insight to market participants to create innovative financial products (e.g., short selling) which improve investors' active market participation and develop the CSE. Also, SSSA consensus price directly affects future share prices. Superfluous price escalation gives insight to the SEC and government of Sri Lanka on many market ills such as excess market volatility, the possibility of emerging bubbles in fast-moving companies, emerging market meltdown, and recent financial crisis. Thus, the findings of the study have important implications for diverse users to formulate their future policy decisions for the development of the stock market and the economy.

The conclusion is drawn as to the “informationally inefficient market” cannot be generalized to the CSE as the sampling frame consists of forty-four companies with consensus information. Further, “the test of private information” is a test of whether individual investors or groups have monopolistic access to private information that is not fully reflected in the market price. As emphasized by Fama (1970), “We would not, of course, expect this efficiency model to be an exact description of reality” (p. 409). Accordingly, the researcher can conclude that Sell Side Security Analysts act as Prophets in the Sri Lankan context.

5.2. Limitations of Research

The main limitation for this kind of research is the availability of data on consensus returns from brokering firms. As consensus price data is a kind of property hold by brokering firms, access to data is a challenge. If possible, to overcome the restrictions to access for data on consensus prices, it will be able to have a wider sample. Further, it is challenging and interesting to compare consensus returns of brokering firms in the market. Another aspect that has to analyze is consensus return adjustment with brokering changers of firms.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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