Exchange Rate Fluctuation and the Stock Return of Listed Multinational Companies in Sri Lanka

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Abstract

According to the availability of resources, countries make the choice between production, export, and import, and they usually attempt to gain competitive advantages through foreign trade activities. Thus, internationally active firms have to face the currency fluctuation risk frequently and disclose the foreign currency gains and losses during the year in their financial statements. Though the literature provides empirical evidence on the impact of exchange rate fluctuation on stock return in foreign countries, studies about the Sri Lankan context are limited. This study, following a quantitative research approach, investigates the relationship between the exchange rate fluctuation and the stock return based on secondary data from selected 31 listed multinational companies in Sri Lanka for the period from 2010 to 2020. 'Exchange rate fluctuation' and 'stock return' are measured using the change in the trade-weighted exchange rate, and stock prices plus dividends respectively. Market portfolio rate of return (MPRR) and inflation rate are used as control variables. By applying panel regression analysis, findings reveal a significant negative relationship between stock returns and trade-weighted exchange rate (TWER). However, control variables (MPRR and the inflation rate) show divergent results with the stock return. Accordingly, the market portfolio rate of return shows a significant positive relationship with the stock return. Contrary to MPRR, there is a significant negative relationship between inflation rate and stock return. Thus, as a fresh study conducted in the Sri Lankan context, these findings reveal that high variations in the exchange rate could lead to uncertain stock returns whereas increased exchange rates and inflations rates reduce firms' market-based performance in terms of stock returns. These findings provide insights and directions towards introducing and regulating policies connected with the exchange rate to mitigate the abrupt impacts of exchange rate fluctuations on individual firms and the economy. Accordingly, the findings of this study would be beneficial for policymakers in taking policy decisions for promoting the international trade of the country while regulating exchange rate and monetary policies.

Keywords: Inflation Rate, Market Portfolio Rate of Return, Multinational Companies, Stock Returns, Trade-weighted Exchange Rate

1 Introduction

A foreign exchange rate is a rate at which one currency can be converted into another currency (Ahmad, Rehman, & Raoof, 2010). Businesses expect a steady change in these exchange rates as the abrupt changes in the exchange rate may cause a country's exports and imports to suffer (Ahmad et al., 2010). Nevertheless, unexpected currency movements have become a major factor of macroeconomic uncertainty in determining profitability, stock return, and firm value of multinational companies (MNCs) due to the variations made to the cash flows (Muller & Verschoor, 2006). However, these variations cannot be directly observed (Boudt, Neely, Sercu, & Wauters, 2019; Jorion, 1990). Accordingly, the researchers have segmented their studies based on the time variations and industry-specific factors to identify the impact of exchange rate fluctuations (Boudt et al., 2019).

The variations in exchange rates may affect firms that have engaged in exports and imports, licensed foreign subsidiaries, and established foreign subsidiaries (Aray & Gardeazabal, 2010). According to Hung (1997), the exchange rate exposure can be identified under three categories: i) transaction exposure (the possibility of change in the value of a contract before it is settled ii) translation exposure (the possibility of change in the figures of consolidated financial statements when an MNC owns a foreign subsidiary), and iii) economic exposure (the possibility of change in the values of the MNCs' future cash flows and market values through unexpected currency fluctuations).

In order to manage this exposure, the central bank of a country can intervene in the process of determining the exchange rate by using sophisticated financial measures (Biswal & Jain, 2019). The floating exchange rate is determined by the independent foreign exchange market demand and supply forces and it may subject the firms' foreign exposure to more volatility (Ramasamy & Abar, 2015). The variations made by exchange rates on individual firm's cash flows and profits induced the researchers to study the impact of exchange rate fluctuations on individual firm stock returns. Moreover, previous researchers found that the exchange rate fluctuations directly influence the multinational companies' cash flows and when the domestic currency depreciates, the multinationals may earn more profits through sales and spend more on imports of production factors (Boudt, Neely, Sercu, & Wauters, 2019; Gao, 2000; Hung, 1997; Shapiro, 1975).

Exploring the impact of exchange rate fluctuations on stock return, some researchers stated that they were unable to identify the relationship between exchange rate fluctuations and stock return, and the reason may be the negligence of hedging activities and time instability (Crabb, 2002; Gao, 2000; Ihrig & Prior, 2005; Jorion, 1990; Muller & Verschoor, 2006). They concluded that there is no statistically significant relationship between exchange rate fluctuations and stock return (Jorion, 1990; Amihud, 1994; Bodnar and Gentry, 1993 as cited by Gao, 2000). Challenging these conclusions, some of the researchers found that there is a statistically significant relationship between exchange rate

fluctuations and stock return (Aray & Gardeazabal, 2010; Boudt et al., 2019; Gao, 2000; Ihrig & Prior, 2005; Muller & Verschoor, 2006).

According to Hughen and Beyer (2015), there is a negative relationship between exchange rate fluctuation and stock return; whereas, Ahmad et al. (2010) found that there is a positive relationship between exchange rate and stock return. Consequently, the findings regarding the relationship between exchange rate and the stock return are still unsettled. Although studies about exchange rate fluctuations and stock returns have been undertaken in developed countries, only a handful of studies can be found regarding emerging economies like Sri Lanka. Wickremasinghe (2012) revealed that there is no relationship between the exchange rate and stock prices in the long run. However, in the short run, the stock prices can be predicted only through US dollar rate changes (Wickremasinghe, 2012).

Therefore, this study attempts to explore the impact of exchange rate fluctuations on stock return regarding the Sri Lankan context. According to Shapiro (1975), the stock return of totally export-oriented firms will gradually decline in a period of high inflation. Hence, the inflation rate and market portfolio rate of return are used as the control variables in this study.

2. Review of Literature

Review of literature is presented relating to the following three major sections.

2.1 Exchange Rates

The exchange rate of a country can be identified in terms of the value paid by that country for goods, services, and finance during international trade activities (Rajakaruna, 2017). The Central Bank of a country is given the statutory powers to intervene in the process of managing exchange rates (Rajakaruna, 2017). Accordingly, the Central Bank intervenes in the process of managing the exchange rate to mobilize capital and savings to fill the resource gap and expand the investments (Rajakaruna, 2017). He further identified both favourable and unfavourable effects of these fluctuations, and found that appreciated currency may reduce the price levels of imports in the local market which leads to a reduction in the inflation rate and vice versa. Moreover, the country's outstanding debt value will be lower in an appreciated exchange rate, which will reduce the burden of repayment (Rajakaruna, 2017). In contrast, the appreciated exchange rate may stimulate more imports and it may badly affect the balance of trade, discouraging the exporters because of the lowering domestic currency.

However, the variations in exchange rates are due to the variations in the inflation rate, interest rates, the balance of trade, net official interventions, remittances, and net foreign purchases (Rajakaruna, 2017). Therefore, some of the researchers have introduced the delta value of exchange rate as a formula of these factors (Crabb, 2002; Gao, 2000).

Isolated exchange rates cannot be taken for the computation of exchange rate variation (ΔER) as their impact can change corresponding to the amount of trade carried

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with those currencies. Accordingly, the scholars have computed a single exchange rate value taking the trade-weights of trade partnering countries into account (Aray & Gardeazabal, 2010; Boudt et al., 2019; Crabb, 2002; Gao, 2000; Ihrig & Prior, 2005; Marshall, 2000; Muller & Verschoor, 2006). Hence, this study measures the exchange rate fluctuations using trade-weighted exchange rates for the study period.

2.2 Exchange Rate and Stock Return

According to Gao (2000), the exchange rate fluctuations may influence the multinationals' cash flows and it leads to variations in stock return. Going multinational has a significant effect on stock return. It implies that though the firms are small in size, they can earn more from foreign trade activities (Qian, 2002). There is a curvilinear relationship between multinationalism and stock return. The earlier attempt of going multinational is positively correlated with the stock return, and, after a point, further extension of foreign activities causes the decline of stock return (Qian, 2002).

The relationship between exchange rate and stock market can be explained by focusing on two models according to the literature: the flow-oriented model by Dornbusch and Fischer (1980); and the stock-oriented model by Branson and Frankel (1983). The flow-oriented model by Dornbusch and Fischer (1980) connects with a country's current account balance, and fluctuations in the exchange rate may affect the international competitiveness and profitability of internationally active firms. Ultimately, it may affect the stock prices. A depreciated currency stimulates the exports and increases the stock prices with speculative motives and

an appreciated currency will decrease the stock prices. According to this model, there is a positive relationship between exchange rates and stock prices (Sikhosana & Aye, 2018).

The stock-oriented model by Branson and Frankel (1983) describes a scenario where stock market changes impact the foreign exchange market. Higher stock prices value the domestic assets at high rates, and it will increase the demand for domestic currency. Higher demand for domestic currency will increase the interest rates, and it will motivate the capital inflows to the country. Ultimately, it will lead to domestic currency appreciation. In contrast, low stock prices lead to domestic currency depreciation. According to this model, there is a negative relationship between exchange rate and stock prices (Sikhosana & Aye, 2018).

According to Hung (1997), the effects of overseas profits can be identified under three categories when the US dollar depreciates: i) the translation effect: a given level of foreign profits may generate a higher level of dollar profits; ii) the cost/volume effect: a depreciated dollar may reduce the production cost and increase the foreign profits; iii) the price/volume effect: a depreciated dollar may increase foreign profits through less competitive prices. Further, Hung (1997) has concluded that 1% of dollar depreciation may lead to a 0.94% increase in foreign profits.

According to Hughen and Beyer (2015), there is a negative relationship between exchange rate fluctuation and stock return whereas Ahmad et al. (2010) found that there is a positive relationship between exchange rate and stock return. In contrast,

some researchers concluded that there is no statistically significant relationship between exchange rate fluctuations and stock return (Jorion, 1990; Amihud, 1994; Bodnar and Gentry, 1993 as cited by Gao, 2000). Referring to the Sri Lankan context, Wickremasinghe (2012) discovered that there is no statistically significant relationship between exchange rate fluctuation and stock prices in the long run and there is a statistically significant relationship between exchange rate fluctuation and stock prices in the short run with reference only to US dollar.

2.3 Stock Return, Inflation and Market portfolio rate of return (MPRR)

Ricardo's theory of comparative advantage states that the countries should specialize to produce and export goods and services where they can earn competitive advantages in terms of cost of production and opportunity costs (as cited by Bahmani-Oskooee, 1993). He suggests that two countries are involved in producing and exchanging two goods or services between each other. The production of exchanging goods and services is selected based on the cost benefits and specialization abilities. A country may produce some goods at a lower cost compared to the other countries, while it may become costly to produce some other commodities. This indicates that the availability of resources and the ability to specialize have helped the countries to produce more. These factors have influenced the emergence of foreign trade.

Further, the Purchasing Power Parity theory of Ricardo mentions that the same commodity must cost the same in two countries (as cited by Bahmani-Oskooee, 1993). For example, if an apple costs 1 US

dollar in America, it should cost the same in Sri Lanka after it is converted to LKR (1 USD = 195.55 LKR as of 01/03/2021). If it costs more in Sri Lanka it may be due to inflation.

Therefore, according to Ricardo, countries can make profits through international trade with such differences in costs. According to Shapiro (1975), if the firms are engaged more in domestic industries than the industries affected by import competition, the inflation will be beneficial. Also, if the firms are sole exporters, these firms' profitability will decline, and if the firms are highly affected by import competitiveness to gain local resources, the profitability will decline in these firms during a period of inflation (Shapiro, 1975). Consequently, the inflation rate is selected as one of the controlling variables for the current study.

Moreover, the market value of a multinational firm is decided based on the assets value and current value of its growth opportunities. The varied market values of different multinational firms imply the difference in investment opportunity sets. The stock return and growth of multinationals will be decided along with the size and macroeconomic variables. Similarly, the potential beta of stock return of multinational firms will depend on the number of future investments and individual firm return variances (Riahi-Belkaoui, 2002).

According to Jorion (1990), market-adjusted betas are taken in order to mitigate the market risks. The findings of Bartov, Bodnar, and Kaul (1996) revealed that there is a positive relationship between exchange rate fluctuation and market portfolio rate of return

(MPRR). Therefore, the market portfolio rate of return is also used as a controlling variable in this study in analyzing the impact of exchange rate fluctuations on stock return.

Nevertheless, some of the scholars have identified the limitations associated with studying the impact of exchange rate fluctuations on the stock return of multinational companies. The two main limitations associated with this type of study are the scarcity of firm-level data and the complexity of evaluating firm hedging decisions (Gao, 2000). The increasing or decreasing cost of technologies and economies of scale will impact driving volume and direction of trade. Moreover, the exchange risk is decided by the distribution of export and domestic sales, the amount of imports, competition faced domestically, and the amount of substitutability of imported factors of production (Shapiro, 1975). However, various scholars depicted contradictory findings on the impact of exchange rate fluctuations on stock return due to these various limitations. Accordingly, the study attempts to evaluate whether there is an impact of exchange rate fluctuations on the stock return of multinational companies in Sri Lanka.

3. Research objectives and methodology

3.1 Research objectives

The main objective of this paper is to explore the impact of exchange rate fluctuations on stock return with special reference to listed multinational companies in Sri Lanka.

3.2. Research Methodology

This study applies quantitative research approach and the research design employed is descriptive.

3.2.1 Population, sampling and sample

The researchers purposefully selected listed multinational companies out of different types of industry sectors listed on the Colombo Stock Exchange (CSE, 2020). Because multinational companies are more appropriate for this study than local companies listed on the CSE as it is concerned with exchange rates, and associated fluctuations and implications. Even though this study was initially expected to approach all companies identified above as the population (61 listed multinational companies) in Sri Lanka, it had to limit the sample to 31 multinational companies (the sample), as far as concerned with the availability of required data adequately to have meaningful analysis and interpretations, and to reach a valid conclusion on the phenomena under investigation. Accordingly, the researchers could have an effective sample of 31 companies for the study by excluding the rest of the companies in the population due to the unavailability of firm-level data on stock prices and dividends distribution.

3.2.2 Data collection and analysis methods

The data were collected only from secondary sources using audited annual reports and published financial statements of the sampled companies for the 10 years from 2010 to 2019.

Exchange rate fluctuation is the independent variable and it is measured by the trade-weighted exchange rate, as it focuses on the trading relationships among countries to

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measure the accurate effects of exchange rate fluctuations (Aray & Gardeazabal, 2010; Boudt et al., 2019; Crabb, 2002; Gao, 2000; amounts of exports and imports (Aray & Gardeazabal, 2010; Boudt et al., 2019; Ihrig & Prior, 2005; Muller & Verschoor, 2006). Reviewing the literature, this study computes the trade-weights of Sri Lanka considering 2010 as the base year with 27 trade partnering countries including 24 currencies. Those trade statistics are drawn from the annual reports published by the Department of Census and Statistics and 27 countries have been selected representing 90% of foreign trade operations. Accordingly, the trade weights have been calculated as follows.

$$Trade\ Weight = \frac{(X_{USA} + M_{USA})}{\sum(X + M)}$$

Where:

X_{USA} = Exports to the USA from Sri Lanka

M_{USA} = Imports from the USA to Sri Lanka

$\sum(X + M)$ = Total exports and imports of Sri Lanka during the year

$$TWI = \left(\frac{\$_t}{\$_T}\right)^{\alpha_1} * \left(\frac{£_t}{£_T}\right)^{\alpha_2} * \left(\frac{¥_t}{¥_T}\right)^{\alpha_3} * ... * ... * ... * SF$$

Where:

TWI = Trade Weighted Index

$ = Sri Lankan Rupees per US Dollar

£ = Sri Lankan Rupees per Sterling Pound

¥ = Sri Lankan Rupees per Chinese Renminbi

T = Base Year

t = Current Year

α_1 = Trade Weight of USA

α_2 = Trade Weight of UK

Marshall, 2000; Muller & Verschoor, 2006). Trade-weights are calculated according to the

α_3 = Trade Weight of China

SF = Scale Factor = 100

The dependent variable is the stock return, and it is measured using stock prices and dividends (Bartov, Bodnar, &Kaul, 1996; Gao, 2000; Ihrig & Prior, 2005; Jorion, 1990; Muller & Verschoor, 2006). In this study, the stock return is calculated using the following formula.

$$SR = \frac{P_1 - P_0 + D}{P_0}$$

Where:

SR = Stock Returns

P0 = Initial Stock Price

P1 = Ending Stock Price

D = Dividends

The Market Portfolio Rate of Return (MPRR) was identified as a control variable (Crabb, 2002; Gao, 2000; Jorion, 1990) as it has an impact on the stock returns of multinational companies. The Jorion (1990) Model states that there should be an alternative specification to measure the currency exposure of companies with low foreign operations, and he has added market movements as a control variable. The value of the firm will be based on i) the market rate of return; ii) the capability of assets to earn income; and iii) the capability to make additional investments in new assets (Riahi-Belkaoui, 2002). Hence, MPRR has been computed as follows.

$$MPRR = \left\{\frac{(P_n * Q_n) - (P_0 * Q_0)}{(P_0 * Q_0)} + 1\right\}^{\frac{1}{n}}$$

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Where:

P_0= Market Value Per Share in Initial Year

P_1 = Market Value Per Share in nth Year

Q_0= Shares Outstanding in Initial Year

Q_1 = Shares Outstanding in nth Year

n = Number of years (10)

In addition to MPRR, the annual inflation rate has also been identified as a control variable as the literature shows that among macro-economic variables, the inflation rate has an impact on both stock prices and exchange rate (Boudt et al., 2019). Accordingly, data for the annual inflation rates have been taken from the Department of Census and Statistics Sri Lanka for the period of 2010/2011 to 2019/2020.

Eviews 9 statistical software was used to analyze the data for investigating the effect of exchange rate fluctuations on stock return. Consequently, descriptive statistics were used to identify the characteristics of the variables; whereas, fixed panel regression analysis was employed to examine the impact of exchange rate fluctuations on firm stock return. This study uses the following regression formula.

$$r_{it} = \beta_0 + \beta_1 r_{it} + \beta_2 e_{it} + \beta_3 i_{it} + \epsilon_{it}$$ where

$$i=1,2,3,\ldots,31$$

$$t=2010, 2011,\ldots, 2019$$

Where:

r_{it}= Stock returns of ith company for the period t

β_0=Constant or intercept

r_{it}= Market portfolio rate of return

e_{it} = Change in the trade weighted exchange rate

i_{it} = Inflation rate for the nth year

ϵ =Random error

i=individuals/Companies

t=time

The hypotheses developed for this study based on the literature are presented below;

H_1: There is a statistically significant relationship between exchange rate fluctuations and the stock return of multinational companies.

H_1: $\beta_j \neq 0$

H_0: There is no statistically significant relationship between exchange rate fluctuations and the stock return of multinational companies.

H_0: $\beta_j = 0$

4. Results and Discussion

The descriptive statistics and panel regression results are taken into account to analyze whether there is an impact of exchange rate fluctuation on stock return. Outliers of the data set were primarily checked by using dot plots, and the leverage plot was also used to do the same. Due to the impact of 4 extreme outliers, the result of the analysis was distorted.

Whilst presenting data tabulated for the intended research purposes, the discussion was made mainly relating to the two parts: the first part provides descriptive statistics which are used to examine the characteristics of the

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variables, and the second part presents the fixed panel regression analysis that was employed to examine the impact of exchange rate fluctuations on firm stock return. For the panel regression analysis, Eviews 9 statistical software was employed and the results are presented in the discussion together with descriptive statistics, regression model summary, coefficients, and hypotheses testing respectively.

4.1 Descriptive Statistics

Descriptive statistics shown in Table 1 are derived excluding the identified outliers. Over the study period, the mean stock return is 0.09 (SD = 0.685), with the minimum -0.991 and maximum 7.5 stock return values. The mean trade-weighted exchange rate value of the sample companies is 109.100 (SD = 6.932). The maximum and minimum TWER values are 123.784 and 101.341 respectively. The mean values of the market portfolio rate of return and inflation rate are 1.003 (SD = 0.155), and 0.05 (SD = 0.017) respectively.

Table 1: Descriptive Statistics

	Mean	Std. Deviation	Minimum	Maximum	N
SR	0.09	0.685	-0.991	7.5	306
TWER	109.100	6.932	101.341	123.784	306
MPRR	1.003	0.155	0.684	1.333	306
Inflation Rate	0.05	0.017	0.022	0.075	306

Source: Eviews 9 - Descriptive statistics for panel data of stock returns, trade-weighted exchange rate, MPRR, and inflation rate (2010 – 2020).

4.2. Panel Regression Results

The secondary data captured for the period of 10 years from 2010 to 2020 is analyzed using fixed panel regression results to assess whether exchange rate fluctuations affect stock returns. The panel regression results are shown as follows.

4.2.1 Model fit and predictability

Table 2: Model Summary

Model	R Square	Adjusted R Square	F statistic (P value)	Durbin-Watson
1	0.19	0.18	0.000	1.82

Source: Eviews 9 - Panel regression analysis of stock returns, trade-weighted exchange rate, market portfolio rate of return, and inflation rate (2010 – 2020)

According to the model summary table, $R^2 = .19$, emphasizes that 19% of the stock return variability can be explained through the selected variables in the model together with trade-weighted exchange rate, market portfolio rate of return, and inflation rate. The remaining 81% variability in stock returns will be due to other reasons which are not examined in the study. Consequently, there are more other factors that functionally affect the stock return.

According to the model adequacy measures, the estimated panel regression model is good fit according to the F statistic of the ANOVA test ($F_{(3, 302)} = 23.33$, $p < .000$). Durbin – Watson value shown in the model summary table is around 1.819. It indicates that there are no autocorrelation issues between the residuals.

4.2.2 Coefficient results and discussion

The coefficients table illustrates the coefficients for all the variables examined in the study. The unstandardized coefficients depict the amount of the stock returns change due to one unit of change in trade weighted-exchange rate, market portfolio rate of return, and inflation rate.

According to Table 3, the constant test was not significant and the other three variables of the model are highly significant.

Table 3: Coefficient Table

Variable	Coefficient	Std.Error	Sig.
(Constant)	0.554	0.362	0.127
TWER	-0.011	0.003	0.000
MPRR	0.899	0.13	0.000
Inflation Rate	-4.1763	1.167	0.000

Source: Eviews 9 – Panel regression analysis coefficients of stock returns, trade-weighted exchange rate, MPRR, and inflation rate (2010 – 2020).

Regression results reveal that the constant is zero; when the predictor variable is zero the response variable is also equal to zero.

The coefficient for the trade-weighted exchange rate is -0.011 ($B = -0.011$, $p > 0.05$). It shows that there is a significant negative relationship between exchange rate fluctuation and stock return. It reveals a unit increase in the trade-weighted exchange rate will cause a 0.011 decline in stock returns.

The coefficient for the market portfolio rate of return is 0.899 ($B = 0.899$, $p > 0.05$) and it shows that there is a significant positive relationship between market portfolio rate of return and stock return. Accordingly, a unit increase in the market portfolio rate of return will cause a 0.899 increment in stock return.

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Further, the inflation rate indicates a significant negative relationship with stock return as the coefficient value is -4.1763 (B =-4.1763, p >0.05). Consequently, the regression results reveal that one unit of variation in the inflation rate may cause a 4.1763 decline in stock returns. Based on the information given in Table 4.3, the regression line can be shown as;

SR = − 0.011 TWER + 0.899 MPRR − 4.176 IR

Where:

SR = Stock Returns

TWER = Trade Weighted Exchange Rate

MPRR = Market Portfolio Rate of Return

IR = Inflation Rate

Overall, panel regression was employed to predict stock return based on the trade-weighted exchange rate, market portfolio rate of return (MPRR), and inflation rate. F statistic determines the fitness of the model ($F_{(3, 302)} = 23.33$, $p < .000$), with an R^2 of 19%. Considering the relationship between two constructs, a unit change in the trade-weighted exchange rate will decrease stock returns by 0.011, a unit increase in market portfolio rate of return will increase stock returns by 0.89 and a unit increase in the inflation rate will decrease stock returns by 4.17. Consequently, trade-weighted exchange rate, market portfolio rate of return, and inflation rate are statistically significant predictors of stock returns.

According to Table 3, the exchange rate fluctuations have a statistically significant negative relationship with stock return. Although the relationship is negative, it is statistically significant. Therefore, the null hypothesis (H_0) is rejected and the alternative hypothesis is accepted.

Although some researchers have concluded that there is a significant positive relationship between exchange rate fluctuation and stock return (Boudt et al., 2019; Ihrig & Prior, 2005; Muller & Verschoor, 2006), and other scholars have concluded that there is no significant relationship between exchange rate fluctuation and stock return (Jorion, 1990; Amihud, 1994; Bodnar and Gentry, 1993 as cited by Gao, 2000), the current study found a statistically significant negative relationship between stock returns and trade-weighted exchange rate.

Accordingly, study results confirm the previous research findings that revealed a significant negative relationship between trade-weighted exchange rate and stock return according to the stock-oriented model (Boudt et al., 2019; Gao, 2000; Hung, 1997; Shapiro, 1975; Hughen and Beyer (2015).

5. Conclusions

In the prevailing global economic environment, investors are highly concerned about the exchange rates and stock price fluctuations in order to maximize their return on investments. Many researchers have investigated the impact of exchange rate fluctuation on stock return specially in developed countries and they have found contradictory findings on the topic. Therefore, this study attempted to investigate the impact of exchange rate fluctuation on stock return in the emerging Sri Lankan context.

The data on trade-weights, stock returns, exchange rates, market portfolio rate of returns, and inflation rates were taken for the period of 10 years from 2010/2011 to 2019/2020 and analyzed using panel regression analysis to examine the relationship between exchange rate fluctuation and stock return.

According to the regression analysis, F statistic is significant and it depicts that the model is good fit and the trade-weighted exchange rate, market portfolio rate of return, and inflation rate can have a simultaneous or joint impact on the stock returns. However, as the R^2 value emphasizes only 19%, the remaining 81% stock returns variability may be due to other factors that are not examined under this study.

The coefficient table illustrates the amount of variance that can be predicted in stock returns due to changes in a unit of independent variables. A unit change in the trade-weighted exchange rate will decrease stock returns by 0.011, a unit increase in market portfolio rate of return will increase stock returns by 0.89 and a unit increase in the inflation rate will decrease stock returns by 4.17. Moreover, it concludes that there is a statistically significant negative relationship between stock returns and trade-weighted exchange rate, a statistically significant positive relationship between stock returns and market portfolio rate of return, and a statistically significant negative relationship between stock returns and inflation rate.

The research findings suggest that higher exchange rates (domestic currency depreciation) may increase the import costs, and ultimately it may lead to the deduction of the stock returns. At the same time, lower exchange rates (domestic currency appreciation) may stimulate exports and ultimately increase stock returns.

6. Implication and Suggestions for Future Researchers

The stock return is one of the most significant market-based performance measurements that firms focus on. However, it might be affected by many micro and macroeconomic factors. Although there is much literature on the impact of micro-economic variables on stock return, the studies about the impact of macro-economic variables on the stock return are limited. The Central Bank, as the authoritative body of launching monetary policy, can introduce new policies of managing currency fluctuation to promote international trade and the successful functioning of multinational firms. Otherwise, the expected performances and gains cannot be earned. This may lead to the stimulation of the Foreign Direct Investments (FDIs) of the country and ultimately it leads to the economic growth of the country. Hence, this is an attempt to focus the attention of policymakers and authoritative bodies to be alert to the currency fluctuations and regulate those fluctuations, in order to manage the earning fluctuations of individual firms as well as the economy as a whole.

Many multinational companies are operating in Sri Lanka that has not registered in CSE. The current study, however, relates only to a sample of multinational companies listed on the Colombo Stock Exchange (CSE) due to the inconvenience of collecting data from all these multinational companies. Therefore, it will be more worthwhile if future

researchers explore the same area of concern focusing on almost all the multinational companies operating in Sri Lanka.

Further, many scholars have conducted these studies in the context out of Sri Lanka. Therefore, there is a lacuna in literary works under the impact of exchange rate fluctuations on the stock return in the Sri Lankan context. Consequently, for future researchers, the study suggests discover more on the impact of exchange rate fluctuations on stock return within Sri Lanka and conducting country or sector-wise comparative analysis, which covers many other predictor variables of stock return in addition to the selected measures for the current study.

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