FACTORS AFFECTING FOREIGN PORTFOLIO INVESTMENT IN COLOMBO STOCK EXCHANGE

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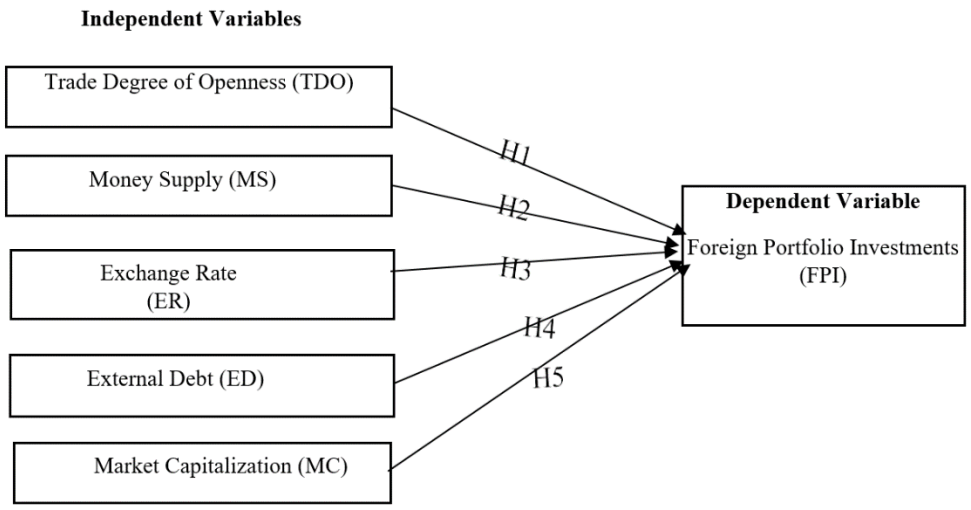
INTRODUCTION

Foreign portfolio investment (FPI) plays a crucial role in the fundraising efforts of developing countries, particularly through foreign investments. Foreign investment (FI) can be classified into two major types: Foreign direct investment (FDI) and FPI (Waqas et al., 2015). While FDI has a lasting nature, FPI is characterized by its short-term nature and higher returns (Ekeocha et al., 2012). This paper aims to review the existing literature on the determinants of FPI in the Colombo Stock Exchange (CSE) and identify empirical gaps in the current research. The study highlights the significance of FPI for developing economies like Sri Lanka and its potential impact on the economy and capital market. Foreign investors, both individual and institutional, contribute to the investor base of the CSE, leading to increased market competitiveness and accurate valuation of stocks. Moreover, FPI facilitates foreign direct investment inflows, which boost economic output and enhance the wealth and asset structure of public businesses (Al-Smadi, 2018). However, challenges such as inadequate monitoring and regulatory structures, political instability, and external factors like war crimes allegations have affected foreign investor confidence in the market. The study also highlights specific events, such as the Easter Sunday attack in 2019 and the COVID-19 pandemic in 2020, which led to a decline in foreign investments. Existing literature on the determinants of FPI in the CSE focuses on factors such as the growth rate of real GDP, real interest rate, real exchange rate, gross capital flow, market capitalization, and inflation (Selvam, 2017). So, there are empirical gaps in understanding the relationship between FPI and other variables such as trade degree of openness (TDO), money supply (MS), exchange rate (ER), external debt (ED), and market capitalization (MC). To bridge these gaps, future researchers should investigate the influence of additional factors on FPI in the CSE context. This study emphasizes the importance of understanding the factors affecting FPI to attract foreign investments, promote economic growth, and strengthen the capital market in developing countries like Sri Lanka. Moreover, this study is relevant and valuable for policymakers and regulatory institutions in Sri Lanka. This study shows the impact of sustainability reporting on a firm's growth. The same kind of practice is also recommended for other countries' issues having similar backgrounds and problems.

METHODOLOGY

Based on the literature, the study identified trade degree of openness (TDO), money supply (MS), exchange rate (ER), external debt (ED), and market capitalization (MC) as independent variables and the FPI as the dependent variable. Accordingly, we developed the conceptual framework, as shown in Figure 1.

Figure 1
Conceptual Framework



TDO is measured by dividing the sum of exports and imports by gross domestic product (GDP) and multiplying it by 100. MS has measured the sum of cash, coins, and deposits. ER is measured by multiplying the nominal exchange rate by the consumer price index. External debt refers to the financial obligations incurred by a nation through borrowing from foreign entities, such as commercial banks, governments, or international financial institutions. MC is measured by multiplying the number of outstanding shares by the current share market price. FPI is measured by deducting foreign purchases from foreign sales. According to the conceptual framework, the study developed the following hypotheses to achieve the objectives of the study:

H_1: There is a long-run co-integration relationship between variables.
H_2: There is a significant effect of TDO on FPI.
H_3: There is a significant effect of MS on FPI.
H_4: There is a significant effect of ER on FPI.
H_5: There is a significant effect of ED on FPI.
H_6: There is a significant effect of MC on FPI.

Further, this research was conducted using a deductive approach. The quantitative data analysis was conducted using time series secondary data. This study used monthly data from January 2012 to December 2021. Data was collected from World Bank reports, the CSE data library, the Census and Statistics Department of Sri Lanka, and Central Bank of Sri Lanka (CBSL) reports. Augmented Dickey-Fuller (ADF) test was carried out to find the stationarity of the data series. Also, it employed Johansen's (1988) co-integration technique to find the long-run co-integration relationship between study variables. In addition to that, the study used multiple regression analysis to detect the impact of independent variables on the dependent variable.

RESULTS AND DISCUSSION

Table 1 presents the results of the descriptive statistics. The median value of each variable represents the central value within the dataset. The standard deviation demonstrates that the variables possess the ability to depart from their mean within a certain range. All of the

variables exhibit positive skewness, suggesting that the greatest values are located to the right of the mean. The variables FPI, ED, and MC exhibit strong peaks and leptokurtic distributions due to their values above a threshold of 3.

Table 1

Descriptive Statistics

	FPI	TDO	MS	ER	ED	MC
Mean	6.521	0.240	14.184	5.032	9.634	20.066
Median	6.580	0.230	14.275	5.010	9.660	20.140
Std. Dev.	0.296	0.054	0.316	0.157	0.144	0.337
Skewness	-1.675	0.352	-0.122	0.358	-0.817	-0.304
Kurtosis	8.330	2.869	1.931	1.774	3.029	3.389

The study examined the data series to determine their stationarity. Table 2 presents the results of the unit root test, except the variables FPI, and ED, along with other variables, exhibit unit roots in level because the p-values associated with these variables are more than 0.05. All of the selected variables exhibit stationarity at the first deference since the p-values of all variables are below the threshold of 0.05.

Table 2

Results of Unit-root Test

Variable	At Level, I(0)	P-values	At 1st Dif., I(1)	P-values
FPI	-6.097	0.000	-14.555	0.000
TDO	-2.370	0.152	-16.729	0.000
MS	0.338	0.979	-5.981	0.000
ER	-0.800	0.815	-10.262	0.000
ED	-3.264	0.018	-11.424	0.000
MC	-1.126	0.703	-11.405	0.000

Note. Critical values are -2.885 and -2.579 at the 5% and 10% I (0). The critical values are 2.886 and -2.580 at the 5% and 10% I (1).

Table 3 demonstrates the outcomes of the co-integration analysis. According to the results, none demonstrates only an intercept model, i.e., a model having no independent variable. The co-integration test found two co-integrating linear relationships as there is a co-integration relationship between the variables. Two linear equations were revealed co-integrated, none, and one at most.

The study next analyzed the impact of the independent variables on the FPI using multiple regression analytical methods. Table 4 shows the regression results. Accordingly, the value of the F-statistic is 9.014, which is high enough, and the p-value is less than 0.05, demonstrating that the overall model is highly statistically significant and shows the fitness of the model. This indicates that the model is the best fit for data and that the model can be accepted. Furthermore, TDO is positively and significantly associated with FPI. MS and ER are negatively and significantly associated with FPI. ED and MC have shown a negative and insignificant relationship with FPI.

Table 3
Results of Johansen's Co-Integration Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	Critical Value	Prob.**
None *	0.248	100.347	95.753	0.023
At most 1	0.212	67.513	69.818	0.045
At most 2	0.194	40.065	47.856	0.220
At most 3	0.076	15.233	29.797	0.764
At most 4	0.050	6.021	15.494	0.693
At most 5	0.000	0.045	3.841	0.831

Note. Trace test indicates 1 cointegrating eqn (s) at the 0.05 level; * denotes rejection of the hypothesis at the 0.05 level; **MacKinnon-Haug-Michelis (1999) p-values

Table 4
Results of Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.065	3.053	-1.986	0.049
TDO	4.550	0.951	4.782	0.000
MS	-1.253	0.337	3.711	0.000
ER	-1.475	0.454	-3.249	0.001
ED	-0.402	0.355	1.131	0.260
.MC	-0.136	0.170	-0.797	0.426

Note. R-squared: 0.283; Adjusted R-squared 0.251; F statistic 9.014 (p=0.000); Durbin-Watson stat 1.250

Based on the results of the study, several findings can be summarized: Firstly, the study confirms the presence of a co-integration relationship between the dependent and independent variables, consistent with some previous studies (Khan et al., 2010). Secondly, the study reveals a significant effect of the TDO on FPI, aligning with the findings of some studies (Bae et al., 2012). However, this finding contradicts the study conducted by some other studies (Li et al., 2012), which found an insignificant effect of TDO on FPI. Thirdly, the analysis demonstrates a significant effect of MS on FPI in the CSE, consistent with some studies (Mishra et al., 2020). Moreover, the study establishes a significant effect of the ER on FPI, supporting the findings of some studies (Sulaiman et al., 2012). Nevertheless, this result conflicts with the conclusions drawn by some Authors who reported an insignificant effect of exchange rate on portfolio investment (Aziz et al., 2015). Additionally, the analysis reveals that external debt has an insignificant effect on foreign portfolio investment in the CSE, which aligns with the findings of some Authors (Chinn and Ito, 2008). However, it contradicts the results of some other authors who found a significant effect of ED on FPI (Hossain and Bose, 2007). Lastly, the study finds an insignificant effect of MC on FPI, which contradicts the findings of some Authors who found a significant effect between the two variables (Wijesinghe & De Silva, 2020). In conclusion, the abstract summarizes the results of the study regarding the effect of various independent variables on FPI in the CSE, highlighting consistencies and contradictions with previous research.

CONCLUSION AND IMPLICATIONS

The main objective of this study is to investigate the factors influencing foreign portfolio investment in CSE. Based on the literature considered, the five variables, namely, TDO, ER, MS, ED, and MC, investigate whether these variables influence the FPI. The secondary data was used. The study found a long-run equilibrium relationship between selected variables using Johansen's co-integration. The study tried to find the factors influencing the FPI using multiple regression results and found that TDO positively influenced the FPI, and ER and MS negatively influenced the FPI. Variables of both ED and MC have not affected FPI. This finding recommends that the findings give the investors, portfolio managers, stockbrokers, and multinational corporations the necessary implications to make significant investment decisions. Further, these findings help policymakers and regulatory authorities design appropriate and strategic policies concerning the currency market in Sri Lanka.

The study has a few limitations. Researchers conducted the study by considering only 10 years from 2012 to 2021 with monthly data and considered only five selected factors affecting FPI in CSE. However, this can be performed for more than 10 years with quarterly or annual data for other various factors affecting FPI in CSE. The researcher has applied secondary data from the monthly reports of the Central Bank of Sri Lanka, Census and Statistics department reports, the CSE data library, and official websites. Therefore, the researcher has no way to verify and has no confidence regarding the accuracy of secondary data gathered from these secondary sources. Moreover, the same study can be conducted to identify other factors affecting FPI in the CSE with data of more than 10 years.

Keywords: Exchange rate, external debt, foreign portfolio investment, market capitalization, money supply, trade degree of openness

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