
FOREIGN DIRECT INVESTMENT AS A DETERMINANT OF PERFORMANCE OF SHARE MARKET IN SRI LANKA

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Abstract

The main concern of this study was to determine the impact of foreign direct investment to the performance of share market in Sri Lanka. Research anticipated observing the data net foreign direct investment and market capitalization. Study covered seventy two months from January 2009 to December 2014 as the sample period among the population because there were big fluctuation in Sri Lanka those variables and Sri Lankan economy and its capital market were reborn and successfully ended the three decade conflict in 2009. The share market calculated these values daily, by using those data were calculated the market capitalization. Share market performance is usually measures by market capitalization, share market size, liquidity, volatility, concentration and integration with world capital markets. With respect to the regression results, value for R square (0.613) indicates that net foreign direct investment presents 61 percent of total variation of dependent variable. In the context of empirical studies, net foreign direct investment can be considered as success predictor of the market capitalization. Further results reveal that the evidences that net foreign direct investment have a positive and significant impact on market capitalization and for accepting the hypothesis of the present study. Finally this study finds relationship between foreign direct investment and performance of share market in Sri Lanka. This study also suggest that infrastructure of the country plays a key role in attracting foreign direct investment into Sri Lanka. Further researchers can develop their studies through identify other macroeconomic variables.

Keywords: *Foreign Direct Investment, Market Capitalization, Share Market, Liquidity.*

Introduction

Foreign direct investment is a major source of investment inflow for a developing country. Foreign direct investment provides a passage for technology, managerial skills, and human capital to come into the host country. The theoretical work shows a positive impact of foreign direct investment, stock market performance on economic growth. Stock market performance is embodied in the general financial sector development. In other words, stock market complements the development of other parts of the financial system. Singh (1997) found positive relationship between economic growth and stock market performance. Large number of empirical studies on the role of foreign direct investment in host countries suggest that foreign direct investment is an important source of capital, complements domestic private investment, is usually associated with new job opportunities and enhancement of technology transfer, and boosts overall economic growth in host countries (ex; Alajekwu & Achugbu, 2012; Ali R, *at el*, 2012).

The share market is a representative of the economic strength of any country and it is supposed to

play an important role in the economy. Especially in last few decades the importance of share market has increased rapidly in developing countries. It mobilizes domestic resources and channels them to productive investments. Efficient share markets are essential for economic growth and prosperity with growing globalization of economies. These implications affect to the development in share market. Identify of this extreme is important. Because the foreign direct investment has a huge impact to performance of share market as well as to the overall Economic Growth. At present foreign direct investment is contribution to the overall economic activities. But there is no any proper way or mathematical model use to identify the relationship among these two variables (Hung & Hang, 2014).

This study examines the relationship between foreign direct investment and performance of share market in Sri Lanka. Find whether there is interrelationship between foreign direct investment and performance of share market. However, internal investment capability of the country is limited due to low domestic savings. Therefore, Sri Lanka has to rely on external finance such as foreign direct investment to achieve expected prosperity. Attractiveness of the selected countries for foreign direct investment was evaluated using an index. Empirical results revealed that gross domestic production growth rate, inflation, infrastructure quality, lending interest rate, labor force, exchange rate, and corporate income tax were significant determinants of foreign direct investment in Sri Lanka during the period of 1975 -2014(Jayasekara, 2014).

Main feature of the variables which are determinants of foreign direct investment is that they are directly associated with the cost of production of the investors. Therefore, it can be interpreted that the main motive of the foreign investors in Sri Lanka is to reduce the cost of production by improving the efficiency of operations. Foreign direct investment index suggests that India and Bangladesh were more attractive for foreign direct investment inflows over Sri Lanka and Pakistan. Market seeking investors are keen on the potential large market size of India and Bangladesh over Sri Lanka. Therefore, the motive of the investors is important in evaluating determinants of foreign direct investments in a country. Long-run relationship and causality between real per capital gross domestic production, foreign direct investment (FDI) and the level of the infrastructure in Sri Lanka over the period 1980 to 2014. Level of the infrastructure has been measured by using a summary measure based on principal component analysis. Analysis shows that there is a long-run relationship between real per capital gross domestic production, foreign direct investment (FDI) and the level of the infrastructure. The empirical results further confirm the unidirectional causality from level of the infrastructure to foreign direct investment (Ali R, *at el.*, 2012).

Problem Statement

Sri Lanka had attracted significance level of foreign direct investment opportunities the economy is still struggling to overcome from the developing status since our economic growth is not sufficient to pull our economy to a developed consequently; it is doubtful whether the contribution of foreign direct investment on Sri Lankan economic growth is significant. Therefore, it is worthwhile to create a clear picture about the effect of foreign direct investment on Sri Lankan economic growth and hence more specifically. According to the expected outcome of the research, find whether there is inter relationship between foreign direct

investment and performance of share market. Share market performance is embodied in the general financial sector development. In other words, share market complements the development of other parts of the financial system (Dharma, 2011).

For instance, Singh (1997) found positive relationship between economic growth and share market performance and a large number of empirical studies on the role of foreign direct investment in host countries. Suggest that foreign direct investment is an important source of capital, complements domestic private investment, is usually associated with new job opportunities and enhancement of technology transfer, and boosts overall economic growth in host countries. However, attention has not been centered on joint effect of share market performance and foreign direct investment on growth in Sri Lanka. Developing economies exist, Up to now very few studies on this subject have been done on Sri Lanka. But identifying this relationship is very important to a country to make economic decisions. Because foreign direct investment stimulates to the economic growth.

To examine the relationship between foreign direct investment and performance of share market in Sri Lanka using recent advancement in time series techniques. Moreover, most of these studies provide a descriptive discussion of foreign direct investment and performance of share market. The research examine whether there is a relationship between the foreign direct investment and performance of share market in Sri Lanka and what type of relationship exist among these two variables such as positive or negative relationship. (May, 2012) Foreign direct investment (FDI) is a mechanism of international flow of capital. It is not merely a conduit for transfer of money to an investment destination where it generates higher returns but also a channel for transfer of best practices including improved and innovative technologies, technical know-how, management methods, labor skills and other innovative practices of conducting business operations. This happens because of the ownership stake of the investing organization in its affiliate firm which gives investors some extent of authority in the management of its affiliate. Extensive amount of literature dealt with factors determining foreign direct investment flow into an economy and how it influences economic growth. Owing to conflicting evidence by various researchers the topic is still controversial (Nalaka, 2013).

It started attracting more attention since capital control liberalizing policies by developing countries increased their growth in recent past. Efficient capital markets are essential for economic growth and prosperity. An integral part of capital market is the share market, the performance of which is linked with the country's level of savings, investment and the rate of economic growth. Local and foreign investor's confidence in the investment environment of Sri Lanka has boosted the share market index in recent years. The developing countries are witnessing changes in the composition of capital flows in their economies because of the expansion and integration of the world equity market. The share markets are also experiencing this change. Foreign direct investments (FDI) are becoming important source of finance in developing countries. Since capital control liberalizing policies by developing countries increased their growth in recent past. Efficient capital markets are essential for economic growth and prosperity (Marie, F. *at el.*, 2012).

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investor's confidence in the investment environment of Sri Lanka has boosted the share market index in recent years. The developing countries are witnessing changes in the composition of capital flows in their economies because of the expansion and integration of the world equity market. The share markets are also experiencing this change. Foreign direct investments (FDI) are becoming important source of finance in developing countries. On the other hand, study does not show the existence of positive long-run relationship between share market performance and foreign direct investment based on the data for the same reference period over 1980–2014 as the estimated coefficient is not significant with a negative sign. Sri Lanka liberalized the economy in 1977 and subsequently foreign direct investment inflows increased significantly up to 1982. However, the impressive upward trend in foreign direct investment inflow was disrupted by the escalation of civil unrest in 1983. Sri Lanka lost its investment potential due to the uncertainty created by the civil war. Therefore the lack of a relationship between share market and foreign direct investment may be due to the substantial fluctuation in foreign direct investment after year 1982(Jayasekara, 2014).

Therefore, empirical studies have shown contradictory inconsistent results. As such with the purpose of filling this gap, the researcher and in accordance with the research problem, the key objective of this research is developed as to determine the relationship between foreign direct investment and performance of share market. It is also aims to find the degree of significance impact of foreign direct investment on performance of share market in Sri Lanka.

Methodology

In order to achieve the objectives of this study, a conceptual framework which depicts the relationship between independent variable foreign direct investment and the dependent variable performance of share market is developed. Foreign directed investment is operationalized with the indicator of net foreign investment(NFDI) and the performance of share market is operationalized with the indicator of market capitalization of stock market (MC).

The Net foreign direct investment in this study is the difference between foreign purchases and sales as a total of foreign companies and foreign individuals. The net foreign direct investment represent the country's share of the foreign purchase represent all foreign companies as well as foreign sales represent all foreign company and foreign individuals sales.

NFDI = Total Foreign purchase - Total Foreign Sales

Performance of share market is usually measures by share market size, liquidity, volatility, concentration and integration with world capital markets. Market capitalization is defined as the total market value of all shares of the companies that are listed in the Colombo Stock Exchange (CSE).

MC = Number of shares in Listed companies * Market value per Share

Five years from January 2009 to December 2014 seventy two months' time period is selected to this research, as the Sri Lanka economy and its capital market were reborn and successfully

ended the three decades local conflict in 2009. Therefore it is expected to get success relationship between foreign direct investment and performance of share market in this period.

Data Analysis

Descriptive statistics are used to describe the basic feature of this data. The mean value is most probability average value. So, the following Table present summary of descriptive statistics of variables during the data period.

Table 1 Descriptive statistics

Statistics Period (2009-2014) - RS. MN		
Measure	NFDI	MC
Median	10175	2212162.5
Mean	6061.67	2201748.67
Std. Deviation	25669.35	639993.57
Skewness	-0.132	-0.803
Mode	-26335	1092137
Maximum	38661	3067000
Minimum	-26335	1092137
Kurtosis	-1.802	2.432
N	6	6

Sources: output

The Table shows the minimum, maximum, mean value and standard deviation of variables. Net foreign direct investment is independent variable and value range is minimum of Rs. -26335 Mn to maximum of Rs. 38661 Mn. Market capitalization is dependent variable and mean value of market capitalization is Rs. 2201748.67 Mn and standard deviation is Rs. 639993.57 Mn. Both variables are mines value skewness represent in this Table 1.

Behavior of net foreign direct investment over the selected period of time spans from 2009 to 2014. A closer look at the Figure 1 reveals that the net foreign direct investment has been behaved with constant variance from starting year until 2010. This patterns show the evidence for stationary property of the series in the particular period. After 2010, the series show significant variation until 2012. However, huge variability in the series is shown in the years (2011, 2012). These shocks in the series may goodly impact to the stationary of the series and lead to generate reliable results from the statistical analysis. According to the sources of Colombo stock exchange factors have made significant influenced over the share market behavior of the CSE.

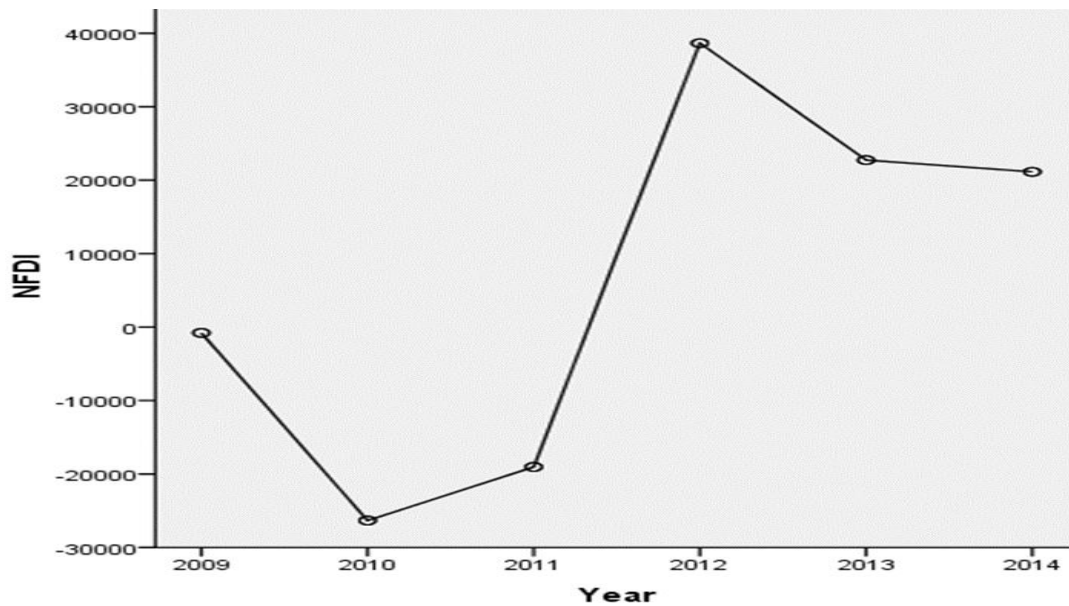


Figure 1 Behavior of net foreign direct investment
Sources: output

Behavior of market capitalization over the selected period of time spans from 2009 to 2014. A closer look at the graph reveals that the market capitalization has been behaved with constant variance from starting year until 2009. This patterns show the evidence for success property of the series in the particular period. After 2010, the series show constant variation until 2012. However, it may not wisely impact to the series to away from stationary property. Huge variability in the series is shown in the last two years (2012 and 2014). These shocks in the series may goodly impact to the stationary of the series and lead to generate reliable results from the statistical analysis.

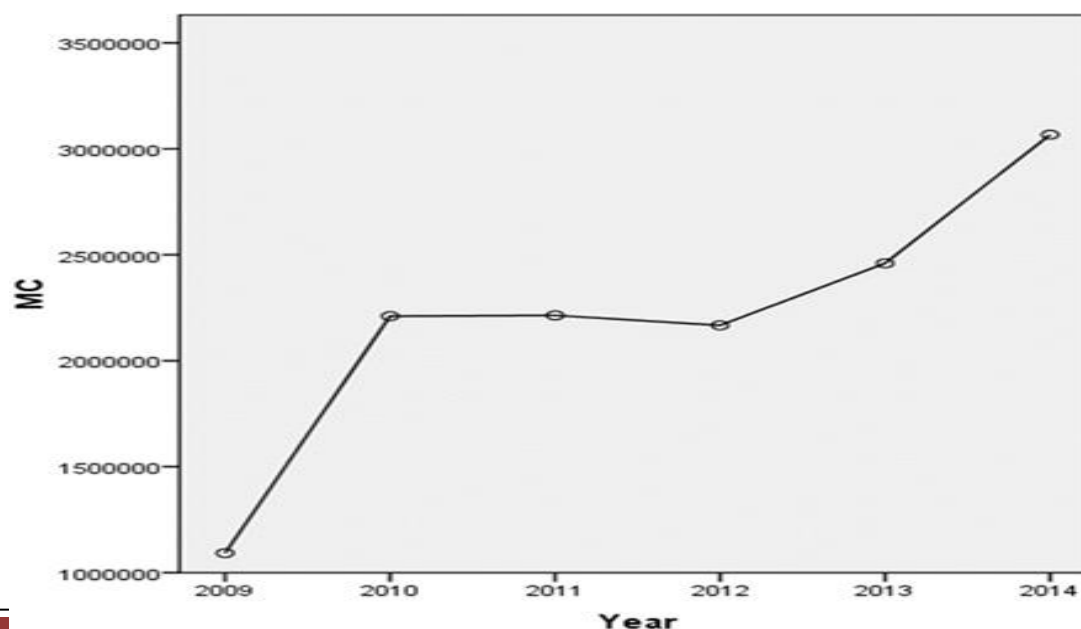


Figure 2 Behavior of Market capitalization

Sources: output

Pearson correlation analysis was performed for the two data series from 2009 to 2014. The correlation analysis results are reported in Table 2. There are positive relationship between net foreign direct investment and market capitalization. The correlation is 0.783. Thus, it can be concluded that there is a positive and significant relationship between net foreign direct investment and market capitalization.

Table 2: Correlations

		MC	NFDI
MC	Pearson Correlation	1	0.783
	Sig. (2-tailed)		0.587
	N	72	72
NFDI	Pearson Correlation	0.783	1
	Sig. (2-tailed)	0.587	
	N	72	72

Sources: output

This section aims to explore the linear impact of net foreign direct investment on market capitalization in the way of Linear Regression Analysis. In the analysis net foreign direct investment was entered as the independent variable and market capitalization was entered as the dependent variable.

Table 3 Linear Regression Analysis

Model	Standardized Coefficients	t	Sig
1(Constant)	2158996.09	7.460	0.002
NFDI	7.053	0.590	0.037
R	0.783		
R Square	0.613		
Durbin Watson	1.95		
N	72		

Sources: output

R square demonstrates the ability of independent variables to explain the variability of dependent variable. In other words, it shows the explanatory power of independent variable in explaining the variability of dependent variable. With respect to the present results, value for R square (0.613) indicates that net foreign direct investment presents 61 percent of total variation of dependent variable. However, 39 percent are unexplained. In the context of empirical studies, net foreign direct investment can be considered as success predictor of the market capitalization.

This simple linear regression equation shows that the value of “b” +7.053 slope of the regression line. This simply indicates that there is a positive relationship between net foreign direct investment and market capitalization. Further it can be expected that when net foreign direct investment goes up by 1, the market capitalization is likely to go up by +7.053. It suggests that when net foreign direct investment falls down to zero, the market capitalization not Zero and there is positive value. This prediction equation is the following Figure 3, along with a plot of the data points. Thus, all of the above statistics show the evidences that net foreign direct investment have a positive and significant impact on market capitalization and for accepting the hypothesis of the present study.

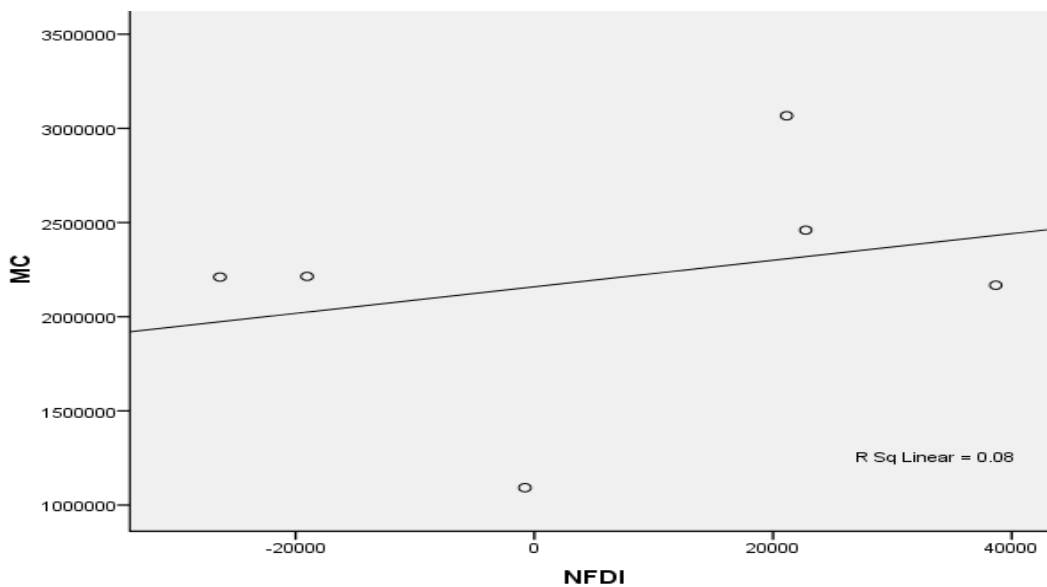


Figure 3 : Plot of the data points

Sources: output

According to the results there is a positive relationship between net foreign direct investment and performance of share market in Sri Lanka. This coefficient implies that the association between the variable is relatively high when compared to the findings of the similar empirical studies. The well-developed financial markets and the stability of the economic environment affects for the efficient share market functions. The well-developed share market helps to give a confidence for the investors for both local and foreign investors for invest in a share market and the well-developed infrastructure, favorable economic and the political environment, rules and regulations gives a confident to the foreign investors to invest in the country.

The researcher examines the relationship of foreign direct investment and performance of share market in Sri Lanka over the period 2009-2014 using regression and correlations analysis. The results support the hypothesis of the study, there is a significant relationship between the foreign direct investment and performance of share market in Sri Lanka.

Findings and Conclusion

The study examined the net foreign direct investment on the share market capitalization in Sri Lanka using annually data from 2009 to 2014, Colombo Stock Exchange- Market capitalization (CSE) is used as a substitute for the performance of the Colombo stock market. Net foreign direct investment which was hypothesized to influence share market capitalization was examined with regression model to test the relationship between the foreign direct investment and performance of share market in Sri Lanka. Five years data was collected from 2009 to 2014 years on monthly basis. Net foreign direct investment unexpected fluctuations in above five years because Sri Lanka's Economy and its Capital Market were reborn and successfully ended the three decade conflict in 2009. The variables included in this model, Market capitalization and Net foreign direct investment.

In the Colombo stock exchange, the macroeconomic variables represent the net foreign direct investment and thus, the results provide remarkable evidence regarding the market capitalization, which represents the share market performance in the Colombo Stock Exchange. Although the share market capitalization is a capital weighted index, and the banking, finance, and insurance sector heavily influence the market in the Colombo Stock Exchange. The validity of the market capitalization remains important. Through this researcher have analyzed share market indicators and key macro-economic variables and researcher evaluated them and identified the relationship of foreign direct investment operation and performance of share market in Sri Lanka using selected 05 years share market indicators.

The role of the share market in the economy is to raise capital and also to ensure that the funds raised are utilized in the most profitable opportunities. This empirical report performs the necessary analysis to answer whether changes in the identified foreign direct investment affect performance of the Colombo Stock Exchange. According to the linear regression test results show that there was a significant positive relationship between foreign direct investment and market capitalization. The Financial Market in Sri Lanka show that investment in share and stock in the market benefited both resident and non-resident from the listing of stock exchange market.

According to the results this research found positive relationship between net foreign direct investment and performance of share market in Sri Lanka. With increased in foreign direct investment, this will result increased in performance of share market in Sri Lanka. This mean with increase net foreign direct investment also increase market capitalization positively. Finally there is a positive relationship between foreign direct investment and Performance of share market in Sri Lanka.

The well-developed financial markets and the stability of the macroeconomic environment affects for the efficient share market functions. The well-developed financial market helps to give a confidence for the investors for both local and foreign investors for invest in a financial market and the well-developed infrastructure, favorable economic and the political environment,

rules and regulations gives a confident to the foreign investors to invest in the country. When there is a foreign investment in the country then more jobs are available for people. The performance of share market means the financial market development. Finally it's affect growth of the overall share market.

Identifying this relationship is very important to a country to make economic decisions. Because at present foreign direct investment is contribution to the overall economic activities and foreign direct investment stimulates the economic growth. To identify the impact of this foreign direct investment to the whole economy is difficult to measure. Because macro-Economic variables affect economy by narrow analyze the project using the share market as the population, and the net foreign direct.

Invest in infrastructure development also consider the income level of the host country and structure of the income distribution in order to assess the expected return on their investments. The income elasticity of services changes with the improvements in income level. Therefore, improvement in income level of the country would positively affect to attract the foreign direct investment, particularly for infrastructure developments. In addition, institutional reforms and legislative changes are also included in broad definition of the infrastructure of the country to pave the way for sustainable economic growth. Therefore, it is essential that policies are focused on creating a holistic enabling environment to achieve overall economic growth. Future research can be conducted by including more economic factors in the model.

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