



PORTFOLIO EQUITY AND OTHER FACTOR ANALYSIS FOR MARKET CAPITALIZATION OF LISTED COMPANIES: A STUDY FROM SOUTH ASIA

Hafiz Waqas Kamran^{1*}, Asma Malik², Ifrah Arif³

^{1*2,3} University of central Punjab, Faisalabad, Pakistan

Correspondence Author: hafizwaqaskamran@gmail.com

Keywords: Market capitalization gross domestic product, Real rate of interest, Gross domestic product per capita, Aggregate money and quasi-money, External debt stock

Abstract

Objective

The objective of this study to analyzes the realistic relationship between the portfolio equity and market capitalization and other key indicators.

Methodology

For the present study pooled data analyzes executed and external factors are considered with the market capitalization gross domestic product for listed company of south Asia from 1991 to 2010.

Finding: The result of study explains there is an insignificant relationship between the market capitalization with predictors which is GDPPC, the portfolio equity, real rate of interest, Population growth rate, aggregate money and quasi-money, External debt stock, foreign direct investment over period of study. While other factors like Population Growth rate, real rate of interest. Portfolio equity and external debt stock has significant impact on market capitalization.

Introduction

Portfolio equity includes net inflows from equity securities other than those recorded as direct investment and including shares, stocks, depository receipts (American or global), and direct purchases of shares in local stock markets by foreign investors. Data are in current U.S \$ Market capitalization (market cap) is the total market value of outstanding shares of a public traded company and market capitalization is equal to the share price times the number of shares outstanding. Market capitalization is the overall value of a company. It is measured by the stock price times the number of shares issued. Unit trust and investment funds and only those companies whose business goal is to hold the shares of excluded listed companies. Data are an end of year values is converted to the US \$ using corresponding year-end foreign exchange rate. Portfolio equity it covers the matters in equity and debt securities. (World Data Indicator)

Investors use a market cap as a simple way to measure the company size. The company outstanding share multiply with current stock price that is equal to a market cap. Market capitalization is one of the many characteristics that help to determine investment risk. it also helps to choose mutual funds and exchange traded fund. To determine the company's size, the investment community used this figure as opposed to sales or total asset figures. Now portfolio investments flows vastly increase with advances in globalize economy

The quick and fast growth of appearing Asian's bond markets since the 1997-1998 economic crisis reflects the region capacity to increase debt in local currency to relatively support its financial needs and slowly drain dependence on foreign borrowings, in exchange rate depreciation. At the end of third quarter 2010 the Asian's outstanding local currency the bond markets have been grown at an average annual rate of 19.1% to reach US \$5.1 trillion in the past four years. Hence a period of time the domestic banks and financial organizations still superior many local currency bond markets, their share is reducing as the investor base is expand to include both the domestic and foreign institutional shareholder (insurance companies).

Portfolio equity investment has invested in different implications and characteristics that are compared to foreign direct investment for developing countries. Market capitalization is calculated by multiplying a company's outstanding shares by current market price of one share. The investment community uses this figure to determine a company's size, as opposed to sales or total asset figures. To compare the increase or decrease the size of the market as a whole through this measure. We also used to compare the value of the equity market to other segments of the economy, such as the value of the real estate market. It also refers to the total value of exchange. We have selected South Asian countries Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.

Purpose of the study

The major objective of the current study is to describe the relationship between the portfolio equity, net flow, and the market capitalization.

Research Question



- What is the nature of the relationship (significant or insignificant) between Portfolio Equity and the development of South Asian countries?
- What does the Portfolio equity net flow impact on the market capitalization of listed companies?
- What is the impact of GDPPC, portfolio equity, a real rate of interest, Population growth rate, Aggregate money and quasi-money, External debt stock, foreign direct investment foreign investors on market activity?

Literature review

For maximizing their returns, foreign investors enter into the emerging market for diversification. At the end of period time foreign investors return that is totally depended on capital gain. Over the long run, higher risk of emerging market should compensate for higher returns. The return is equal to the sum of domestic return on security and foreign currency. There is an impact on the rate of return of a country's currency and the pricing of equity in domestic market.

The impact of capital flows on valuation only in that case if they are undertaken the reason is that information of foreign investors is not yield incorporated in prices. Investors only prefer those firms that have high past returns as indicator of performance and those firms who have too much particular type of investment with relatively high risk. Stock markets to foreign investors established such a process to increase participation in markets for making them more liquid.

Agarwal (1997) he explains the foreign portfolio investment has an impact on economic activity of developing the country which shows that inflation rate is increasing. Foreign portfolio investment meets the financial need of this country. Foreign portfolio investment in south Asia country has the insignificant share of foreign portfolio investment in developing a country.

Andrade and Chhaochharia (2010) He shows in this article the relationship between the foreign direct investment and foreign portfolio investment. It means the initial foreign direct investment link with the later foreign portfolio investment. This article gives the attention on the period which chooses for these investment given by the country.

Aron, Leape, and Thomas (2010) He shows the positive and negative effect of total capital net flows and portfolio equity net inflows persistently comparative of GDP through error correction model. This shows the optimistic effect on the annual rate of modification of real US GDP. And the negative effect is that the inflation in differs for the US and the long term bound of US.

Brennan and Cao (1997) He makes the difference of information endowment between foreign and local investors and create the model of international equity portfolio investment flow. When the local investors have the more information about the foreign market as compare to the foreign investors then the domestic investor buy the foreign assets when profit rate is high and sold the foreign asset when the profit rate is low.

Froot and Ramadorai (2008) He shows the link between the foreign market equity returns, cross-border equity flows and domestic. He finds some main points. First is that cross-border equity flow shows the late effect on market equity return predictions. The relationship between the flows and return occur at the same time. Second is that the net asset value and prices return should predict with the help of cross-border equity flows, at the same level of the extent. In the short run, the flows into close end funds predict the price return but not net asset value. Basically, he suggests that the forecast ability of domestic equity returns by cross-border flows, all the information responsible except the price pressure.

Gathenya (2015) stated that Market capitalization and foreign portfolio equity investment have the strong, positive relationship. it means to increase (growth) in foreign portfolio equity also increase (growth) in the market capitalization. It includes that the portfolio equity is significant for measured the market return as the share prices change. It studies also conclude that the impact of foreign portfolio equity investment of one period has not impacted on market capitalization next year. But the market capitalization and foreign portfolio equity investment have an impact on the same year.

Ndong (2015) His study depend on the two methodologies first is a standard model and the second is simultaneous equations. In this article, the first method result shows that predictors' equity returns and economic growth have a positive and significant impact on the equity return, export development and GOVT efficiency on economic growth. Simultaneous equations results show the positive but insignificant effect on the economic growth and equity return of net portfolio equity investment flows

Samak and Helmy (2000) he used the two stages the first stage is determining the explanatory factors of equity returns and economic growth rate have been estimated. And results show that positive and significant impact determining of equity returns. In this model classic results also found. There is the negative and significant impact on the degree of openness and positive or significant impact on export growth and GOVT. the effectiveness of economic growth. In portfolio equity investments flow have no significant impact on economic growth and equity returns.

To study the existing evolution of economic growth and equity return, assuming that portfolio equity investment flows is the common factor in first two variables. The objective is to study the joint significance of net equity flows on equity returns and economic growth. The second result of this methodology shows a positive, but not statistically significant effect of net portfolio equity investment flows on equity returns and economic growth

Finally, we can note through our research that (1) the size of the stock market is a positive determinant of equity returns, (2) there is simultaneous and interactive evolution of equity returns and economic growth, (3) net portfolio equity investment flows have a



positive but not statistically significant effect on equity returns and economic growth and (4) there is no joint significance of net portfolio equity investment flows on equity returns and economic growth.

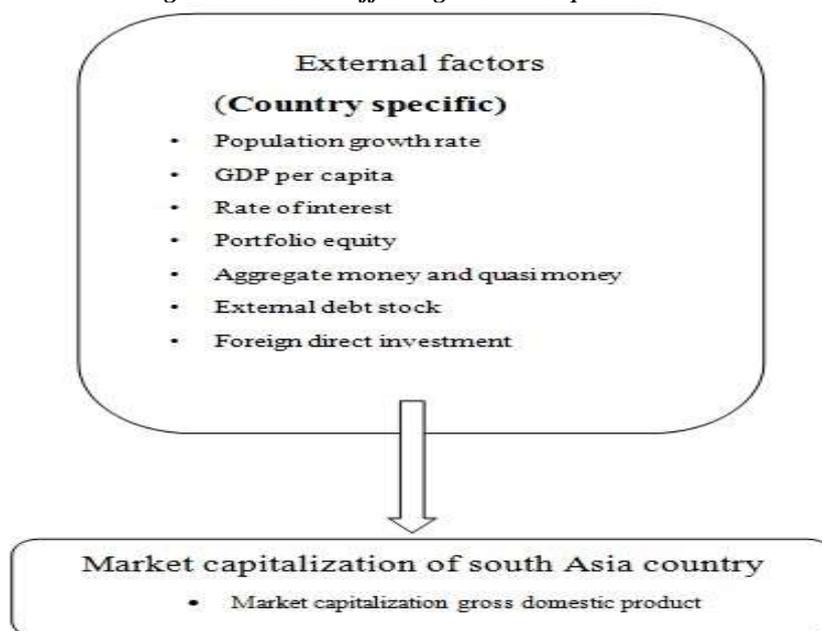
Thapa, Neupane, and Marshall (2016) their study suggests the benefits of international diversification opportunities portfolio investment to exposed Foreign exchange risk. To improve their risk-return profile, the investors, hedge their foreign exchange risk used foreign exchange derivatives. In this study, we conclude that cross country portfolio allocation decisions are influenced by liquidity risk of foreign exchange derivatives.

Our analysis shows significant variations in liquidity levels of foreign exchange derivatives and our results show that developing countries have smaller and relatively illiquid foreign exchange derivatives. Our results of correlation regression that provides the convenience evidence. The overall results show that foreign exchange derivatives markets could be a potential policy for attracting higher levels of foreign equity portfolio investments

Thapa and Poshakwale (2010) he said that the transaction cost has significant impact international equity portfolio investment. His article result shows the two major point. First is that for the future research, for changes in the international portfolio do not overlook the part of the transactional cost in country decision allocation? Second is that in developing country the policy maker should apply these methods to lower the transactional cost to increase the rate of foreign equity portfolio investment.

Research frame work

Research frame work
Figure01: Factors affecting Market Capitalization



Research methodology

The source of the data collection for the selected set of the major explanatory and variables explained by official websites of World Development Indicator (WDI) and published annual reports over the period of the study for the Asian countries so-called external factors is WDI. The time period for the study is from the year 1991 to 2010.

In this article use the panel data methodology which is the combination of Time series data (single unit of observation over a different period of time) and Cross-sectional data (different unit of observation over the single period of time).

Variables and hypothesis

1.Variables

There are some internal and external factors on portfolio equity that is Population, GDP per capita, a rate of interest, net portfolio equity investment flow use as an external factor. Dividend payout ratio, cash to stockholder FCFE, return to equity as the internal factor.

GDP per capita



GDP per capita is a measure of overall output of a country that takes Gross domestic product (GDP) and divides it by quantity of individuals in the country. A rise in per capita GDP alerts boom inside the financial system and tends to translate into an increase in productivity.

gross domestic product = consumer + investment & *goverment spending* + value of export – value of import

Population growth rate

The "population growth rate" is the rate at which the individuals in population increases in a given time period, expressed as a fraction of the preliminary population. In particular, population growth rate refers to the alternate in populace over a unit time period, regularly expressed as a percentage of the range of individuals in the populace at the start of that duration.

$$P = P_0 e^{rt}$$

P= final Population

P₀=initial population

R= rate of growth

T=time

Portfolio equity

Portfolio equity consists of inflows from equity securities aside from the ones recorded as direct investment and together with shares, stocks, depository receipts (American or global), and direct purchases of shares in neighborhood stock markets by way of overseas traders.

Aggregate Money and quasi-money growth (annual %)

Average growth rate in money and quasi-money is average. Quasi-money and aggregate money are composing the sum of currency outside banks, demand deposits other than those of central government savings, time, and foreign currency deposits of resisting region other than the central government. In money supply, the change is measured as a difference in year-end totals relative to the level of money and quasi-money in a preceding year.

External debt stocks EDSPPG, total (current US\$)

Total external debt is the debt owed to nonresidents repayable in currency, goods, or services. Total external debt is the sum of public, publicly guaranteed, and private nonguaranteed long-term debt, use of IMF credit, and short-term debt. In Short-term debt, all debts include having an original maturity of one year or less and interest in arrears on long-term debt. Data are in current U.S. dollars.

Foreign direct investment FDINF, net inflows (current US\$)

In economy, the foreign direct investment refers to direct investment equity flows. This is the sum of equity capital, reinvestment of earnings, and other capital. Direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. Ownership of 10 percent or more of the ordinary shares of voting stock is the criterion for determining the existence of a direct investment relationship. Data are in current U.S. dollars.

Rate of interest

The rate of interest fixed by the central bank of every country. This rate should be varying country to country. And interest rate has many different kinds.

2.Hypothesis

H0: There is a insignificant impact of portfolio equity and net flow on the market capitalization of listed companies of south Asia.

H1: There is a significant impact of portfolio equity and net flow on a market capitalization of listed companies of south Asia.

3.Econometric model

In the current analysis for calculating the different measures of listed company of south Asia MCGDP as outcome factor and country specific from the nominated predictor variables. For the regression equation, take the panel data set of 8 countries over 1991 to 2010 for easily understanding.

$$Y_{it} = B_0 + B_1 X_{1it} + B_2 X_{2it} + B_3 X_{3it} + B_4 X_{4it} + \dots + B_7 X_{7it} + E \quad \text{equ. 1.0}$$

In this equation, the Y_{it} demonstrate the dependent variables which are MCGDP over a period of time. B shows the beta value of variables. B₀ explain the constant value of beta in regression analysis. X₁, X₂, X₃ indicate the explanatory variables which are GDPPC, portfolio equity, real rate of interest, Population growth rate, Aggregate money and quasi-money, External debt stock, Foreign direct investment



Results and Discussions

Des. Statistics	MCGDP	POP.GR	GDPPC	RRI	PE	AMAQM	EDSPPG	FDINF
Mean	13.374	2.03437	928.1	3.831	865745	16.5068	1693006	874402
Standard Error	1.6173	0.0994	93.47	0.646	356696	0.76047	20000323	157280
Median	6.55	1.9	516.5	4.6	0	16.65	46070355	0
Mode	0	1.7	0	0	0	0	0	0
St.D	20.458	1.2577	1182	8.18224	449777	9.61933	2529863	198945
Range	146.9	9.4	7013.4	83	478928	58.9	1.0178	943896
Minimum	0	-1.8	0	-65.5	-150300	0	0	-664798
Maximum	146.9	7.6	7013.4	17.5	328628	58.9	1.01786	877417
Count	160	160	160	160	159	160	160	160

The table above describes the result of descriptive statistics of the study. Here we can see that the MCGDP mean of overall south Asia country's is 13.374. Standard error shows the regression line,

It means that the MCGDP mean should be 14.99 or 11.7567. Standard error value adds or subtract from the mean value. MCGDP median value shows the most center point of which is 6.55. MCGDP value of mode 0 because no one value is repeated. Standard deviation value shows how much the mean value deviate from his answer. In MCGDP the mean value deviates by 20.458. the mean value is 33.832 by adding the amount of standard deviation in mean. MCGDP range value shows the difference between the maximum and minimum. MCGDP minimum value is 0 and maximum value is 146.9. The population growth rate mean of overall country is 2.0343. it should be 2.133 or 1.9347 due to it standard error. 1.9 is the most central point of POP.GR of countries. POP.GR mode value is 1.7 which is the most repeated value. The mean value of the POP.GR should be deviate by 1.25(it mean this value add in the mean value or subtract from the mean value). POP.GR range value is 9.4. Maximum value of POP.GR is 7.6 and minimum value is -1.8. GDPPC has mean value is 928.1. and its standard error is 93.47, median value is 516.5, mode value is 0, mean value deviate from their mean by 1182 standard deviation, range value is 7013.4 and maximum and minimum value is 7013,0 respectively.

RRI mean of selected country is 3.381and its standard error is 0.646, median value is 4.6, mode value is 0, mean value deviate from their mean by 8.18 standard deviation, range value is 83 and maximum and minimum value is -65.5,17.5 respectively. PE mean value is 865745and its standard error should be 356696. Its central point of data 0 which is median, mode is zero, standard deviation is 449777 and range of PE is 478928 which is shows the difference of maximum value which is 328628 and minimum value which is -150300. AMAQM mean of whole data is 16.5068 and its standard error add or subtract from mean which is 0.7604. Median value is 16.65. AMAQM mode is also 0, standard deviation value is 9.61933 and its range is 58.9. EDSPPG mean is 1693006, standard error is 20000323, median is 46070355, mode is 0, standard deviation 2529863 and range is 1.0178. FDINF mean of data of observed country mean is 874402 and its standard error is 157280. Median value is 0, mode value also 0 it shows that the 0 value is repeated in data most time. Standard deviation deviates the mean value by the 198945 and its range value is 9438945. Mean value for external debt stock is maximum which is1693 approximately and population growth rate is 2.034 around which is mini.

The value for the standard error is mini for population growth rate is 0.0994 almost and maximum for the external stock debt is 2000. The maximum value for the median is external stock debt 4607 approximately and portfolio equity and foreign direct investment are minimum which is zero. Mode value for the population growth rate is maximum and remaining variables are minimum. The standard deviation value for external debt stock is maximum which is2529 and population growth rate is 1.2577 which is mini. The minimum value for portfolio equity is -1503 and maximum value for external debt stock is 1.0178 approximately.



Table 2: Correlation matrix

	MCGDP	PGR	GDPPC	RRI	PE	AMAQM	EDS	FDI
MCGDO	1							
PGR	-0.2232	1						
	0.0046***							
GDPPC	-0.0936	-0.18	1					
	0.2392	0.0228**						
RRI	-0.0087	-0.4796	0.1299	1				
	0.9126	0***	0.1015					
PE	0.7231	-0.0682	-0.005	0.0237	1			
	0***	0.3915	0.9498	0.7663				
AMAQM	0.1182	-0.3802	0.1258	0.2438	0.036	1		
	0.1364	0***	0.113	0.0019***	0.6516			
EDS	0.6907	-0.1293	-0.1588	0.0878	0.4664	0.0223	1	
	0***	0.1032		0.2694	0***	0.7795		
FDI	-0.0755	-0.0497	0.202	0.0314	-0.0644	0.0552	-0.1916	1
	0.3428	0.5329	0.0104**	0.6939	0.4185	0.4882	0.0152**	

*, **, *** explains is that correlation value is significant at 10, 05 and 01% respectively.

For the more analysis, it is going clear to check the degree of correlation between the certain variables. Above table shows the relationship between all the main variables which were selected for the current study analysis from the above table that is:

It means there is level of association between the MCGDP and PGR is negative which is -0.2232 and level of strength are low. But there is the perfect correlation because the correlation value is 0.0046 which is the lie in 1 %. Similarly, there is the negative but low correlation because of the level of association between the MCGDP and GDPPC which is -0.0936 but is perfectly insignificant because it is not lie in the level of significance. And there is variation in MCGDP by -0.00875 it shows the inversely but almost no correlation between the predictor and outcome and it's 0.9126 show the insignificant correlation. Similarly, PE and MCGDP relation show the level of strength moderate and level of direction positive, its value is 0.7230 and it correlation show that it is the perfectly correlated because a level of association is 1. The AMAQM is 0.118 which shows the weak correlation between the dependent variables. And the EDSPPG value 0.697 which level of strength moderation and its direction is positive for the, it has the 1% in the level of significance. And when EFDNF is -0.1515. Its shows the weak correlation which level of direction is negative. And the correlation in insignificant because it is not lie in the level of association.

Regression outcome

Table 3: Least square dummy variable method

Number of obs. = 160
 F (14, 145) = 42.48
 Prob.> F = 0.0000
 R-squared = 0.8040
 Adj. R-squared = 0.7850
 Root MSE = 9.4853



LSDVM		
MCGDP	Coef.	P>t
POP.GR	-1.74041	0.064*
GDPPC	0.002038	0.053*
RRI	-0.26222	0.022**
PE	2.30E-09	0.00***
AMAQM	0.161092	0.07*
EDSPPG	-2.04E-10	0.208
FDINF	9.76E-08	0.112
_Icountryid_2	-24.40123	0.005
_Icountryid_3	-49.51051	0.000
_Icountryid_4	-40.51757	0.000
_Icountryid_5	-56.48316	0.000
_Icountryid_6	-36.18211	0.004
_Icountryid_7	-32.11248	0.007
_Icountryid_8	-45.20217	0.001
_Cons	49.95898	0.005

There are 160 observations in this study, the LSDVM R square shows the change which makes by all predictors in the outcome. The least square dummy variable method is the best way to control the effect of entities which may affect the dependents and independent variables. This method creates the dummy variables which hold or fixed the effect. The _I country 2, _I country 3, _I country 4, and more show the dummy variables. In this table show the relationship between the predictors and outcome through coefficient and p-value which show the results are significant or insignificant. The coefficient value for POP.GR is -1.74041 which p-value is highly significant at 05% level.

The coefficient value of GDPPC is 0.002038 that is significant at 05% and the 1-unit change in the value of GDPPC will lead towards the significant and positive change in a dependent variable that is MCGDP. The coefficient value of RRI is -0.26222 that is the perfect correlation at 01% and the 1-unit change in the value of RRI will lead towards the significant and positive change independent variable that is MCGDP. The coefficient value of PE is 2.30E-09 that is Highly highly significant at 01% and the 1-unit change in the value of PE will lead towards the significant and positive change in the dependent variable that is MCGDP. The coefficient value of AMAQM is that is 0.161092 that is significant at 10% and the 1-unit change in the value of AMAQM will lead towards the significant and positive change independent variable that is MCGDP. The coefficient value of EDS is -2.04E-10 that is insignificant because the value not lies in 01, 05 10 % respectively. The coefficient value of FDI is 9.76E-08 that is because the value not lies in 01, 05 10 % respectively.

POP.GR, GDPPC, RRI, PE and AMAQM these predictors p-value shows the significant impact which means these variables has the significant impact on the market capitalization.

Table 4: Fixed effect method

Number of obs = 160
 Number of groups = 8
 Obs per group: min = 20
 avg = 20.0
 max = 20
 F (7,145) = 23.82
 Prob > F = 0.0000



FEM		
MCGDP	Coef.	P>t
POP.GR	-1.74041	0.064*
GDPPC	0.002038	0.053*
RRI	-0.26222	0.022**
PE	2.30E-09	0.00***
AMAQM	0.161092	0.07*
EDSPPG	-2.04E-10	0.208
FDINF	9.76E-08	0.112
_Cons	14.40783	0.001

There are 160 observations in this study, the FEM R square shows the change which makes by all predictors in an outcome. Fixed effect method is the best way to control the effect of entities which may affect the explained and explanatory variables. In this table show the relationship between the predictors and outcome through coefficient and p-value which show the results are significant or insignificant. The coefficient value for POP.GR is -1.74041 which p-value is highly significant at 05% level. The coefficient value of GDPPC is 0.002038 that is significant at 05% and the 1-unit change in the value of GDPPC will lead towards the significant and positive change in outcome variable that is MCGDP. The coefficient value of RRI is -0.26222 that is the perfect correlation at 01% and the 1-unit change in the value of RRI will lead towards the significant and positive change in outcome variable that is MCGDP. The coefficient value of PE is 2.30E-09 that is highly highly significant at 01% and the 1-unit change in the value of PE will lead towards the significant and positive change in outcome variable that is MCGDP. The coefficient value of AMAQM is that is 0.161092 that is significant at 10% and the 1-unit change in the value of AMAQM will lead towards the significant and positive change in outcome variable that is MCGDP. The coefficient value of EDS is -2.04E-10 that is insignificant because the value not lies in 01, 05 10 % respectively. The coefficient value of FDI is 9.76E-08 that is because the value not lies in 01, 05 10 % respectively. POP.GR, GDPPC, RRI, PE, and AMAQM these predictors p-value shows the significant impact which means these variables has the significant impact on the market capitalization.

Table 5: Random effect method

Number of obs = 160
 Number of groups = 8
 Obs per group: min = 20
 avg = 20.0
 max = 20

REM		
MCGDP	Coef.	P>t
POP.GR	-3.1406	0.00***
GDPPC	-0.00088	0.254
RRI	-0.40407	0.001***
PE	2.32E-09	0.00***
AMAQM	0.127772	0.193
EDSPPG	3.58E-10	0.00***
FDINF	6.83E-08	0.313
_Cons	11.67388	0.00

Random effect method is the explain the no effect of characteristics of entities on panel analysis and predicted variables. In this table show the relationship between the predictors and outcome through coefficient and p-value which show the impact are under the level of significant or insignificant. The coefficient value for POP.GR is -3.1406 which shows the variation of MCGDP and which p value is highly highly significant at 01% level. When one-unit change in the GDPPC then outcome variable presents the -0.00088 and its level of significant is insignificant because the value not lies in 01, 05 10 % respectively. The coefficient value of RRI make the negative variation in MCGDP by 0.40407 that is perfectly correlation at 01% and the 1-unit change in the value of PE will lead towards the significant and positive change in explained variable that is MCGDP and its highly highly significant at 01%. The coefficient value of AMAQM is that is



INTERNATIONAL JOURNAL OF RESEARCH SCIENCE & MANAGEMENT

0.127772 which change the outcome variable. That is insignificant because the value not lies in 01, 05 10 % respectively. The 1-unit change in the value of EDS will lead towards positive change in explained variable that is MCGDP. And its p value shows the perfect correlation. The coefficient value of FDI is 6.83E-08 that is insignificant because the value not lies in 01, 05 10 % respectively.

POP.GR, RRI, PE and EDSPPG these explanatory p value shows the significant impact which mean these variables has the significant impact on the market capitalization.

Table 6: Simple regression results

Number of obs = 160

F (7, 152) = 57.46

Prob > F = 0.0000

R-squared = 0.7257

Adj R-squared = 0.7131

Root MSE = 10.958

PRM		
MCGDP	Coef	P>t
POP.GR	-3.1406	0.00***
GDPPC	-0.00088	0.256
RRI	-0.40407	0.001***
PE	2.32E-09	0.00***
AMAQM	0.127772	0.195
EDSPPG	3.58E-10	0.00***
FDINF	6.83E-08	0.315
_Cons	11.67388	0.00

In this table show the relationship between the predictors and outcome through coefficient and p-value which show the results are significant or insignificant. The change in POP.GR by one unit then the MCGDP have the inverse change which is -3.1406 and his p-value is highly highly significant at 01% level.

The coefficient value of GDPPC is -0.00088 which shows the negative relation with the responsible variable and that is insignificant because the value not lies in 01, 05 10 % respectively. At 05. The coefficient value of RRI is -040407 which shows the decrease in MCGDP by changing the one 1 unit. It's perfectly correlated at 01% and the 1-unit change in the value of PE will lead towards the significant and positive change in explained variable that is MCGDP. The coefficient value of PE is 2.32E-09 and is highly highly significant at 01%. The 1-unit change in the value of AMAQM will lead towards the positive change in explained variable that is MCGDP. The p-value value of AMAQM is that is 19.5% that is insignificant because the value not lies in 01, 05 10 % respectively. the When the change of 1 unit in a value of EDS is 3.58E-10 it shows the increased in predicted variable and it's highly highly significant at 01% and the 1-unit change in the value of EDS will lead towards the significant and positive change in explained variable that is MCGDP. The coefficient value of FDI is 6.83E-08 and its p-value 31.5 % insignificant because the value not lies in 01, 05 10 % respectively.

POP.GR, RRI, PE and EDSPPG these explanatory p-value shows the significant impact which means these variables has the significant impact on the market capitalization



Table4: Hausman test

Coefficients				
	(b) fixed	(B) random	(b-B) differences	Sqrt (diag(v_b-v_B) S. E
POP.GR	-1.740409	-3.140597	1.400189	.40394
GDPPC	.0020381	-.000884	.0029221	.0006985
RRI	-.2622158	-.4040662	.1418504	.
PE	2.30e-09	2.32e-09	-1.69e-11	.
AMAQM	.1610924	.127772	.0333204	.
EDSPPG	-2.04e-10	3.58e-10	-5.61e-10	1.56e-10
FDINF	9.76e-08	6.83e-08	2.93e-08	

$$\chi^2(4) = (b-B)'[(V_b-V_B)^{-1}](b-B) = 2.44$$

$$Prob>\chi^2 = 0.6557$$

This test makes the comparison between the fixed effect method and random effect method. Here create the null and alternative hypothesis.

H₀: Difference in coefficients not systematic

H₁: Difference in coefficients systematic

If the answer of Prob>chi² is less, than 0.05 the go for the fixed effect method and if the answer is more than 0.05 than go for the random effect method. Now in this article houseman test shows the Prob>chi²=0.6557 which is more than the limit. Then go for the random effect method. And accept the null hypothesis.

Table5: Breusch-Pagan Lagrange multiplier (LM)

	Var	sd = sqrt(Var)
MCGDP	418.535	20.45813
E	89.97085	9.485296
U	0	0

$$\text{Test: Var}(u) = 0$$

$$\text{chibar2}(01) = 0.00$$

$$Prob > \text{chibar2} = 1.0000$$

For the further analysis we go for the Breusch-Pagan Lagrange multiplier which generate the outcome of that which method used in the random effect method (simple OLS regression or random effect regression)

The answer of LM is less than 0.05 which is Prob > chibar2 = 1.0000. This shows we should use the random effect regression for the analysis.

Conclusion

This study develop model for portfolio equity, net flow and market capitalization. The Capital Market Authority (CMA), the stock market regulator and the study provides comprehensive empirical evidence on the impact of the Portfolio Equity, net flow on the development of the listed company of south Asia and such evidence can be used as a basis of developing policies and structures to ensure the development of the listed company of south Asia is well-grounded. To determine the significant or insignificant impact of portfolio equity net flow on market capitalization used the Panel data analysis for better results.



INTERNATIONAL JOURNAL OF RESEARCH SCIENCE & MANAGEMENT

In present study we make result that there is no relation between the portfolio equity, net flow and the development of the south Asia country. The key factors have the insignificant role from country specific which involved for the determination of outcome which is GDPPC, portfolio equity, real rate of interest, Population growth rate, Aggregate money and quasi money, External debt stock, foreign direct investment. These predictors have no impact on the market capitalization of the listed company. This article shows the insignificant impact between the foreign investor and market activity. Result also show that variation in portfolio equity, net flow than there is no change of the market capitalization. For the upcoming investigation we suggest that to increase the range of the sample scope of the study to other related financial organization which work on this. For the future study, when the decision maker makes the decision on the basis of market capitalization than he should considered the other factor.

References

1. Agarwal, R. (1997). Foreign portfolio investment in some developing countries: A study of determinants and macroeconomic impact. *Indian Economic Review*, 217-229.
2. Andrade, S. C., & Chhaochharia, V. (2010). Information immobility and foreign portfolio investment. *Review of Financial Studies*, hhp116.
3. Brennan, M. J., & Cao, H. H. (1997). International portfolio investment flows. *Journal of Finance*, 1851-1880.
4. Froot, K. A., & Ramadorai, T. (2008). Institutional portfolio flows and international investments. *Review of Financial Studies*, 21(2), 937-971.
5. Gathenya, J. M. (2015). Impact of Foreign Portfolio Equity Investments on the Market Capitalization of the Nairobi Securities Exchange (2004-2013). United States International University-Africa.
6. Samak, N., & Helmy, O. (2000). Foreign portfolio equity investment in Egypt: An analytical overview: Cairo University Working Paper.
7. Thapa, C., Neupane, S., & Marshall, A. (2016). Market liquidity risks of foreign exchange derivatives and cross-country equity portfolio allocations. *Journal of Multinational Financial Management*.
8. Thapa, C., & Poshakwale, S. S. (2010). International equity portfolio allocations and transaction costs. *Journal of Banking & Finance*, 34(11), 2627-2638.
9. Aron, J., Leape, J., & Thomas, L. (2010). Foreign portfolio investment and capital markets in South Africa. Unpublished-Working Paper, http://www.academia.edu/999128/Foreign_Portfolio_Investment_and_Capital_Markets_in_South_Africa.
10. Ndong, B. (2015). Effect of Portfolio Equity Investment Flows on Equity Returns and Economic Growth in 11 Major African Stock Markets. *International Journal of Economics and Finance*, 7(2), p225.