

# The Effect of Foreign Portfolio Investment (FPI) on Capital Market Indices (Evidence from Amman Stock Exchange)

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## *Abstract*

*This research aimed at showing the effect of foreign portfolio investment (FPI), both in buying of shares or sale of shares by foreign investors, inflation and gross domestic product on the market capitalization in the Amman Stock Exchange for the period 2005-2016. The financial data were collected through the official website of the Amman Stock Exchange and the reports issued by the Central Bank of Jordan. To achieve the purpose of the study, the financial data were analyzed utilizing statistical methods offered by SPSS package. The study concluded that there is a statistically significant effect on both the purchases and sales by foreign investors on market capitalization. The study also found no statistically significant effect between inflation and market capitalization.*

**Key Words:** *FPI, Portfolio, Investment, Amman Stock Exchange.*

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## **Introduction**

Foreign portfolio investment(FPI) is the capital inflow in the host country. fundamentally, foreign capital inflow is the investment in the securities of the host country by the foreign investors, Foreign capital inflow is very hot money. FPI consist financial papers held by foreign investors, FPI does not give the investor the right with direct ownership of financial assets, or direct management the corporate(Onyeisi et al., 2016).

From the foreign investors' view,FPI can diversify portfolio choices, particularly through investment in emerging markets, because low correlation with industrial countries enables foreign investors diversify their portfolios. For host countries view, cross-border capital can enhance capital structure, improve stock market efficiency and increase corporate governance transparency

According to Parthapratim (2006), foreign investments help host countries in achieving a set of benefits that include cash flows to host economies other than debt-NON DEBT-, such as portfolio investment transfers, which are complementary to domestic savings, to improve the rate of investment in host countries and provide foreign exchange to developing countries.

Foreign investment, in addition to reducing the problem of the balance of payments deficit, also reduces the foreign exchange gap of the least developed countries, thus facilitating the import of essential commodities from abroad.

The increase in the flow of foreign capital to emerging countries increases the efficiency of capital allocation in host countries, which helps to increase cash flows from the rich countries to emerging economies, due to low investment returns in rich countries and their rise in emerging countries. For host countries, this cash flow reduces the cost of money, increases investments and enhances the competitiveness of local companies in the global markets, which will positively affect production and demand for labor.

FPI may also have the form of purchase of stocks and bonds from secondary financial markets, thereby stimulating the deepening and expansion of the secondary financial market and increasing wealth and liquidity in host countries.

The main important aspect of FPI investments is the competition between foreign financial institutions, which contribute to the importation of financial services and advanced technology and the localization or adaptation of new technology with the domestic environment of host countries.

The result is efficient allocation of funds, risk sharing and increased control over capital issuances. Internationalization makes financial markets more efficient, more liquid and deeper.

According to Daly and Xuan(2013) still, the foreign investors are most likely to invest in their domestic market. The host countries need to take different steps to attract the foreign investors to invest in their country, like reducing the constraints on the capital movements and creating attractive opportunities for investment with remarkable return on investment (capital gain).

The Amman Stock Exchange (ASE) was established in March 1999 as a non-profit independent institution authorized to function as a regulated market for trading securities in Jordan. ASE aims at creating an attractive, safe, competitive, transparent and credible investment environment, developing processes, methods, and systems for trading securities in the stock market according to the latest international standards (ASE, 2017).

Non-Jordanian ownership in companies listed at the ASE by the end of 2015 represented 49.5 percent of the total market value. Jordan's financial market reached its height in 2007-2008, where average trading volumes topped \$118 million daily. Following the global economic downturn, the market declined precipitously, with market capitalization falling from \$41 billion in 2007 to \$25 billion in 2015 and down to \$24 billion as of July 31, 2016. Market capitalization as a percentage of GDP dropped over the same period from 289 percent to 70.7 percent. Liquidity in the market has diminished, as roughly \$10 million trade hands daily. The bourse remains prone to speculative movements (ASE, 2017).

## Literature Review

LO Duca (2012), examined the factors affecting the capital inflows are GDP growth rate, market efficiency and higher returns expectation. These factors play an essential role in attracting the foreign capital. All these factors raise the total economic level, which leads the economy towards the growth. Contrariwise, and because of the volatility of this kind of investment, it can cause the economic crisis in the host country.

Ibrahim and Akinbobola (2017) examined the relationship between foreign portfolio investment, democracy and economic growth in Nigeria. The results showed that, in the long run. foreign portfolio

investment had positive and significant effect on the economic growth in Nigeria, that democracy in itself affected economic growth significantly and positively but democratic government had no significant effect on the relationship between foreign portfolio and economic growth.

Haider et al (2017) investigated the impact of stock market performance and inflation on foreign portfolio investment (FPI) in China. For this purpose, time series quarterly data from 2007 Q1 to 2015 Q4 was used. The results showed that there was significant positive impact of stock market performance on the FPI, whereas inflation is found to be negatively associated with the FPI.

Fayyaz et al (2015), concluded that the major determinants of the foreign portfolio investments are the GDP growth, market size and market efficiency and higher expectation of returns, which played a vital role in the movement of the foreign portfolio investment.

Aurangzeb and Ul Haq (2012) inspected the impact of international capital inflows on the growth of Pakistan economy. They found that external debt, remittances and FDI had an optimistic impact on GDP. As per Parthapritam (2006), in order to attract foreign portfolio investments there had been competition among the emerging markets, and it became important for the developing countries to ensure attractive returns for foreign investors, and to increase in the operational flexibility.

Loice (2017) investigated the effect of foreign portfolio equity outflows on stock returns of listed financial institutions in Kenya. Using purposive sampling technique the study concentrated on 14 financial institutions. Panel estimation results indicated that foreign portfolio equity outflows had no effect on stock returns of listed financial institutions in Kenya.

Ouedraogo (2017) explored the impact of the inflows of portfolio capital into three institutional sectors (government, banks and corporates) on the real effective exchange rate. Using a large sample of 73 countries, it was shown that the effect of portfolio inflows on the real effective exchange rate depended on the sector the investment that flowed in. The results were robust to different econometric methods, additional variables in the model, and various indicators of real effective exchange rates.

## Methodology

The data of FPIB, FPIS, INFL, GDP, and MC have been taken from the ASE and Central Bank of Jordan publications. Sixteen observations have been collected and analysis, from 2005 to 2016. FPI was handled as total investment inflow and outflow in the country. The data has been taken on the annually and JD (Jordanian Dinar) as a currency unit was used.

The variables and the equation were:

$MC=f(PFIB, PFIS, GDP, INFL)$ , where MC is the dependent variable and PFIB, PFIS, GDP, INFL are independent variables .

MC=Market Capitalization

FPIB=Foreign Portfolio Investment (Buying)

FPIS=Foreign Portfolio Investment(Selling)

GDP=Gross Domestic Product

INFL=Inflation

$a, b_1, b_2, b_3, b_4$ - constants

U = random error.

**Hypotheses**

The following Hypotheses have been developed on the basis of previous literature.

- H01: There is no statistically significant relationship between foreign demand on shares and the market value of listed companies on the ASE.
- H02: There is no statistically significant relationship between the foreign sale of shares and the market value of listed companies on the ASE.
- H03: On Securities, there is no statistically significant relationship between inflation and the market value of listed companies on the ASE.
- H04: On Securities, there is no statistically significant relationship between GNP and the market value of listed companies on the ASE.

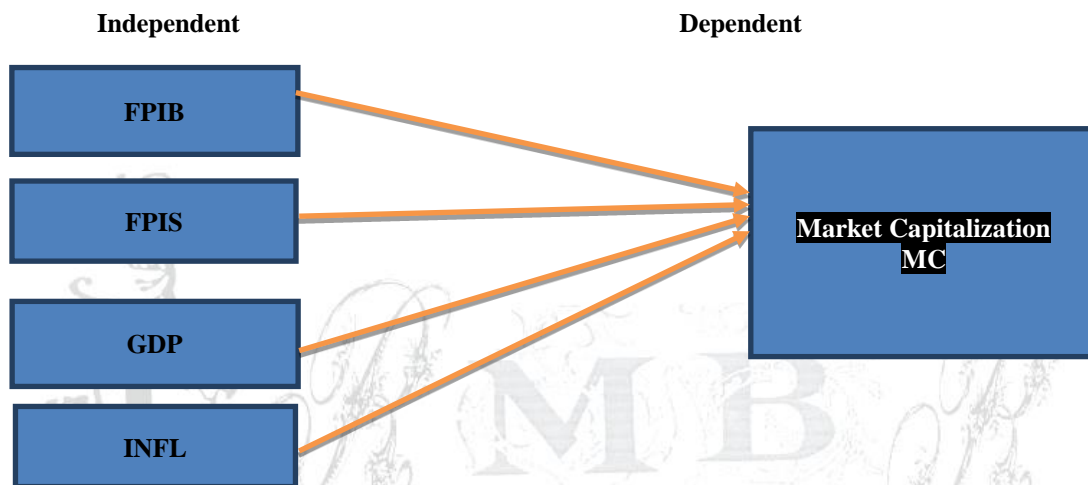


Figure (1): Independent and Dependent Variables

**Findings and Discussions**

Table (1) summarizes this research's main data, on which further analysis and discussion proceed.

Table(1). MC, FPIB, FPIS Inflation (%) and GDP 2005-2016

Year	MC	FPIB	FPIS	INFL %	GDP
2005	26667	2152	1739	3.5	8953
2006	21078	1995	1815	6.3	10521
2007	29214	2825	2359	4.7	11722
2008	25406	4220	3910	14	14190
2009	22527	2136	2139	-0.7	16912
2010	21858	1037	1051	5	18762
2011	19273	555.8	477.2	4.4	20477
2012	19146	233.9	285.3	4.5	21966
2013	18234	939.5	792.6	4.8	23852
2014	18083	362.7	384.8	2.9	25437
2015	17985	981.7	971.1	-0.9	26637
2016	17339	666.5	492.4	-0.8	27445

Charts 1, 2, 3 and 4 represent respectively: FPIB, FPIS, Inflation(%) and GDP with MC.

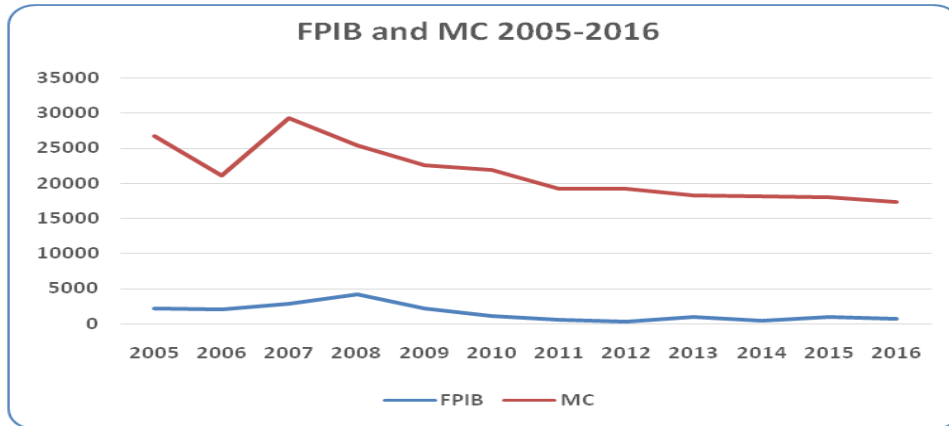


Figure 2. FPIB and MC 2005-2016

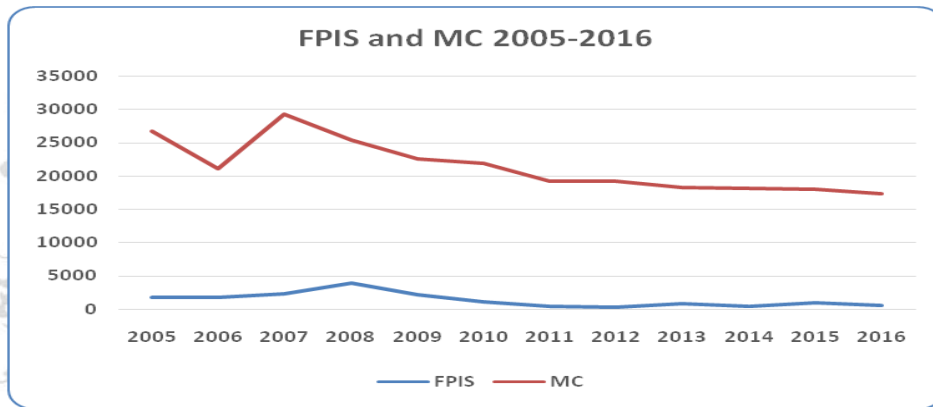


Figure 3. FPIS and MC 2005-2016

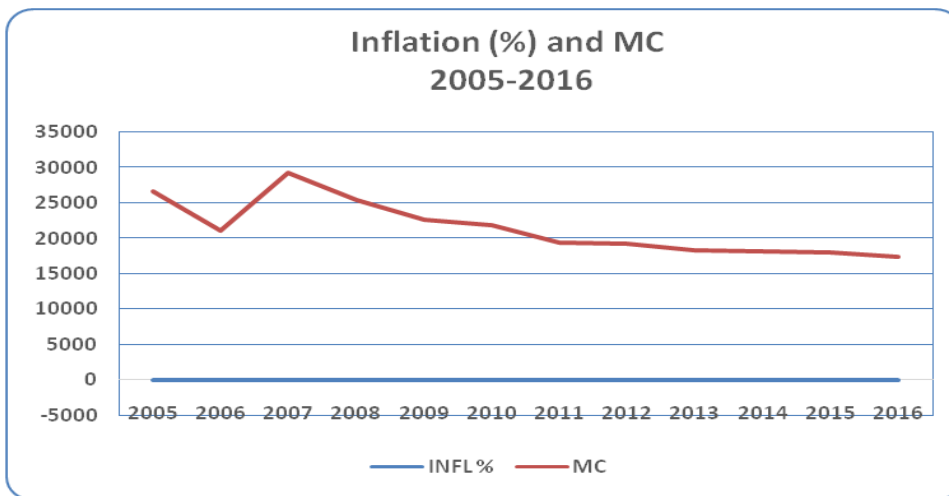


Figure 4. Inflation (%) and MC 2005-2016

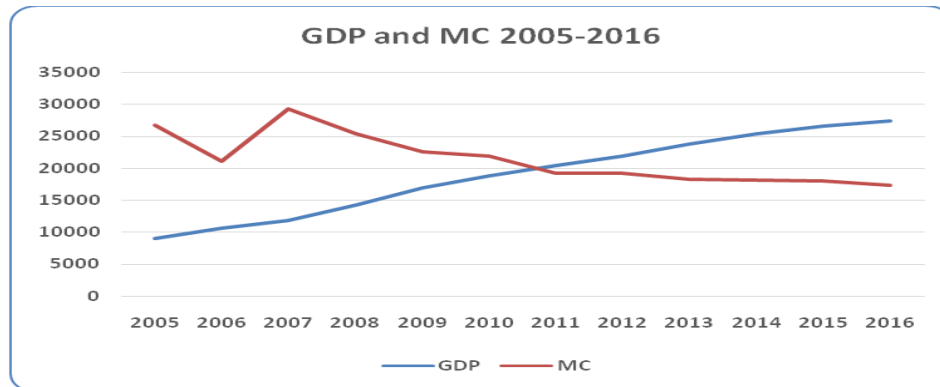


Figure 5. GDP and MC 2005-2016

In order to test the hypotheses of the research, the collected data that relates to the independent variables of the research and the dependent variable were analyzed, utilizing the statistical analysis package SPSS. In the first stage, the overall combined effect of the independent variables was measured, i.e., the foreign demand for shares, the sale by foreigners of shares, inflation and GDP on the market value of the companies listed on the Amman Stock Exchange during the period covered by the research (2005-2016). This analysis is necessary to know the overall effect of all the independent variables on the dependent variable. Multiple Regression served for achieving this stage. The second stage consisted of testing the four hypotheses of the research using simple regression analysis. The results of the analysis are as follows:

A. The impact of foreign demand on stocks, foreigners' selling of shares, inflation and GDP on the market value of the companies listed on the Amman Stock Exchange:

Table (2). Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	25118.869	3539.286		7.097	.000
	FPIS	6.609	4.562	2.025	1.449	.191
	FPIB	-5.515-	4.850	-1.527-	-1.137-	.293
	INF	-11074.405-	18176.684	-.115-	-.609-	.562
	GDP	-.302-	.138	-.503-	-2.191-	.065

Dependent Variable: CM

Table (2) shows that there is no statistically significant effect for all independent variables, taken together, on the dependent variable at 5% significance level. The table shows that the values of the statistical significance of the independent variables: foreigners demand for shares, foreigners' sale of shares, inflation and GDP were (0.191, 0.293, 0.562, and 0.065) respectively, and each was higher than (0.05).

Table (3). Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.919	.844	.774	1916.6286

a. Predictors: (Constant), GDP, INF, FPIB, FPIS

As table (3) shows, the value of the coefficient of determination ( $R^2$ ) indicates that independent variables, taken as a whole, explain about (0.844) of the volume of changes that occur in the dependent variable.

Table (4).Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	17451.041	1164.693		14.983	.000
FPIS	2.618	.617	.802	4.246	.002

a. Dependent Variable: CM

B. First hypothesis test: Table (4) indicates the existence of a statistically significant effect of the independent variable (foreigners' sale of shares FPIS) on the market value of shares; as its statistical significance value was (0.002), which is less than 0.05.

Table (5).Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.802 <sup>a</sup>	.643	.608	2427.93704

a. Predictors: (Constant), FPIS

Table (5) shows that the value of the coefficient of determination for this variable explains (0.608) of the volume of changes occurring in the dependent variable.

Table (6). Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	17642.047	1268.596		13.907	.000
FPIB	2.747	.742	.761	3.705	.004

a. Dependent Variable: CM

C. Second hypothesis test: table (6) indicates the existence of a statistically significant effect of the independent variable (foreigners' purchase of shares FPIB) on the market value of shares; as its statistical significance was 0.004, which is less than 0.05.

Table (7). Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761 <sup>a</sup>	.579	.536	2638.79521

a. Predictors: (Constant), FPIB

The coefficient of determination value indicates that this variable explains (0.536) of the volume of changes in the dependent variable.

Table (8).Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	19781.459	1526.825		12.956	.000
INF	40737.504	27570.088	.423	1.478	.170

a. Dependent Variable: CM



D. Third hypothesis test: Table (8) shows that there is no statistically significant effect of the independent variable (inflation) on the market value of shares; as the value of statistical significance was 0.170, which is higher than 0.05.

Table(9).Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.423 <sup>a</sup>	.179	.097	3682.67141

a. Predictors: (Constant), INF

The value of the coefficient of determination indicates that this variable explains (0.097) of the volume of changes in the dependent variable.

Table (10). Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	31112.939	1950.991		15.947	.000
	GDP	-.514-	.098	-.856-	-5.238-	.000

a. Dependent Variable: CM

E. Fourth hypothesis test: Table (10) indicates that there is a statistically significant effect of the independent variable (GDP) on the market value of shares, as its statistical significance value is less than 0.001, which is less than 0.05.

Table (11). Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.856 <sup>a</sup>	.733	.706	2100.98417

a. Predictors: (Constant), GDP

The value of the coefficient of determination indicates that this variable explains (0.706) of the volume of changes in the dependent variable.

## Conclusion

In this paper, the researcher investigated the impact of foreign investment, inflation and gross domestic product on market capitalization (MC). The data were collected through Amman Stock Exchange reports. The study covered the period in which oil prices rose sharply, creating cash surpluses in the oil-exporting countries. Some of these surpluses were directed to investment in securities, which increased the demand for securities. The target was speculation and quick profit. The total foreign demand for securities reached a peak in 2008, with foreign investment in securities on the Amman Stock Exchange reaching (4220) million dinars. This coincided with an unprecedented rise in the price of a barrel of oil, which, in the middle of the same year (2008), reached \$ 149 a barrel, followed by a sharp decline in oil prices in the second half of 2008 and subsequent years. The decline was accompanied by the foreigners' sale of their investment in Amman Financial Market, which resulted in a sharp volatility in the prices of securities. This confirms the positive relationship between oil prices and the volume of foreign investments in the Amman Financial Market.



The researcher utilized statistical analysis tools to study the effect of independent variables (GDP, FPIB, FPIS, INFLATION) on the dependent variable (MC). The study found a statistically significant relationship between GDP, FPIB and FPIS with MC, and there was no statistically significant relationship between inflation and MC.

## References

- Ahmad, F., Draz, M. U., & Yang, S. C. (2015). "Determinants of Foreign Portfolio Inflows: Analysis and Implications for China". *Asian Journal of Finance & Accounting*, 7(2), 66-77. Available: <http://dx.doi.org/10.2139/ssrn.2542610>
- Aurangzeb, & A. Ul Haq. (2012). "Impact of Foreign Capital Inflows on Economic Growth in Pakistan". *European Journal of Economics, Finance and Administrative Sciences*, 46.
- Daly, K. & Vo, X. V. (2013). "The determinants of home bias puzzle in equity portfolio investment in Australia". *International Review of Financial Analysis*, 27, 34-42. <http://dx.doi.org/10.1016/j.irfa.2012.05.005>
- <http://www.cbj.gov.jo/Pages/viewpage.aspx?pageID=68>
- Khakan Najaf & Rabia Najaf (2016). "Impact of foreign portfolio investment on the development of Pakistan". *Journal of Business Management and economics* Available: <http://www.journalresearchijf.com>
- LoDuca, M. (2012). "Modelling the time varying determinants of portfolio flows to emerging markets". August 23, 2012.
- Loice Koskei, (2017). "The Effect of Foreign Portfolio Equity Sales on Stock Returns in Kenya: Evidence from NSE Listed Financial Institutions".
- Muhammad Afaq Haider, Muhammad Asif Khan & Elyas Abdulahi (2016). Determinants of Foreign Portfolio Investment and Its Effects on China". *International Journal of Economics and Finance*, Vol. 8, No. 12; 2016.
- Muhammad Afaq Haider, Muhammad Asif Khan, Shamila Saddique , Shujahat Haider Hashmi (2017). "The Impact of Stock Market Performance on Foreign Portfolio Investment in China". *International Journal of Economics and Financial Issues*, 2017, 7(2), 460-468. Available at: <http://www.econjournals.com>
- Onyeisi, Ogbonna Samuel, Odo, Idenyi Stephen, Anoke, Charity Ifeyinwa (2016). "Foreign portfolio investment and stock market growth in Nigeria". *Developing Country Studies*, vol. 6 No. 11.
- Parthapratim (2006). Draft Paper Submitted for the Annual Conference on Development and Change Mission: Promoting Development in a Globalized World, Sao Paulo, Brazil, November 18 – 20, 2006.
- Parthapratim P. (2006). "Foreign portfolio investment Stock market and economic development: A case study of India". Draft paper submitted for the Annual conference of Development and Change mission promoting development in a globalized world.
- Rasmane Ouedraogo (2017). "Portfolio Inflows and Real Effective Exchange Rates" *Journal of Economics and Sustainable Development*, Vol.8, No. 5. <https://www.ase.com.jo/ar> available as 20/09/2017