



ORIGINAL RESEARCH PAPER

Commerce

“AN ANALYSIS OF IMPACT OF FOREIGN DIRECT INVESTMENT ON ASIAN STOCK MARKETS: WITH SPECIAL REFERENCE TO BSE-SENSEX AND SZSE COMPONENT INDEX”

KEY WORDS: FDI, BSE-Sensex, SZSE Component Index, Asian Stock Market

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ABSTRACT

This research paper explores the influence of Foreign Direct Investment (FDI) on the Bombay Stock Exchange Sensitive Index (BSE SENSEX) in India and the Shenzhen Stock Exchange Component Index (SZSE) in China. By analysing the relationship between FDI and these stock market indices, the study aims to provide insights into the potential effects of foreign investment on their respective performances. Employing a quantitative methodology, the research utilizes yearly data from 2015-16 to 2021-22 to examine the dynamic interactions between FDI inflows and stock market indices. Preliminary findings indicate a high positive correlation between FDI and SZSE indices performance while in case of the BSE SENSEX there is a very little positive correlation with FDI. The results suggest that FDI inflows have an insignificant impact on these indices. In conclusion, this research contributes to the existing literature by examining the impact of FDI on the BSE SENSEX and SZSE indices. The findings provide valuable insights into the interplay between foreign investment and stock market performance, in the Indian and Chinese economies and contributing to the broader understanding of the Asian financial market.

1. INTRODUCTION:

The Asian stock market has become a significant player in the global financial landscape, capturing the attention of investors, analysts, and researchers worldwide. With its dynamic nature and diverse economies, the Asian market encompasses countries such as Japan, China, South Korea, India, and Singapore. Its potential for growth is fuelled by rapid economic development, technological advancements, and increasing integration with the global economy, making it an appealing destination for domestic and international investors. However, the Asian stock market also faces unique challenges, including regulatory issues, geopolitical tensions, and market volatility. A comprehensive understanding of this market is crucial for investors and researchers to navigate its complexities and identify potential growth opportunities.

FDI refers to investments made by foreign entities in the form of ownership or controlling interests in businesses located in Asian countries. Such investments can have several effects on the Asian stock market. Foreign direct investment (FDI) has a significant impact on the Asian stock market, boosting liquidity, enhancing market sentiment, and facilitating technology transfer. However, excessive reliance on FDI can introduce volatility and vulnerability to external shocks, necessitating careful regulation and monitoring.

2. LITERATURE REVIEW:

Jayachandran G and Seilan (2010) investigated the relationship between trade, FDI, and economic growth in India. The study explores the causal links and interdependencies among these factors. Through empirical analysis, the paper provides insights into how trade and FDI impact the economic growth of India.

Gupta (2017) analysed the impact of FDI on BSE and NSE in which the researcher found that moderate degree of positive correlation between FDI & BSE Sensex and FDI & NSE CNX Nifty.

Sharma, Vyas and Vyas (2019) assessed the relationship between FDI inflows and stock market performance in India from 2001-2017, focusing on the BSE-SENSEX. They found that there has been a high degree of positive correlation and direct linear relationship between FDI & BSE Sensex.

Gajera (2020) examined returns, market movement and correlation of major stock market indices globally through

CAGR and ANOVA from 2015 to 2019.

3. OBJECTIVES OF THE STUDY:

- To study the trends and patterns of FDI inflows in India and China.
- To study the relationship between FDI and stock market index.
- To study the effect of FDI on BSE-SENSEX and SZSE Component Index.

4. RESEARCH DESIGN:

A. Period Of The Study:

The present research work covers the time period of seven years starting from 2015-16 to 2021-22.

B. Data Collection:

The data collected is purely secondary in nature. The data related to FDI inflows has been collected from the website of world bank and the data of BSE-SENSEX and SZSE Component Index have been collected from the website of their respective stock exchange.

C. Tools and Techniques:

The Simple Linear Regression and trend are the tools for the analysis of data.

D. Hypothesis:

H_{01} = The impact of FDI inflows on BSE-SENSEX is statistically insignificant.

H_{02} = The impact of FDI inflows on SZSE Component Index is statistically insignificant.

5. LIMITATIONS OF THE STUDY:

- The present study focused only on BSE Sensex and SZSE Component Index.
- The study is restricted to the time period of seven years only.

6. DATA ANALYSIS:

Impact of FDI on BSE-SENSEX and SZSE Component Index:

Table-1: Year-wise Foreign Direct Investment (FDI) in India and S&P BSE SENSEX

Year	FDI (Usd Thousands)	Trend	Bse Sensex
2015-16	44009492130	100%	26275.637
2016-17	44458571546	101%	27572.795
2017-18	39966091359	91%	32587.667

2018-19	42117450737	96%	36323.894
2019-20	50610647354	115%	38523.958
2020-21	64362364994	146%	40980.888
2021-22	44727277563	102%	55826.973

Source: Compiled from website of world bank and BSE

The above table shows the amount of FDI inflows in India and BSE Sensex during the study period. In the year 2015-16 the FDI inflow was US \$ 44009492130 then it increased a bit during next year. In the year 2017-18 the FDI inflow was lowest during the study period. After 2017-18 it starts rising and reached to US \$ 64362364994 in the year 2020-21 and again it dropped to US \$ 44727277563 in the 2021-22. During the study period there was a continuous rise in the BSE Sensex starting from 26275.637 in 2015-16 to 55826.973 in 2021-22. Thus, FDI total inflows in India showed a fluctuating trend while BSE Sensex showed upward trend during the study period.

Table-2: Year-wise Foreign Direct Investment (FDI) and SZSE Component Index.

Year	FDI (USD Thousands)	Trend	Szse Component Index
2015-16	242489331627	100%	11949.037
2016-17	174749584584	72%	10434.341
2017-18	166083755721	68%	10770.600
2018-19	235365050036	97%	8738.949
2019-20	187169822364	77%	9765.607
2020-21	253095616058	104%	13187.439
2021-22	333979029130	138%	14226.145

Source: Compiled from website of world bank and SZSE

The above table shows the amount of FDI inflows in China and SZSE Component Index during the study period. In the year 2015-16 the FDI inflow was US \$ 242489331627 then it starts decreasing during next two years. In the year 2017- the FDI inflow was lowest during the study period. After 2017-18 it increased and reached to US \$ 235365050036 in the year 2018-19 and again it dropped to US \$ 187169822364 in the 2019-20. During the study period there was continuous fluctuations in the SZSE Component Index during 2015-16 to 2019-20 and the it starts increasing during last two years. Thus, FDI total inflows in China and SZSE Component Index showed a fluctuating trend during the study period.

Model of Regression:

To study the impact of FDI on BSE SENSEX and SZSE Component Index during 2015-16 to 2021-22, Simple Linear Regression has been applied. Independent variable is FDI of respective country and dependent variables are BSE SENSEX and SZSE Component Index. The model is as follows:

- Model Building: $Y = a + bX$
- Model (a): $SENSEX = a + b \text{ FDI}$
- Model (b): $SZSE \text{ Component Index} = a + b \text{ FDI}$
- Where, a = intercept, b = slope, Y = Dependent Variable, X = Independent Variable
- The outcome of Regression Analysis is portrayed in the tables below:

Table 3: Model Summary

Model	Multiple R	R Square	Adjusted R Square	Standard Error	Observations
SENSEX	0.2480	0.0615	-0.12618	10579.54	7
	2532	16559	0129	243	
SZSE Component Index	0.7216	0.5208	0.424967	1468.096	7
	68853	05933	119	01	

Source: Author's Computation

Table 4: ANOVA

Model	df	SS	MS	F	Sig.	
SENSEX	Regression	1	366833	36683	0.3277	0.5917
			67.47	367.47	45	7

	Residual	5	559633	11192		
			590.5	6718.1		
	Total	6	596316			
			957.9			
SZSE Component Index	Regression	1	117123	11712	5.4341	0.0671
			33	333	85943	1646
	Residual	5	107765	21553		
			29.48	05.895		
	Total	6	224888			
			62.48			

Source: Author's Computation

Table 5: Coefficients

Model		Coefficients	Standard Error	t Stat	P-value
SENSEX	Intercept	22726.21	25027.69	0.9080	0.40549
		607	576	42686	4
	X Variable 1	2.99796E-07	5.23671E-07	0.5724	0.59177
			89747		
SZSE Component Index	Intercept	5851.458	2400.593	2.4375	0.05883
		453	99	04416	422
	X Variable 1	2.39256E-08	1.02635E-08	2.3311	0.06711
			34047	6462	

Source: Author's Computation

7. HYPOTHESIS TESTING:

H₀₁ = The impact of FDI inflows on BSE-SENSEX is statistically insignificant.

From the above statistics, the researcher has found the p-value related to FDI and BSE Sensex is 0.59177 which is greater than 0.05 at the 5% level of significance. Hence, there is sufficient evidence to fail to reject the null hypothesis which means the impact of FDI inflows on BSE-SENSEX is statistically insignificant.

H₀₂ = The impact of FDI inflows on SZSE Component Index is statistically insignificant.

From the above statistics, the researcher has found the p-value related to FDI and SZSE Component Index is 0.067116462 which is greater than 0.05 at the 5% level of significance. Hence, there is sufficient evidence to fail to reject the null hypothesis which means the impact of FDI inflows on SZSE Component Index is statistically insignificant.

8. FINDINGS:

- The FDI inflow of India and China shown mix trend during the study period.
- The BSE Sensex shown a continuous growth while SZSE Component Index is continuously fluctuating during the study period.
- The results discovered that there has been a very little positive correlation (r = 0.24) between FDI & BSE Sensex. And there has been a high degree of positive correlation (r = 0.72) and direct linear relationship between and FDI & SZSE Component Index.
- The study also revealed that there is no impact of FDI inflows on BSE Sensex and SZSE Component Index.

9. REFERENCES:

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