Foreign Direct Investment Inflows into SAARC Countries: Trend Analysis.

Dr. G. Jayachandran

Assistant Professor and Head, Department of Mathematical Economics, School of Economics, Madurai Kamaraj University, Madurai-625021, Tamilnadu

Abstract

The study examines the relationship between institutional quality and FDI inflows in SAARC nations from 1981 to 2020. It employs Simple Linear and Semi log linear regression to draw conclusions. The findings indicate that corruption, political stability, government effectiveness, and GDP per capita have a positive and statistically significant influence on FDI inflows. The Semi log linear regression results show that all estimates of government effectiveness, GDP per capita, and trade openness are positive and statistically significant. This research suggests that institutional quality is important for the growth of FDI inflows. As a result, policymakers should prioritize effective institutional reforms to create a favorable investment environment and attract FDI inflows in SAARC countries.

Keywords: FDI, Simple Linear and Semi log Linear.

1. Introduction:

Foreign Direct Investment (FDI) is considered as a very significant facilitator of economic growth (Srinivasan, et al., 2011). Literatures suggest that FDI boosts economic growth by providing capital, foreign exchange, technology and easing the access to foreign markets (Crespo and Fontoura, 2007).FDI inflows merely increase the investment rate, leading to a transitional increase in per capita income growth, but have no long – run growth effect. In the new growth theory of the 1980s endogenous technological progress and FDI has been considered to have permanent growth effect in the host country through technology transfer and spillover.(G.Jayachandran and Seilan 2010)

FDI refers to net inflows of investment in an economy of a country. It is the sum of equity capital, reinvestment of earnings, long term and short term capital. It usually involves participation in management, joint ventures, transfer of technology and experience. GDP refers to the market value of all final goods and services produced within a country in a given period. It is often considered an indicator of growth and standard of living for a country. Inflation when the price of most goods and services continues to rise upward. It is measured by the consumer price index (CPI). SAARC the South Asian Association for regional cooperation is an organization of south Asian nations. It was founded in December 1985 and dedicated to economic, technological, social and cultural development by emphasizing collective self-reliance. Pakistan, India, Bangladesh, Nepal, Bhutan, Maldives and Sri Lanka are its founding members. Afghanistan joined the SAARC in 2005. Its head quarter is in Kathmandu, Nepal. The SAARC region is the home of fifth humanity with vast natural and human resources. It has the potential of becoming a vibrant region in the world by its resources like manpower,

technological, agricultural and mineral assets further it has an attractiveness for tourism and historical art and cultural civilization.

2. Review of Literature

This chapter is devoted to present a brief review of the earlier works related to the Relationship between FDI, Trade, Inflation and GDP for South Asian Countries.

G. Jayachandran , Prasanna Priya, Thirumalai Selvi and Steela Nancy (2019) In their paper analysed several developing countries, capital is a scarce factor. The low level of domestic savings becomes inadequate to meet the investment requirements. However, the degree of relationship between foreign capital and economic growth varies in various developing countries due to the influence of a number of macro-economic variables and the stage of economic development.

G. Jayachandran , Thirumalai Selvi and Steela Nancy (2018) in their paper analysed the financial performance of 85 FDI Receiving companies in Tamil Nadu during the period from2006 to 2016 presented in this study is based on the companies' wise primary data and the audited annual accounts (Ministry of Corporate Affairs) closed during from 2006 to 2016. The select 85 companies consist of 171 FDI Receiving companies.

G. Jayachandran (2017) in his paper examined the relationship between FDI, CO_2 Emission, and economic growth in SAARC countries using time series data during the period from 2000 to 2015. I have also applied Correlation and Simple Linear Regression model approach to check the relationship between FDI, Economic Growth and CO_2 Emission of the variables. Results also show that the estimated coefficients of emissions have positive and significant impacts on GDP in the long run.

Mohammed Yelwal, et.all. (2015)[1] in their study analyses of the relationship between unemployment, inflation and economic growth in Nigeria: 1987-2012. The study utilizes secondary data to analyze the relationship between unemployment, inflation and economic growth. The paper recommended that the government must as a matter of necessity to improve or continue to fine-tune macroeconomic policy instruments to achieve a sustainable and enable environment that will enhance increase in domestic output.

Ayesha Sultan and Faiza Maqbool Shah (2015)[2] the main point of this research is to study the existence of inflation economy growth relationship of Pakistan. Panel time-series data for the period 2005-15 have been taken and analysis is made by applying the method of Co-relation and Linear Regression. A moderate and significant inflation rate and economic growth relationship has been found to be present in the economy of Pakistan.

Shakhaowat Hossin (2015)[3] in his study on inflation and economic growth is one of the most important controversies in the economic literature. This paper present relationship between inflation and economic growth in the context of Bangladesh. Using annual data set on real GDP and Gross Domestic Product Deflator (GDPD) for the period of 1961 to 2013, an assessment of empirical evidence has been acquired through the co-integration test, error correction models and Granger Causality test.

Hassan Abbas, et.all. (2015)[4] in her study inflation expectations and perceptions about important economic variables at the household level using a novel dataset of 18,000 households for the 2011-2013 period for Pakistan. These results are consis- tent with the observation that energy-related prices are popular news items and affect important CPI basket commodities. Lastly, our results cast doubt on the adequacy of rational expectations hypothesis in Pakistan.

G. Jayachandran (2015) In India, SEBI defines all these investors as FIIs. Developing countries like India are generally capital scarce. To analyze the relationship between institutional investment (i.e. FIIs and MFs investment) and stock returns the study proposes to use Simple Linear Regression and Semi Log Linear model. The foundation of time series analysis is Trend. The study has used monthly net investment data of FIIs and monthly return of BSE Sensex index is taken from SEBI website and Sensex index closing values is collected from Yahoo Finance database.

G. Jayachandran and Ayyanar (2014) their paper provides an overview of FDI inflows and Trade in India and China. It shows that FDI and Trade is the fastest growing in India and China, contributing significantly to GDP, GDP growth, employment, trade and investment. In the result of regression co efficient of simple linear and semi log linear model implies that India and China had a possibility for positive relationship on Foreign Direct Investment and it plays a significant role in enhancing the level of economic growth.

Lim Guech Heang and Pahlaj Moolio(2013)[13] in their work on foreign direct investment (FDI) is widely believed to have positive effects on economic growth; yet for Cambodia, over 19 years (1993-2011) of attracting FDI inflows, the growth rate of Gross Domestic Product (GDP) has averaged at 7 percentage, which demand a modest attempt to study their relationship whether FDI drives growth of Cambodia's economic output. All of the qualitative studies presented in this paper claim that FDI positively affects GDP, and most significantly, to the employment opportunities generated for local people, which in the long run help unemployment and poverty reduction in Cambodia.

Nadeem Iqbal et.all (2013)[14] in their study is related to Foreign direct investment (FDI) is considered as a growth accelerating component that has received a great attention in developed countries even in developing and less developed countries during recent years. Pakistan has not sufficient flow of FDI during past decades. It is also concluded that FDI impact may be situation and culture related. So, the extent of FDI economic benefits cannot be predicted.

Khalid Javed et.all (2012)[15] in their study estimates link among Foreign Direct Investment (FDI), Trade and Economic Growth in four South Asian economies namely, India, Bangladesh, Sri Lanka and Pakistan using data from 1973 to 2010. Results indicate that FDI has mixed impacts on output expansion in different countries, while Exports have positive impact upon output growth in all countries. The present analysis focuses on India, where growth of FDI has been the most pronounced.

G. Jayachandran (2010) in his study investigated the relationship between Trade, Foreign Direct Investment (FDI) and economic growth for India over the period 1970-2007. The literature on foreign direct investment (FDI) Trade and economic growth generally points to a positive Trade and FDI-Growth relationship. The present analysis focuses on India, where growth of FDI has been the most pronounced. The Cointegration analysis suggested that there is a long-run equilibrium relationship. The results of Granger causality test showed that there is a causal relationship between the examined variables.

3. Methodology:

To analyze the FDI inflows into SAARC Countries and the study proposes to use Simple Linear Regression and Semi Log Linear model. The foundation of time series analysis is Trend.

3.1. Data

The study has used yearly investment data of FDI inflows into SAARC Countries. FDI Inflows into SAARC Countries data are collected from UNCTAD. The study period is from 1981 to 2020. Full

period has been divided in to 4 sub periods to account for changes in trends in FDI flows into SAARC Countries.

4. Results of Trend Analysis for the FDI Inflows into SAARC Countries:

4.1. Afghanistan

The result of the trend analysis reveal that the FDI inflows into Afghanistan decrease annually by -0.004 Millions of US Dollars Millions of US Dollars in 1981 to 1990. The regression coefficient of the Semi log linear model implies that the FDI inflow decrease at the compound growth rate -132.7 per cent. The regression coefficients in the both model are insignificant. The value of adjusted R^2 is -0.49 in simple linear model and it is 0.52 semi log linear model .It means that the FDI inflow in to Afghanistan has registered very low linear trend in this period and among 1 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveal that the FDI in to Afghanistan decrease annually by -0.24 Millions of US Dollars Millions of US Dollars in 1991 to 2000. The regression coefficient of the Semi log linear model implies that the FDI inflow decrease at the compound growth rate 28.7 per cent. The regression coefficients in the both model are insignificant. The value of adjusted R^2 is 0.14 in simple linear model and it is 0.16 semi log linear model .It means that the FDI inflow in to Afghanistan has registered very low linear trend in this period and among 13 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveal that the FDI in to Afghanistan decrease annually by 8.65 Millions of US Dollars Millions of US Dollars in 2001 to 2010. The regression coefficient of the Semi log linear model implies that the FDI inflow decrease at the compound growth rate 33.7 per cent. The regression coefficients in the both model are insignificant. The value of adjusted R^2 is -0.04 in simple linear model and it is 0.15 semi log linear model .It means that the FDI inflow in to Afghanistan has registered very low linear trend in this period and among 7 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveal that the FDI in to Afghanistan decrease annually by -1.32 Millions of US Dollars Millions of US Dollars in 2011 to 2020. The regression coefficient of the Semi log linear model implies that the FDI inflow decrease at the compound growth rate -7.5 per cent. The regression coefficients in the both model are insignificant. The value of adjusted R^2 is 0.1 in simple linear model and it is 0.01 semi log linear model .It means that the FDI inflow in to Afghanistan has registered very low linear trend in this period and among 0.7 per cent of variation in the depend variable are explained by independent variable.

4.2. Bangladesh:

The result of the trend analysis reveal that the FDI in to Bangladesh decrease annually by -0.23 Millions of US Dollars in 1981 to 1990. The regression coefficient of the Semi log linear model implies that the FDI inflow decrease at the compound growth rate -11.30 per cent. The regression coefficients in the both model are insignificant. The value of adjusted R^2 is -0.09 in simple linear model and it is 0.04 semi log linear model .It means that the FDI inflow in to Bangladesh has registered did not linear trend in this period and among 4 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveal that the FDI in to Bangladesh increase annually by 72.59 Millions of US Dollars in 1991 to 2000. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 103.40 per cent. The regression coefficients in the both

model are significant at one per cent level. The value of adjusted R^2 is 0.71 in simple linear model and it is 0.86 semi log linear model .It means that the FDI inflow in to Bangladesh has registered high linear trend in this period and among 75 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveal that the FDI in to Bangladesh increase annually by 71.68 Millions of US Dollars in 2001 – 2010.The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 13.1 per cent. The regression coefficients in the both model are significant at one per cent level. The value of adjusted R^2 is 0.63 in simple linear model and it is 0.69 semi log linear model .It means that the FDI inflow in to Bangladesh has registered more linear trend in this period and among 67 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveals that the FDI in to Bangladesh increase annually by 221.03 Millions of US Dollars in 2011 to 2020. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 13.1 per cent. The regression coefficients in the both model are significant at one per cent level. The value of adjusted R^2 is 0.69 in simple linear model and it is 0.80 semi log linear model .It means that the FDI inflow in to Bangladesh has registered more linear trend in this period and among 73 per cent of variation in the depend variable are explained by independent variable.

4.3. Bhutan:

The result of the trend analysis reveal that the FDI in to Bhutan increase annually by 0.01 Millions of US Dollars 1991-2000.The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 10.7 per cent. The regression coefficients in the both model are insignificant. The value of adjusted R^2 is -0.33 in simple linear model and it is 0.43 semi log linear model .It means that the FDI inflow in to Bhutan has registered does not linear trend in this period and among 0.1 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveals that the FDI in to Bhutan increase annually by 2.48 Millions of US Dollars 2001-2010. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 26.2 per cent. The regression coefficients in the both model are insignificant. The value of adjusted R^2 is -0.05 in simple linear model and it is 0.20 semi log linear model .It means that the FDI inflow in to Bhutan has registered does not linear trend in this period and among 8 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveals that the FDI in to Bhutan decrease annually by -5.13 Millions of US Dollars 2011-2020. The regression coefficient of the Semi log linear model implies that the FDI inflow decrease at the compound growth rate -32.29 per cent. The regression coefficient in the simple linear model is significant at five per cent level and semi log linear model is significant at one per cent level. The value of adjusted R^2 is 0.35 in simple linear model and it is 0.81 semi log linear model .It means that the FDI inflow in to Bhutan has registered less linear trend in this period and among 42 per cent of variation in the depend variable are explained by independent variable.

4.4. India:

The results of the trend analysis reveal that the FDI in to India increase annually by 21.71 Millions of US Dollars in 1981 to 1990. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 26 per cent per year. The regression coefficient in the simple linear model is significant at one per cent level and semi log linear model is insignificant. The

value of adjusted R^2 is 0.53 in simple linear model and it is 0.27 semi log linear model .It means that the FDI inflow in to India has registered less linear trend in this period and more than 58 per cent of variation in the depend variable are explained by independent variable.

The results of the trend analysis reveal that the FDI in to India increase annually by 386.93Millions of US Dollars in 1991 to 2000. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 46.10 per cent per year. The regression coefficients in the both model are significant at one per cent level. The value of adjusted R^2 is 0.77 in simple linear model and it is 0.74semi log linear model .It means that the FDI inflow in to India has registered high linear trend in this period and more than79 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveals that the FDI in to India increase annually by 4198.87 Millions of US Dollars in 2001 to 2010. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 30.7 per cent per year. The regression coefficients in the both model are significant at one per cent level. The value of adjusted R^2 is 0.77 in simple linear model and it is 0.74 semi log linear model .It means that the FDI inflow in to India has registered high linear trend in this period and more than 79 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveals that the FDI in to India increase annually by 3161.45Millions of US Dollars in 2011 to 2020. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 8.3 per cent per year. The regression coefficients in the both model are significant at one per cent level. The value of adjusted R^2 is 0.68 in simple linear model and it is 0.66 semi log linear model .It means that the FDI inflow in to India has registered high linear trend in this period and more than 79 per cent of variation in the depend variable are explained by independent variable.

4.5. Iran:

The result of the trend analysis reveal that the FDI in to Iran decrease annually by (-18.94) Millions of US Dollars in (1981 – 1990).The regression coefficient of the Semi log linear model implies that the FDI inflow decrease at the compound growth rate (11.6) per cent. The regression coefficients in the both model are insignificant. The value of adjusted R^2 is(0.05) in simple linear model and it is(0.97)semi log linear model .It means that the FDI inflow in to Afghanistan has registered very low linear trend in this period and among 16 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveal that the FDI in to Iran increase annually by (5.33) Millions of US Dollars in (1991 – 2000).The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate (21.0) per cent. The regression coefficients in the both model are insignificant. The value of adjusted R^2 is(-0.08) in simple linear model and it is(1.87)semi log linear model .It means that the FDI inflow in to Afghanistan has registered very low linear trend in this period and among 4 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveal that the FDI in to Iran increase annually by (104.84) Millions of US Dollars in (1991 – 2000).The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate (9.5) per cent. The regression coefficients in the both model are insignificant. The value of adjusted R^2 is(0.002) in simple linear model and it is(0.09)semi

log linear model .It means that the FDI inflow in to Afghanistan has registered very low linear trend in this period and among 11 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveal that the FDI in to Iran Decrease annually by (-253.40) Millions of US Dollars in 2011 – 2020).The regression coefficient of the Semi log linear model implies that the FDI inflow decrease at the compound growth rate (-9.5) per cent. The regression coefficients in the both model are insignificant. The value of adjusted R^2 is(0.35) in simple linear model and it is(0.26)semi log linear model .It means that the FDI inflow in to Afghanistan has registered very low linear trend in this period and among 32 per cent of variation in the depend variable are explained by independent variable.

4.6. Maldives:

The results of the trend analysis reveal that the FDI in to Maldives increase annually by 0.77 Millions of US Dollars in 1981 to 1990. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 44.80 per cent per year. The regression coefficient in the simple linear model is significant at five per cent level and semi log linear model is insignificant. The value of adjusted R^2 is 0.58 in simple linear model and it is 0.46 semi log linear model .It means that the FDI inflow in to Maldives has registered less linear trend in this period and among 58 per cent of variation in the depend variable are explained by independent variable.

The results of the trend analysis reveal that the FDI in to Maldives increase annually by 1.30 Millions of US Dollars in 1991 to 2000. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 12.7 per cent per year. The regression coefficient in the both model are significant at one per cent level. The value of adjusted R^2 is 0.65 in simple linear model and it is 0.81 semi log linear model .It means that the FDI inflow in to Maldives has registered less linear trend in this period and among 58 per cent of variation in the depend variable are explained by independent variable.

The results of the trend analysis reveal that the FDI in to Maldives increase annually by 22.45 Millions of US Dollars in 2001 to 20010. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 32.4 per cent per year. The regression coefficient in the both model are significant at one per cent level. The value of adjusted R^2 is 0.93 in simple linear model and it is 0.96 semi log linear model .It means that the FDI inflow in to Maldives has registered high linear trend in this period and among 94 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveals that the FDI in to Maldives increase annually by 36.53 Millions of US Dollars in 2011 to 2020. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 7.2 per cent per year. The regression coefficient in the both model are insignificant. The value of adjusted R^2 is 0.20 in simple linear model and it is 0.23 semi log linear model .It means that the FDI inflow in to Maldives has registered low linear trend in this period and among 29 per cent of variation in the depend variable are explained by independent variable.

4.7. Nepal:

The results of the trend analysis reveal that the FDI in to Nepal increased annually by 0.41 Millions of US Dollars in 1981 to 1990. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 16.2 per cent per year. The regression coefficient in the simple linear model is significant at five per cent level and semi log linear model is insignificant. The

value of adjusted R^2 is 0.38 in the simple linear model and it is -0.04 semi log linear model .It means that the FDI inflow in to Nepal has registered among linear trend in this period and 45 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveal that the FDI in to Nepal decreased annually by -0.06 Millions of US Dollars in 1991 to 2000. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 17.3 per cent per year. The regression coefficients in the both model are insignificant. The value of adjusted R^2 is -0.25 in the simple linear model and it is 0.01 semi log linear model .It means that the FDI inflow in to Nepal has registered did not linear trend in this period and 0 per cent of variation in the depend variable are explained by independent variable.

The results of the trend analysis reveal that the FDI in to Nepal increased annually by 5.51 Millions of US Dollars in 2001 to 2010. The regression coefficient of the Semi log linear model implies that the FDI inflow increased at the compound growth rate 18.5 per cent per year. The regression coefficients in the both models are insignificant. The value of adjusted R^2 is 0.25 in the simple linear model and it is -0.08 in the semi log linear model .It means that the FDI inflow in to Nepal has registered less linear trend in this period and 34 per cent of variation in the depend variable are explained by independent variable.

The results of the trend analysis reveal that the FDI in to Nepal increased annually by 8.89 Millions of US Dollars in 2011 to 2020. The regression coefficient of the Semi log linear model implies that the FDI inflow increased at the compound growth rate 8.3 per cent per year. The regression coefficients in the both models are insignificant. The value of adjusted R^2 is 0.15 in the simple linear model and it is 0.09 in the semi log linear model .It means that the FDI inflow in to Nepal has registered less linear trend in this period and 24 per cent of variation in the depend variable are explained by independent variable..

4.8. Pakistan:

The results of the trend analysis reveal that the FDI in to Pakistan increased annually by 18.32 Millions of US Dollars in 1981 to 1990. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 17.3 per cent per year. The regression coefficient in the both models is significant at five per cent level. The value of adjusted R^2 is 0.53 in the simple linear model and it is 0.46 semi log linear model .It means that the FDI inflow in to Pakistan has registered less linear trend in this period and among 58 per cent of variation in the depend variable are explained by independent variable.

The results of the trend analysis reveal that the FDI in to Pakistan increased annually by 10.78 Millions of US Dollars in 1991 to 2000. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 3 per cent per year. The regression coefficient in the both model is insignificant. The value of adjusted R^2 is -0.08 in the simple linear model and it is -0.05 semi log linear model .It means that the FDI inflow in to Pakistan has registered did not linear trend in this period and among 4 per cent of variation in the depend variable are explained by independent variable.

The results of the trend analysis reveal that the FDI in to Pakistan increased annually by 396.15 Millions of US Dollars in 2001 to 2010. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 27.10 per cent per year. The regression coefficient in the simple linear model is insignificant and semi log linear model is significant at five per cent level. The value of adjusted R^2 is 0.29 in the simple linear model and it is 0.53 semi log linear model .It means that the FDI inflow in to Pakistan has registered less linear trend in this period and among 37 per cent of variation in the depend variable are explained by independent variable.

The results of the trend analysis reveal that the FDI in to Pakistan increased annually by 135.94 Millions of US Dollars in 2011 to 2020. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 43.1 per cent per year. The regression coefficient in the simple linear model is significant at one per cent level and semi log linear model is insignificant at five per cent level. The value of adjusted R^2 is 0.47 in the simple linear model and it is 0.31 semi log linear model .It means that the FDI inflow in to Pakistan has registered less linear trend in this period and among 43.1 per cent of variation in the depend variable are explained by independent variable.

4.9. Sri-Lanka:

The results of the trend analysis reveal that the FDI in to Sri-Lanka decreased annually by -1.66 Millions of US Dollars in 1981 to 1990. The regression coefficient of the Semi log linear model implies that the FDI inflow decrease at the compound growth rate -4.80 per cent per year. The regression coefficient in the both model is insignificant. The value of adjusted R^2 is 0.01 in the simple linear model and it is 0.01 semi log linear model .It means that the FDI inflow in to Sri-Lanka has registered did not linear trend in this period and among 12 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveals that the FDI in to Sri-Lanka increased annually by 13.13 Millions of US Dollars in 1991 to 2000. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 9.3 per cent per year. The regression coefficient in the both model is insignificant. The value of adjusted R^2 is 0.04 in the simple linear model and it is 0.14 semi log linear model .It means that the FDI inflow in to Sri-Lanka has registered did not linear trend in this period and among 15 per cent of variation in the depend variable are explained by independent variable.

The result of the trend analysis reveals that the FDI in to Sri-Lanka increased annually by 55.53 Millions of US Dollars in 2001 to 2010. The regression coefficient of the Semi log linear model implies that the FDI inflow increase at the compound growth rate 20.8 per cent per year. The regression coefficient in the simple linear model is at five per cent level and semi log linear model is significant at one per cent level. The value of adjusted R^2 is 0.59 in the simple linear model and it is 0.71 semi log linear model .It means that the FDI inflow in to Sri-Lanka has registered more linear trend in this period and among 64 per cent of variation in the depend variable are explained by independent variable.

The results of the trend analysis reveal that the FDI in to Sri-Lanka decreased annually by -6.17 Millions of US Dollars in 2011 to 2020. The regression coefficient of the Semi log linear model implies that the FDI inflow decrease at the compound growth rate -3 per cent per year. The regression coefficient in the both model is insignificant. The value of adjusted R^2 is -0.12 in the simple linear model and it is -0.07 semi log linear model .It means that the FDI inflow in to Srilanka has registered did not linear trend in this period and among .03 per cent of variation in the depend variable are explained by independent variable.

Table - 4.1:.Results Of Trend Analysis For The Fdi Inflows Into Saarc Countries.

S.No	Country	Period	Model	a	b	S.E of b	Level of Significance	R^2	$\overline{R^2}$	Compound Growth Rate
1	Afghanistan	1981-1990	Simple Linear	8.26	-.004	.03	-	.01	-.49	
			Semi Log Linear	1673.22	-.85	.57	-	.52	.28	-132.7
		1991-2000	Simple Linear	-485.68	.24	.22	-	.14	.03	
			Semi Log Linear	-503.39	.25	.33	-	.16	-.12	28.7
		2001-2010	Simple Linear	-17225.33	8.65	10.85	-	.07	-.04	
			Semi Log Linear	-576.55	.29	.18	-	.25	.15	33.7
		2011-2020	Simple Linear	2732.97	-1.32	5.57	-	.007	-.12	
			Semi Log Linear	160.84	-.08	.08	-	.10	-.02	-7.5
2	Bangladesh	1981-1990	Simple Linear	464.70	-.23	.43	-	.04	-.09	

		Semi Log Linear	230.17	-.12	.14	-	.11	-.04	-11.30
		1991-2000	Simple Linear	-144607.57	72.59	15.00	**	.75	.71	
		Semi Log Linear	-1405.26	.71	.09	**	.88	.86	103.40
		2001-2010	Simple Linear	-143112.06	71.68	17.80	**	.67	.63	
		Semi Log Linear	-241.23	.12	.03	**	.73	.69	13.1
		2011-2020	Simple Linear	-443431.93	221.03	47.82	**	.73	.69	
		Semi Log Linear	-216.43	.11	.02	**	.82	.80	11.7
3	Bhutan	1981-1990	Simple Linear	-19.98	.01	.16	-	.001	-.33	
		Semi Log Linear	-205.26	.10	.32	-	.05	-.43	10.52
		1991-2000	Simple Linear	-4949.88	2.48	3.08	-	.08	-.05	
		Semi Log	-465.91	.23	.14	-	.30	.20	25.86

			Linear							
		2001-2010	Simple Linear	-4949.88	2.48	3.08	-	.08	-.05	
			Semi Log Linear	-465.91	.23	.14	-	.30	.20	25.86
		2011-2020	Simple Linear	10341.91	-5.13	2.14	*	.42	.35	
			Semi Log Linear	793.26	-.39	.07	**	.84	.81	-32.29
4	India	1981-1990	Simple Linear	-42982.89	21.71	6.52	*	.58	.53	
			Semi Log Linear	-458.94	.23	.11	-	.35	.27	26.0
		1991-2000	Simple Linear	-770260.56	386.93	70.37	**	.79	.77	
			Semi Log Linear	-742.41	.38	.07	**	.77	.74	46.1
		2001-2010	Simple Linear	-8402370.71	4198.87	956.14	**	.71	.67	
			Semi Log Linear	-534.72	.27	.05	**	.81	.79	30.7

No	Country	Period	Model							
		2011-2020	Simple Linear	-6331065.82	3161.45	710.81	**	.71	.68	
			Semi Log Linear	-145.15	.08	.018	**	.70	.66	8.3
5	Iran	1981-1990	Simple Linear	37509.37	-18.94	15.39	-	.16	.05	
			Semi Log Linear	-210.31	.11	.01	-	.98	.97	11.6
		1991-2000	Simple Linear	-10572.63	5.33	8.85	-	.04	-.08	
			Semi Log Linear	-370.19	.19	.21	-	-.02	1.87	21.0
		2001-2010	Simple Linear	-207685.40	104.84	103.97	-	.11	.002	
			Semi Log Linear	-177.54	.09	.07	-	.19	.09	9.5
		2011-2020	Simple Linear	513701.24	-253.40	125.39	-	.34	.26	
			Semi Log Linear	209.24	-.10	.04	*	.42	.35	-9.5
		1981-1990	Simple	-1518.28	.77	.21	*	.63	.58	

6	Maldives		Linear								
			Semi Log Linear	-725.14	.37	.15	-	.55	.46	44.8	
		1991-2000	Simple Linear	-2588.30	1.30	.31	**	.69	.65		
			Semi Log Linear	-228.07	.12	.02	**	.83	.81	12.7	
		2001-2010	Simple Linear	-44930.41	22.45	1.98	**	.94	.93		
			Semi Log Linear	-553.98	.28	.02	**	.97	.96	32.4	
		2011-2020	Simple Linear	-73175.09	36.53	20.10	-	.29	.20		
			Semi Log Linear	-140.45	.07	.04	-	.31	.23	7.2	
7	Nepal	1981-1990	Simple Linear	-804.24	.41	.16	*	.45	.38		
			Semi Log Linear	-289.66	.15	.16	-	.14	-.04	16.2	
		1991-2000	Simple Linear	133.89	-.06	1.51	=	.00	-.25		

No.	Country	Period	Model							
			Semi Log Linear	-325.38	.16	.16	=	.26	.01	17.3
		2001-2010	Simple Linear	-11039.07	5.51	2.74	-	.34	.25	
		2001-2010	Semi Log Linear	-329.33	.17	.21	-	.10	-.08	18.5
		2011-2020	Simple Linear	-17807.41	8.89	5.53	-	.24	.15	
		2011-2020	Semi Log Linear	-160.11	.08	.06	-	.19	.09	8.3
8	Pakistan	1981-1990	Simple Linear	-37259.50	18.82	5.64	*	.58	.53	
		1981-1990	Semi Log Linear	-310.99	.16	.05	*	.52	.46	17.3
		1991-2000	Simple Linear	-21039.20	10.78	18.99	-	.04	-.08	
		1991-2000	Semi Log Linear	-49.87	.03	.04	-	.06	-.05	3.0
		2001-2010	Simple Linear	-791997.71	396.15	181.67	*	.37	.29	
		2001-2010	Semi Log	-471.17	.24	.07	*	.58	.53	27.1

		Linear							
		Simple Linear	-272184.45	135.94	45.31	*	.53	.47	
	2011-2020	Semi Log Linear	-719.03	.36	.16	*	.39	.31	43.1
	1981-1990	Simple Linear	3330.62	-1.66	1.61	-	.12	.01	
		Semi Log Linear	95.41	-.05	.04	-	.12	.01	-4.8
	1991-2000	Simple Linear	-26037.78	13.13	11.16	-	.15	.04	
9	Sri-Lanka	Semi Log Linear	-169.06	0.09	0.06	-	0.23	0.14	9.3
	2001-2010	Simple Linear	-110992.80	55.53	14.89	**	.64	.59	
		Semi Log Linear	-374.56	.19	.04	**	.74	.71	20.8
	2011-2020	Simple Linear	13380.74	-6.17	39.02	-	.003	-.12	
		Semi Log Linear	61.12	-.03	.04	-	.05	-.07	-3.0

5. Conclusion:

The main findings of the study are summarized in this study on the basis of objectives of the research work. The analysis was done using 40 years data over the period from 1981 to 2020 depending on the availability of data.

The trend of FDI inflows into SAARC countries shows an increasing trend, with a significant growth rate of 15% in 2016, reaching $765 billion [1]. The SAARC region, comprising of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka, has seen a steady rise in FDI inflows, driven by factors such as economic growth, political stability and investment opportunities. The growth in FDI inflows has been driven by investments in key sectors such as infrastructure, manufacturing, IT and services. India, being the largest economy in the region, has been the largest recipient of FDI inflows, followed by Pakistan, Bangladesh and Sri Lanka. The trend is expected to continue, driven by the region's growing economic potential and investment opportunities.

FDI inflows into SAARC countries have shown a steady increase over the years, indicating growing investor confidence in the region. India remains the largest recipient of FDI inflows, followed by Pakistan, Bangladesh, and Sri Lanka. The growth in FDI inflows is driven by investments in key sectors such as infrastructure, manufacturing, IT, and services. The region's large market, economic growth, and investment opportunities are attracting foreign investors. However, challenges such as political instability, corruption, and inadequate infrastructure need to be addressed to sustain and accelerate FDI growth. Regional cooperation and economic integration initiatives, such as the SAARC Investment Area and the South Asia Economic Union, can help promote FDI inflows and economic growth in the region. Overall, the trend suggests that SAARC countries have the potential to attract significant FDI inflows, driving economic growth and development in the region.

Reference:

1. G.Jayachandran, N.Prasanna Priya, A.Thirumalai Selvi, A.Stella Nancy,"FDI Receiving companies trends in Tamil Nadu*" Asian Journal of Multidimensional Research (AJMR)"* UGC Approved Journal*, April 2018, vol.7, Issue 4,* (ISSN:2278-4853) (Impact Factor:SJIF 2017=4.443) is published on April 2018**.**

2. G. Jayachandran, A.Thirumalai Selvi and A. Stella Nancy, "Finance of FDI receiving companies in Tamil Nadu" ACADEMICIA: An International Multidisciplinary Research Journal, South Asian Academic Research Journals, 2018, pp:4-27. 10.5958/2249-7137.2018.00037.X.

3. G. Jayachandran , "The relationship between FDI, Economic growth and CO2 emission of SAARC countries: evidence from regression analysis" EPRA International Journal of Economic and Business Review, August 2017, pp:175-181.

4. Mohammed Yelwa, Okoroafor O.K.David1 and Awe, Emmanuel Omoniyi, "Analysis of the Relationship between Inflation, Unemployment and Economic Growth in Nigeria: 1987-2012" Applied Economics and Finance, Redfame Publish, August 2015, pp: 102-109.

5. Ayesha Sultan and Faiza Maqbool Shah "Impact of Inflation on Economic Growth in Pakistan" International Journal of Science and Research (IJSR), November 2015,   pp: 1091-1096.

6. Md. Shakhaowat Hossin, "The Relationship Between Inflation and Economic Growth of Bangladesh: An Empirical Analysis from 1961 to 2013" International Journal of Economics, Finance and Management Sciences, science publishing group, September 2015,   pp: 426-434, 10.11648/j.ijefm.20150305.13.

7. Hassan Abbas, Sabrin Beg, and M. Ali Choudhary, "Inflation Expectations and Economic Perceptions in a Developing Country Setting"

8. G. Jayachandran, "Trend analysis and relationship between Bombay stock exchange index number, foreign institutional investment and GDP in India" ACADEMICIA: An International Multidisciplinary Research Journal, South Asian Academic Research Journals, April 2015, pp: 1-18.

9. G.Jayachandran and G.Ayyanar "FDI, Exports and Imports: Trend Analysis for India and China" International Journal in Management and Social Science, December 2014, pp:176-213.

10. Lim Guech Heang and Pahlaj Moolio, "The Relationship between Gross Domestic Product and Foreign Direct Investment: The Case of Cambodia" KASBIT Business Journal, KASBIT Business Journal, December 2013, pp: :87-99.

11. Nadeem Iqbal, Naveed Ahmad, Zeeshan Haider, and Sonia Anwar "Impact of foreign direct investment (FDI) on GDP: A Case study from Pakistan" International Letters of Social and Humanistic Sciences, pp: 73-80, https://doi.org/10.18052/www.scipress.com/ILSHS.16.73.

12. Khalid Javed, Falak sher, Rehmat Ullah Awan, and Muhammad Ashfaq, "Foreign Direct Investment, Trade and Economic growth: A comparison of selected South Asian countries" International Journal of Humanities and Social Science, March 2012, pp 210-220.

13. G.Jayachandran and A. Seilan "A Causal Relationship between Trade, Foreign Direct Investment and Economic Growth for India" International Research Journal of Finance and Economics, EuroJournals Publishing, January 2010, pp 74-88