The Relationship between Foreign Direct Investment and Tourism Development: An analysis of Granger Causality

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ABSTRACT

Tourism is one of the most important export sectors in many developing countries. It not only increases foreign exchange income, but also creates employment opportunities, stimulates the growth of the tourism industry and as a result, contributes to overall economic growth. As there is a widely accepted belief that tourism plays a fundamental role for developing countries to achieve economic growth and development , tourism development has become an important target for most governments, especially in developing countries. Foreign Direct Investment (FDI) is an important source of capital for the development of the tourism sector in any country. The study investigated the causal relationship between foreign direct investment in tourism (FDIT) and the number of foreign tourist arrivals (TOUR) in Sri Lanka / Foreign Exchange Earnings from Tourism (FEE) using quarterly data for the period 2005:1 to 2013:4. The analysis reveals that the time series TOUR and FDIT/FEE and FDIT are not cointergrated. The VAR systems in first differences of the variables were used to investigate the causality between the variables. The results show that there is uni-directional relationship from FDIT to tourism and FDIT to FEE.

Keywords FDI, Tourism, Economic Development

JEL classification: F21, F31, F60, G28

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1. INTRODUCTION

FDI is defined as investment of assets from a foreign country to a host country. The flow of capital from the foreign country is invested in assets such as land business or construction of new facilities which is different from investing in the stock market of another country, as in times of economic uncertainty; the investments in stocks can be easily withdrawn. FDI

signifies a more lasting relationship between the foreign country and the host country as new facilities land and buildings cannot be easily abandoned or removed. Hence FDI is considered as a better source of financing for the tourism sector.

Although agriculture and production were considered as the most significant sources for generating jobs and income from the export of products or promoting development in rural areas, many countries, now consider tourism as an important factor for socio-economic development. Tourism is a collection of activities that provide similar and unique goods and services such as transport, accommodation, food and beverages, entertainment and cultural activities, sports and recreation.

Construction, agriculture, telecommunications, financial services, health services and other services such as electricity, water, sewage, security and operation of law are activities which affect the production as well as consumption of tourism. These can be converted into opportunities for investment and employment. Tourism has many sectors, which can make a high contribution to the socio-economic development of developing countries. Investments can be in any of these areas and can be carried out by various companies, domestic or international. New opportunities in employment can be created for semiskilled staff, particularly women, which mean the development of tourism in developing countries results in positive effects that promote economic growth, while reducing unemployment and poverty [1]. Pioneering studies have highlighted its potential effects in promoting growth, creating jobs and generating revenue for the government [2] (Lea, 1988; Sinclair, 1998).

However, tourism is an industry that requires capital, infrastructure, knowledge and access to global marketing and distribution chains. Hence, access to financial resources is significantly important for achieving tourism development and economic growth. FDI would play an important role in developing the tourism industry, particularly in developing countries, by providing the required capital and infrastructure such as international airports, expressways, hotels and modern technologies which are the keystones to tourism development.

Hence, most governments in developing countries place the highest precedence on attracting FDI for further tourism arrivals and economic growth (Zhang and Chong, 1999; Andergassen and Candela, 2009) [3,4]. and, a causal relationship between FDI and tourist arrivals can be observed, with FDI improving the quantum and quality of service, then the international tourist arrival numbers increase (Selvanathan *et al.*, 2012) [5]. A further indirect link from FDI to tourism is through business tourists which creates a reverse causality that links tourism to FDI, ie. via entrepreneurs and managers from other countries who, while looking for opportunities to invest in a country as well as to promote and sustain business. However FDI in tourism is

still rather low – in both developed and developing countries – compared to the levels of FDI in other economic activities, including other services industries[6] (UNCTAD (2007))But it does not mean that tourism-related FDIs are not significant. FDI is definitely used as an important tool for expanding the tourism industry in developing countries. On the other hand, there is a causal relationship between tourism and FDI in that tourists usually demand goods and services such as accommodation, food, transportation facilities and entertainment in the host country. In most developing countries, to satisfy this increasing demand, the current level of production needs to increase. Since there is a shortage of facilities and infrastructure in developing countries, FDI is considered an effective channel for transferring the trade, knowledge and technologies leading to economic growth. Thus, governments prefer to attract further FDI to expand domestic products.

The nature of FDI involvement is diverse. It is wrong to assume that the relationship is bi-lateral, that the relationship is just between the foreign and host countries. It is better to think about the relationship as a web that spans several countries. Understanding the causality helps in formulating appropriate economic policies.

If there is clear-cut unidirectional causality from tourism growth to FDI, then making strides in tourism growth must be prioritized. If the outcome shows the opposite direction of causality, then every effort should be made for overall tourism-related FDI as this, in turn, will result in the expansion of the tourism industry. If there is no causal relationship between tourism growth and FDI, then there is no feedback effect between each other. Finally, if the relationship is bidirectional, and tourism and FDI have a reciprocal causal relationship, then major initiatives in both areas would benefit both. Hence the objective of this study is set as the study of causality between FDI and tourism for Sri Lanka.

2. BACKGROUND OF THE TOURISM SECTOR IN SRI LANKA

Sri Lanka has always been an ideal destination of transit and visit for the merchants who travelled to the east for trade. The significance of the tourism sector to the Sri Lankan economy can be seen from the development plan "Mahinda Chinthana" in 2005/2010[7] which pledged the necessity of developing tourism in the country. Developing the city of Colombo as a clean and modern place for exclusive shopping and developing other selected coastal areas and historical places and sites of tourist attraction are emphasized and extensive investment is planned for attaining this objective, which would exceed the level of domestic savings of the country.

The Tourism Act No 38 of 2005 came into effect in October 2007. The Act provided for the

setting up of the Sri Lanka Tourism Development Authority (SLTDA) with the objective of developing Sri Lanka as a tourist and travel destination. Tourism has been a significant foreign exchange earner for Sri Lanka. It has been experiencing an impressive growth both in terms of tourist arrivals and in foreign exchange revenues after the restoration of peace and normalcy in the country in 2009. Tourist arrivals reached one million in 2012, an increase of 17% over 2011. On average tourist arrivals have increased by5% during the past ten years. Foreign exchange earnings exceeded US$ 1 billion, an increase of 16% over 2011. Foreign exchange earnings from tourism have increased on average around 8.5 % during the period, 2005 to 2013.This has increased to an average of 13.5 % after 2009.The SLTDA's target is to grow and achieve Tourism revenues from total annual tourism revenues of Rs.42, 585 million in 2006 to Rs.327 million in 2016.

Contribution of the Tourism sector to the real GDP during the last ten years has increased by 35 % on average and it has increased to 40% since 2009. Total FDI inflows to Sri Lanka has grown at an average of 6 % and shows an increase in the growth rate to 7.4% after 2009, while FDI to the tourism sector has indicated considerable increase with FDI on tourism sector in 2011 being US$ millions 215,605. The proportion of FDI in the tourism sector as a percentage of the total FDI receipts has been gradually increasing reaching a 7.5% rate in 2011.

The Board of Investment (BOI)Sri Lanka is the institution entrusted with the responsibility of attracting Foreign Direct Investments (FDI) to the country. It has been executing this strategy, by attracting top rank tourism and hotel investors. BOI has identified key sectors for FDI, namely, Hotels / Resorts / Villas ,Higher-end restaurants, Leisure / Entertainment and Theme Parks, Tourist transport: Domestic and International Sea & Air transport , Meeting Incentive Convention and Exhibition: MICE, Domestic and International Air transport / Water-based transport, Skill Development: Hotel / Hospitality Training Institutes and some ancillary areas such as Convention and Exhibition Centers' ,Entertainment Complex / Tourist Shopping Complex, Water Sports / Golf Course / Race Course / Angling, Spa & Wellness Centers ,Yacht Marina, Eco-Lodges, Camping, Whale & Dolphin Watching and Coastal Ferry Service & Cruise Lines and the like[8][9].

Sri Lanka government has identified some key areas for tourism development and is promoting them for hotel and resort projects. These destinations are Kuchchaveli in Trincomalee district on the north-eastern coast, Passikudah on the east coast, Kalpitiya on the north western coast consisting of 14 different islands, and Dedduwa near the river Madhu Ganga located close to Bentota on the south western coast.[7]

The government has taken steps to develop major infrastructure projects such as expressways,

airports and seaports. First ever expressway from the capital Colombo to the southern hub of Galle was opened in November 2011. The Colombo Katunayake Expressway connecting to the international airport was completed in 2013. Furthermore plans for highways from Katunayake to Anuradhapura in the Cultural Triangle, Colombo to the hill capital Kandy and from Anuradhapura to Jaffna at the northern tip of the country are being finalized. A second international airport at Mattala was opened in the southern Hambantota district. The existing airport in Katunayake is being developed, with the addition of a passenger terminal and expanded cargo handling facilities. Domestic airline services are also being developed. Sri Lankan Airlines has commenced seaplane operations connecting Colombo to 12 destinations

In a " Lonely Planet" article on Sri Lanka in 2013, it was said that "Sri Lanka offers culture, nature, agro, community, religious and spiritual attractions such as Endless beaches, timeless ruins, welcoming people, oodles of elephants, killer surf, cheap prices, fun trains famous tea, and flavorful food are an experience that will fascinate any traveler."As a very high interest among global travelers' is observed, there is a very strong opportunity for investment in this sector [10]

3. THE DATA

Time series analysis is carried out to investigate the possibility of two-way causality between FDI on tourism and tourism. Quarterly Data on foreign direct investment on Tourism (FDIT) and the number of foreign tourist arrivals (TOUR) and Foreign Exchange Earnings on Tourism (FEE) for the period 2005:1 to 2013:4 is utilized in this study. The restriction of the sample to 36 observations is due to non availability of data.

This study is based on secondary data obtained from the statistics maintained by the Board of Investment – Sri Lanka and Sri Lanka Tourism Development Authority. Various issues of the Annual Reports/ Monthly Bulletin published by the Central bank of Sri Lanka [8,9,11]

4. A PRELIMINARY DATA ANALYSIS

TABLE 1 CORRELATION BETWEEN VARIABLES FDIT, FEE AND TOUR

	FDIT	FEE	TOUR
FDIT	1.00	0.27	0.30
FEE	0.27	1.00	0.97
TOUR	0.30	0.97	1.00

According to the calculations strong correlation between FEE and TOUR is observed, though

correlation between FDIT with FEE and TOUR are not strong.

Unit Root Test: To investigate whether the time series data contain unit root or not, Augmented Dickey-Fuller (ADF) [12] and Phillips-Perron (PP) [13] unit root tests which are generally used in most researches will be used here.

This study starts with investigating whether the time series data contain unit root or not. If they do, they are non-stationary. If time series data are not stationary, the results may contain a "spurious regression problem" [14] which has a high R squared and t-statistics that appear to be significant, but the results do not have any economic significance [15] If the data have unit roots, then all the usual regression results might be misleading and incorrect [16] A regression of variables should never be carried out if they contain unit root [16] It is required to verify for stationarity before examining the correlations among series to avoid the problem of the spurious regression. A number of tests are proposed to assess whether the data series contains unit root or not. The Augmented Dickey-Fuller (ADF) [12] and Phillips-Perron (PP) [13] unit root tests are generally used by many researchers. According to Greene [17] the hypothesis to be examined with unit root test is as follows:

H0: There is a unit root (data series are non-stationary)

H1: There is no unit root (data series are stationary)

The unit root hypothesis for non-stationarity was checked using ADF test which both depend on the structure of model (with or without trend and drift). If the H0 is accepted, the series contain unit root and are non-stationary. Converting non-stationary data to a stationary one could be done by taking difference of the data from the first lag. If a series in level form is non-stationary and its first difference is stationary, this series has integration order of 1, I (1), the difference would be I (0). The integration order informs how many times the data need to be differenced to become stationary. Once the data are differenced, and become stationary, the data are ready to proceed with regression analysis. By observing the pattern of data it was decided that both trend and drift must be considered in this calculation.

TABLE 2. UNIT ROOT USING ADF/PP LEVEL/TREND AND DRIFT

	Level/Trend and Drift	1st Difference
FDIT		
ADF Stat/PP	-1.708063/-2.153038	-3.782303/-3.759489
Critical value at 10%	-3.204699/-3.207094	-3.207094/-3.207094
FEE		
ADF Stat/PP	0.008004/0.046936	-2.260687/-13.56550
Critical value at 10%	-3.204699/-3.215267	-3.225334/-3.207094
TOUR		
ADF Stat/PP	-1.159452/-1.950725	-3.288999/-10.95016
Critical value at 10%	-3.215267/-3.204699	-3.215267/-3.207094

Source: author's calculations

The statistics FDIT, FEE and TOUR demonstrate stationary feature at first difference which were non stationary at level order.

Optimal Lag Length Test: The number of lagged terms is chosen to ensure that the errors are uncorrelated. To determine the suitable optimal lag length, two most popular methods are the Akaike's information criterion (AIC) [18], and Schwarz information criterion (SC) [19] for Vector Auto regression (VAR). By choosing optimal lag length of explanatory variables based on data, the explanatory variables with appropriate lag length in the model will cover all the related information and better explain the endogenous variable

Table 3 Lag order Selection Criteria

VAR Lag Order Selection Criteria						
Endogenous variables: FDIT TOUR FEE						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-910.4076	NA	1.25e+21	57.08797	57.22539	57.13352
1	-852.1871	101.8859	5.77e+19	54.01169	54.56135	54.19389
2	-834.9126	26.99148	3.50e+19	53.49454	54.45642	53.81337
3	-819.0210	21.85095	2.38e+19	53.06381	54.43794	53.51929
4	-800.9148	21.50107*	1.46e+19*	52.49467*	54.28104*	53.08680*
* indicates lag order selected by the criterion						
LR: sequential modified LR test statistic (each test at 5% level)						
FPE: Final prediction error						
AIC: Akaike information criterion						
SC: Schwarz information criterion						
HQ: Hannan-Quinn information criterion						

Source: authors calculations

In order to determine the suitable optimal lag length: the Akaike's information criterion (AIC), Schwarz information criterion (SC), log-likelihood ratio test (LR) Criterion, and the Hannan-Quinn information criterion (HQ) are being used. However, most popular methods are AIC and SC. VAR or VECM with the optimal lag length will make the estimated model have higher explanatory power than using the other lag lengths. The smallest AIC / SC can be applied for choosing the most efficient and accurate optimal lag length. In the Table 3 above it is observed that the AIC, SC, LR and HQ suggest a lag length of 4 .Hence this study determines and uses a lag length of 4 in estimating the VAR or VECM.

Co-integration Test: Co-integration implies that causality exists between the two variables, but it does not indicate the direction of the causal relationship. This paper applies multivariate co-integration approach to examine whether GDP, FDI and Tourist Arrivals have long run equilibrium interaction. If the series do not have co-integration and no long run equilibrium

relation among time series, VAR model will be applied to measure Granger causality effect. In contrast, if there is equilibrium interrelation among the time series, VECM is used to examine Granger causality.

TABLE 4 COINTEGRATION TEST FOR FDIT AND FEE/TOUR

Series: FDIT FEE				
Lags interval (in first differences): 1 to 4				
Unrestricted Cointegration Rank Test (Trace)				
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.334862	13.08688	15.49471	0.1117
At most 1	0.014293	0.446288	3.841466	0.5041
Trace test indicates no cointegration at the 0.05 level				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.334862	12.64059	14.26460	0.0888
At most 1	0.014293	0.446288	3.841466	0.5041
Max-eigenvalue test indicates no cointegration at the 0.05 level				
Series: FDIT TOUR				
Lags interval (in first differences): 1 to 4				
Unrestricted Cointegration Rank Test (Trace)				
None	0.363839	14.05725	15.49471	0.0814
At most 1	0.001155	0.035840	3.841466	0.8498
Trace test indicates no cointegration at the 0.05 level				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.363839	14.02141	14.26460	0.0546
At most 1	0.001155	0.035840	3.841466	0.8498
Max-eigenvalue test indicates no cointegration at the 0.05 level				

Table 4 depicts the co-integration test carried out in order to assess whether there is long run association among the variables FDIT, and FEE / TOUR. The test results indicate that there is no co-integration among the three variables which means that there is no long run association between the variables and that in turn enabled the estimation of VAR model instead of a VECM model.

Granger Causality: Can be used to verify whether one time series is capable of forecasting another. An underlying assumption of Granger causality is that a variable A Granger causes B if B can be better predicted using the histories of both A and B than it can use the history of B

alone. Engle and Granger (1987)[20] explained that if co-integration exists between two variables in the long run, and then there must be either unidirectional or bi-directional Granger Causality between these two variables. As mentioned earlier, if they have one unit root and are co integrated, then the bivariate VECM is specified and estimated. The Granger causality test is then conducted in the context of the VECM. If the two series have one unit root and are not co integrated, then the bivariate VAR is specified and estimated. However, in this study, only short run causal relationship was detected, hence, VECM will not be estimated. This analysis will reveal whether there is causality relationship between FDIT and FEE /TOUR or no causality between these variables for Sri Lanka. Findings of this study would convey empirical implications.

5. TESTING FOR GRANGER CAUSALITY

Taking FDIT and TOUR into analysis, it was found that both series TOUR and FDIT are not co integrated. Therefore they have no long term relationship. They may nonetheless be related in the short-run. Their short-run fluctuation can be described by their first-differences, which are stationary. The interactions in the short-run fluctuations may therefore be described by a VAR system in first differences.

$$\Delta TOUR_t = \alpha_{01} + \alpha_{11}\Delta TOUR_{t-1} + \alpha_{21}\Delta TOUR_{t-2} + \alpha_{31}\Delta TOUR_{t-3} + \alpha_{41}\Delta TOUR_{t-4} + \alpha_{11}\Delta FDIT_{t-1} + \alpha_{21}\Delta FDIT_{t-2} + \alpha_{31}\Delta FDIT_{t-3} + \alpha_{41}\Delta FDIT_{t-4} + u_{1t} \text{ ---EQ1}$$

$$\Delta FDIT_t = \alpha_{02} + \alpha_{12}\Delta TOUR_{t-1} + \alpha_{22}\Delta TOUR_{t-2} + \alpha_{32}\Delta TOUR_{t-3} + \alpha_{42}\Delta TOUR_{t-4} + \alpha_{12}\Delta FDIT_{t-1} + \alpha_{22}\Delta FDIT_{t-2} + \alpha_{32}\Delta FDIT_{t-3} + \alpha_{42}\Delta FDIT_{t-4} + u_{2t} \text{ ---EQ2}$$

In equation (EQ1) the null hypothesis to test "non-causality" that "FDI does not cause TOUR" (H_0:FDI$\neq$>TOUR) is that: H_0: $\alpha_{11} = \alpha_{21} = \alpha_{31} = \alpha_{41} = 0$

Rejection of the null hypothesis means that FDI causes TOUR in the Granger sense.

Similarly in equation (EQ2) the null hypothesis to test "non causality" that "TOUR does not cause FDI" (H_0: TOUR$\neq$>FDI) is that H_0: $\alpha_{12} = \alpha_{22} = \alpha_{32} = \alpha_{42} = 0$

The optimal lag length for the VAR system was determined by using the Schwarz Criterion (SC) [19] and the Akaike Information Criterion (AIC) [18]. As Table 3 indicates the optimal lag lengths for both the FDIT and TOUR series is 4 lags. Therefore the final system to be used is a VAR (4). Table 5 and Table 6 indicate the results of the Granger Causality Test

Table 5. VAR Granger Causality/Block Exogeneity Wald Tests

Dependent variable: FDIT

Excluded	Chi-sq	df	Prob.
TOUR	2.017727	4	0.7325

Dependent variable: TOUR

Excluded	Chi-sq	df	Prob.
FDIT	12.35542	4	0.0149

Rejection of the null hypotheses means that TOUR causes FDIT. The rejection of null hypotheses in both the tests implies a bi-directional causality in the Granger sense and the acceptance of either one only indicates a uni-directional causality.

Table 5 presents the results for causality between TOUR and FDIT. Row 1 shows the outcome for testing of H0: TOUR≠>FDIT, for which the p-value.73. and the null hypothesisH0: "TOUR does not cause FDIT" is not rejected. As shown from row 2 of the Table, for testing the null hypothesis, H0: FDIT≠>TOUR, the p-value is 0.04, and the null hypothesis that FDIT does not cause TOUR" is rejected. Hence a uni -directional causality is observed from FDIT to TOUR.

Consequently, Foreign Exchange Earnings from Tourism (FEE) was utilized in place of tourist arrivals, and similar tests were carried out for which the results are presented in Table 6.From the analysis, it was also found that both series FEE and FDIT are not co integrated. Therefore they have no long term relationship. They may nonetheless be related in the short-run. Their short-run fluctuation can be described by their first-differences, which are stationary. The interactions in the short-run fluctuations may therefore be described by a VAR system in first differences. Similar to the earlier case it was found that the optimal lag lengths for both the FDIT and FEE series also to be 4 lags. Therefore a VAR (4) system is used.

$$\Delta FEE_t = \alpha_{01} + \alpha_{11}\Delta FEE_{t-1} + \alpha_{21}\Delta FEE_{t-2} + \alpha_{31}\Delta FEE_{t-3} + \alpha_{41}\Delta FEE_{t-4} + \alpha_{11}\Delta FDIT_{t-1} + \alpha_{21}\Delta FDIT_{t-2} + A_{31}\Delta FDIT_{t-3} + \alpha_{41}\Delta FDIT_{t-4} + u_{1t} \text{ -----EQ3}$$

$$\Delta FDIT_t = \alpha_{02} + \alpha_{12}\Delta FEE_{t-1} + \alpha_{22}\Delta FEE_{t-2} + \alpha_{32}\Delta FEE_{t-3} + \alpha_{42}\Delta FEE_{t-4} + \alpha_{12}\Delta FDIT_{t-1} + \alpha_{22}\Delta FDIT_{t-2} + \alpha_{32}\Delta FDIT_{t-3} + \alpha_{42}\Delta FDIT_{t-4} + u_{2t} \text{ -----EQ4}$$

In equation (EQ3) the null hypothesis to test "non-causality" that "FDI does not cause FEE" (H_0:FDI≠>FEE) is that: H_0: $\alpha_{11} = \alpha_{21} = \alpha_{31} = \alpha_{41} = 0$

Rejection of the null hypothesis means that FDIT causes FEE in the Granger sense.

Similarly in equation (EQ4) the null hypothesis to test "non causality" that "FEE does not cause FDIT" (H_0: FEE≠>FDI) is that H_0: $\alpha_{12} = \alpha_{22} = \alpha_{32} = \alpha_{42} = 0$

Table 6. VAR Granger Causality/Block Exogeneity Wald Tests

Dependent variable: FDIT

Excluded	Chi-sq	df	Prob.
FEE	2.131176	4	0.7116

Dependent variable: FEE

Excluded	Chi-sq	df	Prob.
FDIT	10.48138	4	0.0331

Rejection of the null hypotheses means that FEE causes FDIT. The rejection of null hypotheses in both the tests implies a bi-directional causality in the Granger sense and the acceptance of either one only indicates a uni-directional causality.

As shown in row 1 Table 6 for the testing of hypothesis H0: FEE≠>FDI, the p-value is .71, and the null hypothesis H_0: FEE does not cause FDI" is not rejected. As shown in row 2 of the Table, for testing the null hypothesis, H_0: FDIT≠>FEE, the p-value is 0.03, and the null hypothesis that "FDIT does not cause FEE" is rejected. Hence a uni-directional causality is observed from FDIT to FEE.

6. LIMITATIONS OF STUDY

FDIT was defined as FDI received on" Hotels and Restaurants". However, FDI inflow under other categories would have had a direct influence on Tourism which was not incorporated under the definition of FDIT.

The data set utilized in this study consisted of 36 observations of quarterly data on FDIT, in US$ millions, number of tourist arrivals (TOUR) and Foreign Exchange Earnings from Tourism(FEE) from 2005:1 to 2013:4. This was mainly due to the non-availability of quarterly data on FDIT for the period earlier than 2005. Although annual data on FDI in general was available from 1978, utilizing annual time series was prevented due to the non availability of FDI on Tourism sector. This constraint on data

availability prevented carrying out the study for a longer period of time and utilizing annual data in order to confirm the outcome of the quarterly data analysis. The conclusions presented in the ensuing section are subject to the limitations stated.

7. CONCLUSIONS

In this study the causal relationship between Foreign Direct Investment in Tourism (FDIT) and the number of foreign tourist arrivals (TOUR) and Foreign Direct Investment in Tourism and Foreign Exchange Earnings from Tourism (FEE) in Sri Lanka was investigated. Quarterly data for the period 2005:1 to 2013:4 were utilized. For this investigation various time series econometric techniques such as unit root test, co integration and causality were utilized. The analysis revealed that the two time series TOUR and FDI, FEE and FDIT are both not co-integrated. The VAR systems in first-difference of the variables were used to investigate the causality between TOUR and FDIT and FEE and FDIT.

The results show that there is uni-directional causal relationship from FDIT to TOUR and FDIT to FEE. That is FDIT has a causal effect on the number of foreign tourist arrivals and Foreign Exchange Earnings in Sri Lanka. As pointed out in the introduction, FDIT plays a significant role in expanding the tourism sector in Sri Lanka. This shows that an integrated policy (Tourism and FDI) by joint contribution of the BOI and SLTDA must be formulated to explore tourism resources and to develop new tourist venues and facilities on one side and to promote FDI to the country on the other.

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