

# The Dynamic Linkage between Corruption Index and Foreign Direct Investment: The Case of Developed and Developing Countries

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## ABSTRACT

*In today's competitive business world, attracting foreign investment and creating investors friendly environment is highly important. MNCs invest in countries where they have the best economies of scale. Corruption is one of the factors deterring FDI from a country. The study has been undertaken to analyse the impact of corruption on the foreign direct investment of developed countries and developing countries. The study used correlation, regression and granger causality test to analyse the relationship. The study found high positive correlation between FDI and CPI for developing countries. The study observed low negative and positive correlation between FDI and CPI for developed countries. Further the study found uni directional causality from corruption index to FDI of India. The respective government can take stringent policies and regulations to curb corruption in order to attract more and more FDI.*

**Keywords:** *Corruption, Foreign Direct Investment, Developed and Developing Countries and Granger Causality Test.*

## Introduction:

Foreign Direct Investment (FDI) can be said as an investment by a resident of one country in another country. FDI can be used to measure the level of direct investment by foreign investors in a country. FDI inflow plays a major role in growth of the host country. FDI can generate foreign capital, foreign exchange, facilitate transfer of technology and knowledge, increase the scope of business to the global level, create modern day jobs, etc. In early 1980s, developing countries saw many benefits of FDI and opened up their markets to the global investors. FDI can be done by acquiring a company in the host country or by expanding business of the existing company into the host country. An investor or a firm goes for investing in other economies because their resident country's economy is not growing anymore, i.e. in case of developed countries where the growth of the economy is stagnant or slow growing. It gives the investors better opportunity and higher returns. Major advantage of FDI for the host country is that when the

resources and domestic investments are limited, the economies developed faster by attracting FDI. Therefore, there is a direct positive relation between FDI and economic growth. There are many factors which attract FDI in a country, such as gross domestic product (GDP), economic growth, market size, per capita income, consumer spending, exchange rate, inflation rate, unemployment and interest rate. Apart from these common factors, corruption level of the host country plays one of most important role in attracting FDI. Corruption is there in all the countries in one form or the other i.e. a student cheating in an exam, a policeman taking bribes or a politician using the public's money for his own private gains. Corruption deters the foreign direct investment into a country by changing the perception towards investing in foreign countries (Udenze, 2014). Corruption can increase the cost of FDI by being a cost for the company when the companies have to pay bribes to the government officials and agencies to get there work done. And paying bribe being a criminal offense keeps the companies at risk of being

caught and losing their goodwill and may face other criminal charges. Corruption becomes a factor for deciding whether to invest in a country or not because of the uncertainty of receiving the benefit for which they have paid for because there is no law regulating corruption in a country. FDI helps a country grow and develop. Corruption affects FDI in a country. Therefore corruption affects a growth rate of a country and its development. Multinational companies avoid countries with high level of corruption as it is a loss for them. Higher the corruption of the country, higher the cost of setting up, which means more expenses for the MNC (Azam and Ahmad, 2013). In most of the cases corruption negatively affects FDI inflow in a country. But in few countries corruption may have a positive relation with FDI inflow. Corruption may have a negative or positive impact on FDI inflow in a country depending upon the country's structure and culture (Prasad, 2015). Corruption has a negative impact on the FDI inflow of a country and this in turn affects the economic growth as foreign direct investment is a source of employment and economic development. Foreign direct investment for a host country is a boon as it helps the country receive more capital and latest technology and optimum usage of the idle resources in the host country. FDI provides more employment, capital resources, latest technology, economic growth, economic development etc. Corruption indirectly affects these factors by negatively impacting FDI inflow in a country.

#### Literature Review:

Many researchers have found relationship between corruption and foreign direct investment. Gasanova et al (2017) identified that corruption influences the investment attractiveness of a country. Bayar and Alakbarov (2016) found that in a few countries corruption had a negative effect on FDI and while in some countries corruption had a positive impact on FDI. Ertimi et al (2016) concluded that corruption has a negative impact on the economic growth of a country. Hintsova et al (2016) found that better business environment ratings by different agencies leads to higher FDI volume and higher CPI level of a country leads to low FDI inflow. Ofori et al (2015) identified that corruption in Ghana not only reduced or decreased the flow of FDI but it also had a negative effect on SMEs growth and development. Hossain (2015) found out that corruption has a negative effect on the FDI of a country and decrease of 1% in corruption can lead to about 8.15% in FDI inflow. Ravi (2015) concluded that corruption negatively impacts FDI inflow in India, whereas in China corruption has a positive effect on FDI inflow. Quazi (2014) identified that corruption has a negative effect on the FDI inflow and in turn affects the economic condition of an economy by reducing the economic growth. Onyinye (2014) found out that corruption negatively affects the foreign direct investment flow in a developing country and negatively

affects the GDP of the country. Tosun et al (2014) concluded that corruption has a negative impact on foreign direct investment inflow in Turkey and does not act as a 'helping hand' as for some countries. Chande (2014) found in his study that corruption has a negative effect on foreign direct investment inflow in few African countries and in few African countries it has a positive impact. Godinez J and Liu L (2014) identified that there is a negative correlation between FDI and corruption distance when host country has lower corruption than home country and vice versa. Azam and Ahmad (2013) concluded that corruption has a negative impact on FDI inflow and that lower corruption levels in a country attract MNCs to invest in the country. Erhieyovwe (2013) found out that high corruption in Nigeria depreciated the Nigerian currency in respect to other countries and reduction in corruption will help the currency appreciate. Ferreira et al (2013) identified that one unit increase in corruption in host country leads to 21% decrease in FDI inflow and high level of corruption in host country leads to low FDI outflow. Amarandei (2013) found a significant negative relationship between corruption and foreign direct investment. Alemu (2012) identified that corruption can have a positive effect as well as negative impact on an economy and 1% decrease in corruption can increase FDI by 3.5%. Evan and Bolotov (2011) evaluated that CPI is a constant variable, relationship between corruption and FDI stock is weak and that changes in FDI do not cause changes in corruption. Akinlabi et al (2011) showed that corruption has a negative impact on FDI of a country and this reduces economic growth as FDI is source of economic development and employment. Tokunova (2011) concluded that CPI level in a developed country has a positive impact on FDI in terms of investment attractiveness and in developing country it has a negative impact. Zurawicki and Habib (2010) found out that corruption has an adverse effect on economic growth and investment and while in few countries it has a positive effect based on the economy type. Dong and Torgler (2010) evaluated that corruption in China had a positive and a negative effect on the economic growth and development. Javorcik and Wei (2009) identified that corruption makes local bureaucracy less transparent and increases cost of setting up and corruption also affects the decision of joint venture with a local partner. Ohlsson (2007) concluded that corruption has a significantly negative impact on foreign direct investment on developed, developing and transition countries. W. Ketkar et al (2005) identified that corruption in a country negatively affects the FDI inflow in a country and source of income for the government.

#### Objectives:

1. To analyze the impact of corruption Index on the FDI of the developed and developing countries
2. To analyze the Granger Causality between CPI and FDI of developed and developing countries

**Hypothesis:**

**H<sub>0a</sub>**- There is no impact of corruption Index on the FDI of the developed and developing countries

**H<sub>0b</sub>**- There is no Causality between CPI and FDI of developed and developing countries

**Methodology:**

**Data:** The study used annual Corruption Perception Index and FDI of developed and developing countries.

**Source of Data:** The study collected Corruption Perception Index from International Transparency's website and FDI of each country from UNCTAD (United Nations Conference on Trade and Development).

**Period of the study:** The data collected for the period of 21 years from 1996-2016.

**Analytical Tools:** The study used correlation, regression analysis and Granger causality to analyse the relationship between Corruption index and FDI.

Correlation studies the strength of the relationship between two or more variables. The present study aims to measure the relationship between corruption in selected developed and developing countries and foreign direct investment inflows in developed and developing countries.

Regression is a set of statistical processes for estimating the relationships among variables. In this study we will study to analyse the effect of corruption on foreign direct investment in selected developed and developing countries.

$FDI = \beta_0 + \beta_1$  (Corruption index)

**Selection of Countries**

The study selected few developed and developing countries based on the highest GDP. Following is the list of countries selected for this study:

- A. Developed Countries- USA, Japan, Germany, United Kingdom, France, Canada, South Korea, Australia and Netherlands,
- B. Developing Countries-China, India, Brazil, Russia, Turkey and Thailand

The study considered FDI as The dependent variable and FDI inflow as independent variable

**Findings and Discussions:**

Table (1) and table (3) clearly shows the descriptive statistics of CPI and FDI of developing countries respectively. Further table 2 (a&b) and table 4 (a&b) shows CPI and FDI of descriptive statistics of developed countries respectively.

Table (5) clearly shows all the developed countries CPI values are non-stationary at level but stationary at first order difference except Germany CPI values which is stationary at level.

Table (6) clearly shows all the developed countries FDI values are stationary at level but except UK, and USA FDI values which are stationary at first order difference.

Table (7) clearly shows three developing countries CPI values are stationary at level and three developing countries (India, Thailand and Turkey) CPI values are stationary at first order difference.

Table (8) clearly shows all the developing countries FDI values are non-stationary at level but stationary at first order difference except Thailand FDI values which is stationary at level.

Table (9) shows and indicated that all the developed countries have a negative relationship between corruption and foreign direct investment except France, South Korea and United Kingdom for which it was found to have a positive relationship. A negative relationship means that an increase in corruption will lead to a decrease in the foreign direct investment. A positive relation means that a decrease in corruption will lead to increase in foreign direct investment.

Table (10) shows and indicated that all developing countries undertaken for the study have a positive correlation between corruption and foreign direct investment except for Russia for which it was found to have a negative relationship. Positive relationship means a decrease in corruption will lead to an increase in the foreign direct investment. More interestingly correlation results found high positive correlation between CPI and FDI for China and India.

Table (11) shows the regression results for developing countries. From the results we can conclude that there is no significant impact of corruption on foreign direct investment for all the selected developing countries.

Table (12) depicts the regression results for developed countries. The results found significant impact corruption index of South Korea on FDI (0.0388). Further, the study found no significant impact of corruption index on FDI for any other developed country.

Table (13) clearly indicates uni directional causality from FDI to CPI of Russia and CPI to FDI of India. Further there is no evident to supports the existence of uni or bi directional causality between respective CPI and FDI of developed countries.

Table (14) clearly indicates uni directional causality from FDI to CPI of France. Further there is no evident to supports the existence of uni or bi directional causality between respective CPI and FDI of developed countries.

**Conclusion:**

Investment is the paramount key for development and growth of any economy. The study was undertaken to find out the relationship and impact of corruption on foreign direct investment with respect to developed and developing countries. The study observed low negative and positive correlation between FDI and CPI for developed countries. Further the study found uni directional causality from corruption index of India to FDI of India. The respective government can take stringent policies and regulations to curb corruption in order to attract more and more FDI.

**Reference:**

- Ahmad, M. A. (2013). Effects of corruption on foreign direct investment inflow: Some empirical evidence from less developed countries. *Journal of Applied Sciences Research* .
- Akinlabi, A. O., Hamed, B., & A. M. (2011). Corruption, foreign direct investment and economic growth in Nigeria: An empirical investigation. *Journal of Research in International Business Management*, 1(9), 278-292.
- Alakbarov, Y. B. (2016). *Corruption and Foreign Direct Investment Inflows in Emerging Market Economies*. Ecoforum.
- Alemu, A. M. (2012). Effects of Corruption on FDI Inflow in Asian Economies. *Seoul Journal of Economics* , 387-412.
- Amarandei, C. M. (2013). Corruption and Foreign Direct Investment Evidence From Central And Eastern European States. *CES Working Papers*, 5(3).
- Aneta Bobenič Hintošová, Z. K. (2016). Does Quality of Business Environment Influence Foreign Direct Investment Inflow? A Case of Central European Countries. *Central European Journal Of Management* .
- Ayshah Gasanova, A. N. (2017). The Assessment of Corruption Impact on the Inflow of Foreign Direct Investment . *Applied Mathematics and Computer Science* .
- Azam, M., & Ahmad, S. A. (2013). Effects of corruption on foreign direct investment inflows: Some empirical evidence from less developed countries. *Journal of Applied Sciences Research*.
- Basem Elmukhtar Ertimi, A. d. (2016). The Impact of Corruption on Economic Growth in OIC Countries . *International Journal of Economics and Finance* , 91-103.
- Chande, K. A. (2014). *Africa Rising: Corruption & Foreign Direct Investment Inflows* . CMC Senior Theses.
- Daniel Ofori, S. A.-M. (2015). Corruption, Foreign Direct Investment and Growth in Ghana: An Empirical Analysis . *European Journal of Business and Management* .
- Habib, L. Z. (2010). Corruption And Foreign Direct Investment: What Have We Learned? . *International Business & Economics Research Journal* .
- Hossain, S. (2016). Foreign Direct Investment (FDI) and Corruption: Is it a major hindrance for encouraging inward FDI? *African Journal of Business Management*, 10(10), 256-269.
- Ketkar, K. W., Murtuza, A., & Ketkar, S. L. (2005). Impact of Corruption on Foreign Direct Investment and Tax Revenues. *Journal of Public Budgeting Accounting & Financial Management*, 17(3), 313-341.
- Kumar, S. P. (2015). Does Corruption in a Country Affect the Foreign Direct Investment? A Study of Rising Economic Super Powers China and India. *Open Journal of Social Sciences*, 3, 99-104.
- Kusum W. Ketkar, A. M. (2005). Impact Of Corruption On Foreign Direct. *J. Of Public Budgeting, Accounting & Financial Management*, 17(3), 313-341.
- L, G. a. (2015). Corruption Distance and FDI flows into Latin America. *International Business Review* , 33-42.
- M. Umur Toson, M. O. (2014). The Relationship Between Corruption and Foreign Direct Investment Inflows In Turkey: An Empirical Examination. *Transylvanian Review of Administrative Sciences* , 247-257.
- Manuel Portugal Ferreira, H. C. (2013). *How Corruption Matters on FDI Flows: Home and Host Country Effects* .
- Ohlsson, M. H. (2007). Impact of Corruption on FDI: A cross-country analysis. *Master thesis within Economics*.
- Onokero, E. K. (2013). Corruption, Foreign Direct Investment and its Impact on Exchange Rate of the Nigerian Economy . *Mediterranean Journal of Social Sciences* .
- Quazi, R. M. (2014). Corruption and Foreign Direct Investment in East Asia and South Asia: An Econometric Study. *International Journal of Economics and Financial Issues*, 4(2), 231-242.
- Tokunova, S. *A Comparative Study on the Effects of Corruption on FDI*. Master of Economics & Business, Economics of Management and Organization .
- Tomáš Evan, I. B. (2014). The Weak Relation Between Foreign Direct Investment and Corruption: A Theoretical and Econometric Study. *Prague Economic Papers* .
- Torgler, B. D. (2010). *The Consequences of Corruption: Evidence from China*. Centre for Research in Economics, Management and the Arts.
- Udenze, O. (2014). The Effect of Corruption on Foreign Direct Investments in Developing Countries. *The Park Place Economist*, 22(1).
- Wei, B. S.-J. (2009). Corruption and Cross-Border Investment in Emerging Markets: Firm-Level Evidence. *Journal of International Money and Finance* .

**Table 1: Descriptive Statistics of Corruption Index (CPI) of Developing Countries**

	CPI_BRAZIL	CPI_CHINA	CPI_INDIA	CPI_RUSSIA	CPI_THAI	CPI_TURKEY
Mean	3.815238	3.457619	3.175238	2.559524	3.423333	3.921429
Median	3.9	3.5	3.1	2.5	3.4	3.8
Maximum	4.3	4	4	3.8	3.8	5
Minimum	2.96	2.43	2.63	2.1	3	3.1
Std. Dev.	0.328506	0.357182	0.42688	0.391465	0.238649	0.576457
Skewness	-0.738897	-1.026919	0.387107	1.390927	0.080485	0.257936
Kurtosis	3.488056	4.723325	1.816695	5.755372	2.077666	1.956411
Jarque-Bera	2.119313	6.289587	1.749666	13.41444	0.767035	1.185803
Probability	0.346575	0.043076	0.416932	0.001222	0.68146	0.552721
Observations	21	21	21	21	21	21

(Researcher's own calculation)

**Table 2a: Descriptive Statistics of Corruption Index (CPI) of Developed Countries**

	CPI_AUSTRALIA	CPI_CANADA	CPI_FRANCE	CPI_GERMANY	CPI_JAPAN
Mean	8.53619	8.688571	6.924762	7.914286	7.153333
Median	8.7	8.7	6.9	7.9	7.3
Maximum	8.86	9.2	7.5	8.27	8
Minimum	7.9	8.1	6.3	7.3	5.8
Std. Dev.	0.308391	0.35601	0.277338	0.255099	0.566289
Skewness	-1.102019	-0.118639	0.083577	-0.843329	-0.937061
Kurtosis	2.811263	1.924681	3.190384	3.302852	3.298597
Jarque-Bera	4.281731	1.061036	0.056164	2.569468	3.151307
Probability	0.117553	0.5883	0.972309	0.276724	0.206872
Observations	21	21	21	21	21

(Researcher's own calculation)

**Table 2b: Descriptive Statistics of Corruption Index (CPI) of Developed Countries**

	CPI_NETHERLANDS	CPI_SOUTHKOREA	CPI_UK	CPI_USA
Mean	8.74	4.914762	8.207619	7.450952
Median	8.8	5.1	8.3	7.5
Maximum	9.03	5.6	8.7	7.8
Minimum	8.3	3.8	7.4	7.1
Std. Dev.	0.25743	0.596738	0.444229	0.191987
Skewness	-0.665078	-0.443814	-0.371351	-0.250685
Kurtosis	2.010889	1.699417	1.645543	2.285611
Jarque-Bera	2.404199	2.169475	2.087891	0.666508
Probability	0.300563	0.33799	0.352063	0.716588
Observations	21	21	21	21

(Researcher's own calculation)

**Table 3: Descriptive Statistics of Foreign Direct Investment (FDI) of Developing Countries**

	FDI_TURKEY	FDI_BRAZIL	FDI_CHINA	FDI_INDIA	FDI_RUSSIA	FDI_THAILAND
Mean	8913.559	39614.58	82890.86	19567.12	23169.44	6386.774
Median	9086	28855.61	72715	20327.76	15283.75	5699.719
Maximum	22047	96152.37	135610	47102.42	75855.7	15493.03
Minimum	722	10143.52	40318.71	2168	2579.321	1370.363
Std. Dev.	7445.96	26190.22	36027.42	16245.59	20951.07	3684.52
Skewness	0.2877	0.7484	0.1937	0.3347	0.8546	0.9977
Kurtosis	1.6871	2.2758	1.3962	1.5837	2.9680	3.7417
Jarque-Bera	1.7980	2.4194	2.3819	2.1475	2.5570	3.9651
Probability	0.4070	0.2983	0.3039	0.3417	0.2784	0.1377
Observations	21	21	21	21	21	21

(Researcher's own calculation)

**Table 4a: Descriptive Statistics of Foreign Direct Investment (FDI) of Developed Countries**

	FDI_AUSTRALIA	FDI_CANADA	FDI_FRANCE	FDI_GERMANY	FDI_JAPAN
Mean	25725.97	37823.02	26543.75	39944.26	6347.019
Median	26313.85	28400.44	27496.87	28181.12	6241.596
Maximum	59551.61	116820.6	63499.57	198279.3	24425.12
Minimum	-28293.89	-445.0354	-2573.58	-10192.18	-6505.844
Std. Dev.	22979.06	27146.56	15312.36	43589.1	7712.33
Skewness	-0.3122	1.1321	0.2853	2.3292	0.7380
Kurtosis	2.5541	4.4232	3.2845	9.3736	3.2990
Jarque-Bera	0.5150	6.2579	0.3556	54.5336	1.9843
Probability	0.7730	0.0438	0.8371	0.0000	0.3708
Observations	21	21	21	21	21

(Researcher’s own calculation)

**Table 4b: Descriptive Statistics of Foreign Direct Investment (FDI) of Developed Countries**

	FDI_NETHERLANDS	FDI_SOTH_KOREA	FDI_UK	FDI_USA
Mean	38013.66	8770.905	80804.13	196658.9
Median	37277.25	9273.6	58200.28	198049
Maximum	114161.2	13643.2	253825.8	391104
Minimum	-7184.472	2782.6	16590.15	53146
Std. Dev.	29970.08	3149.601	62561.94	92624.13
Skewness	0.7683	-0.3761	1.3234	0.4069
Kurtosis	3.4715	2.2567	4.0164	2.3764
Jarque-Bera	2.2605	0.9786	7.0342	0.9199
Probability	0.3229	0.6131	0.0297	0.6313
Observations	21	21	21	21

(Researcher’s own calculation)

**Table 5: Unit Root Test results of Corruption Index (CPI) of Developed Countries**

At Level			
Variable	T-Statistics	Probability	Conclusion
Germany	-3.5073	0.00195 ***	I(O)
First Order Difference			
Variable	T-Statistics	Probability	Conclusion
Australia	-4.2961	0.0038***	I(1)
Canada	-3.556	0.0176***	I(1)
France	-4.6299	0.0019***	I(1)
Japan	-3.4478	0.022***	I(1)
Netherlands	-4.8922	0.0011***	I(1)
S.Korea	-4.8718	0.0011***	I(1)
UK	-5.1225	0.0007***	I(1)
USA	-5.4839	0.0003***	I(1)

(Researcher’s own calculation) (\*\*\*) indicates at 1% level)

**Table 6: Unit Root Test of Foreign Direct Investment (FDI) of Developed Countries**

At Level			
Variable	T-Statistics	Probability	Conclusion
Germany	-3.9507	0.0074***	I(O)
Canada	-3.3327	0.0277***	I(O)
France	-4.1497	0.0048***	I(O)
Japan	-3.5023	0.019 ***	I(O)
Netherlands	-4.2681	0.0038 ***	I(O)
S.Korea	-4.6368	0.0019 ***	I(O)

First Order Difference			
Variable	T-Statistics	Probability	Conclusion
UK	-3.0706	0.0462 **	I(1)
USA	-4.5729	0.0021***	I(1)
Australia	-7.2155	0.0000***	I(1)

(Researcher’s own calculation) (\*\*\*) and \*\* indicates at 1% and 5% level)

**Table 7: Unit Root Test results of Corruption Index (CPI) of Developing Countries**

At Level			
Variable	T-Statistics	Probability	Conclusion
Brazil	-3.3508	0.0259 **	I(O)
China	-3.2681	0.0307 **	I(O)
Russia	-3.2647	0.0309 **	I(O)
First Order Difference			
Variable	T-Statistics	Probability	Conclusion
India	-4.285	0.0039 ***	I(1)
Thailand	-5.0858	0.0007 ***	I(1)
Turkey	-3.4793	0.0206 **	I(1)

(Researcher’s own calculation) (\*\*\*) and \*\* indicates at 1% and 5% level)

**Table 8: Unit Root Test of Foreign Direct Investment of Developing Countries**

At Level			
Variable	T-Statistics	Probability	Conclusion
Thailand	-4.5174	0.0022 ***	I(O)
First Order Difference			
Variable	T-Statistics	Probability	Conclusion
Turkey	-3.3251	0.0281 **	I(1)
Brazil	-4.7147	0.0016 ***	I(1)
China	-3.9118	0.009 ***	I(1)
India	-4.828	0.0013 ***	I(1)
Russia	-4.9228	0.001 ***	I(1)

(Researcher’s own calculation) (\*\*\*) and \*\* indicates at 1% and 5% level)

**Table 9: Cross Correlation between CPI and FDI of developed countries**

Variable	Correlation coefficient
AUSTRALIA	-0.3107
CANADA	-0.2686
FRANCE	0.1661
GERMANY	-0.3881
JAPAN	-0.1414
NETHERLNDs	-0.2482
SOUTH KOREA	0.1880
UK	0.1306
USA	-0.2339

**Table 10: cross correlation between CPI and FDI of developed countries**

Variable	Correlation coefficient
TURKEY	0.4824
BRAZIL	0.4125
CHINA	0.7735
INDIA	0.7772
RUSSIA	-0.2346
THAILAND	0.0104

**Table 11: shows results of Regression analysis of Developing Countries**

	N	$\beta_0$	$\beta_1$	F-Statistics	R-Square
THAILAND	20	6577.046	1431.394	0.1116	0.0062
		0	0.7421	0.7421	
TURKEY	20	517.1569	1646.182	0.2293	0.0126
		0.631	0.6378	0.6378	
BRAZIL	20	83353.58	20984.76	2.0459	0.1021
		0.159	0.1697	0.1697	
CHINA	20	13821.92	2628.441	0.1335	0.0074
		0.5918	0.7191	0.7191	
INDIA	20	2674.94	8422.024	0.6573	0.0352
		0.1755	0.4281	0.4281	
RUSSIA	20	8608.249	4050.289	0.1575	0.0087
		0.7482	0.6961	0.6961	

**Table 12: shows the Regression analysis results of Developed Countries**

VARIABLES	N	$\beta_0$	$\beta_1$	F-Statistics	R-Square
NETHERLANDS	20	39818.76	34817.31	0.8161	0.0437
		0	0.3782	0.3782	
GERMANY	20	564795.4	66316.93	3.3695	0.1506
		0.0631	0.0821	0.0821	
AUSTRALIA	20	1897.066	6598.847	0.043052	0.002386
		0.7452	0.838	0.837957	
CANADA	20	40574.91	35326.99	1.025837	0.053918
		0	0.3246	0.32456	
FRANCE	20	26748.55	11685.63	0.616532	0.033117
		0	0.4426	0.442552	
JAPAN	20	6658.756	771.9413	0.023736	0.001317
		0.0015	0.8793	0.879272	
SOUTH KOREA	20	9003.936	4741.68**	4.97059	0.216389
		0	0.0388	0.038758	
UK	20	12425.37	56226.16	1.114202	0.058292
		0.4114	0.3051	0.305133	
USA	20	14577.77	58052.11	0.27344	0.014964
		0.4739	0.6074	0.607411	

**Table 13: Granger Causality test results between CPI and FDI of Developing Countries**

Null Hypothesis	Observations	F-Statistics	Prob.
DCPI_THAI does not Granger Cause FDI_THAI	18	0.0221	0.9782
FDI_THAI does not Granger Cause DCPI_THAI		0.3562	0.7069
DFDI_BRAZIL AND CPI_BRAZIL	18	2.4271	0.1271
CPI_BRAZIL AND DFDI_BRAZIL		2.6159	0.111
DFDI_RUSSIA AND CPI_RUSSIA	18	9.6284**	0.0027
CPI_RUSSIA AND DFDI_RUSSIA		0.7985	0.4709
DFDI_TURKEY AND DCPI_TURKEY	18	2.2951	0.1401
DCPI_TURKEY AND DFDI_TURKEY		0.0047	0.9953
DINDIA_CPI AND DFDI_INDIA	18	5.2201**	0.0217
DFDI_INDIA AND DINDIA_CPI		2.6307	0.1098
DFDI_CHINA AND CPI_CHINA	18	0.2658	0.771
CPI_CHINA AND DFDI_CHINA		1.0304	0.3864

(Researcher’s own calculation) (\*\* indicates significant at 5% level)



Table 14: Granger Causality test results between CPI and FDI of Developed Countries

Null Hypothesis	Observations	F-Statistics	Prob.
CPI_GERMANY does not Granger Cause FDI_GERMANY	18	0.3027	0.7435
FDI_GERMANY does not Granger Cause CPI_GERMANY		3.6683	0.0524
DCPI_CANADA AND FDI_CANADA	18	0.1438	0.8674
FDI_CANADA AND DCPI_CANADA		0.7733	0.4816
DCPI_FRANCE AND FDI_FRANCE	18	2.1513	0.1559
FDI_FRANCE AND DCPI_FRANCE		3.8719**	0.048
DCPI_JAPAN AND FDI_JAPAN	18	0.2848	0.7567
FDI_JAPAN AND DCPI_JAPAN		1.6906	0.2225
DCPI_NETHERLANDS AND FDI_NETHERLANDS	18	0.3941	0.682
FDI_NETHERLANDS AND DCPI_NETHERLANDS		1.6122	0.2369
DCPI_SOUTH_KOREA AND FDI_SOUTH_KOREA	18	1.2332	0.3233
FDI_SOUTH_KOREA AND DCPI_SOUTH_KOREA		1.3660	0.2894
DFDI_AUSTRALIA AND DCPI_AUSTRALIA	18	0.0080	0.992
DCPI_AUSTRALIA AND DFDI_AUSTRALIA		0.2971	0.7479
DFDI_UK AND DCPI_UK	18	0.4869	0.6252
DCPI_UK AND DFDI_UK		1.8700	0.1933
DFDI_USA AND DCPI_USA	18	0.3166	0.7341
DCPI_USA AND DFDI_USA		0.2443	0.7868

(Researcher's own calculation) (\*\* indicates significant at 5% level)

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