



Determinants of Foreign Direct Investment in Netherland: New Evidence through ARDL Approach

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ABSTRACT

This study analyzes the effect of gross domestic product, inflation and natural resource rent on foreign direct investment in the Netherland. Our study applies the Autoregressive distributed lag model for the period 1980 to 2018. The empirical results show gross domestic product and natural resource rent positively affected foreign direct investment while inflation affected negatively in both the short-run and long run. This study recommends the government officials and policymakers formulate policies to promote foreign direct investment for the development of the economy of the Netherland.

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Introduction

Unfamiliar direct venture (FDI) numbers have grown earnestly as a critical kind of overall capital trade over the past numerous years. It is the main monetary marker and extremely basic segment for a country's monetary wellbeing and addresses an imperative source to finance capital hypothesis (Dollis, 2017). Furthermore, it similarly ensures strength, as the "chilly" FDI streams are seen as an all the more consistent wellspring of external financing because of it drawn out stay in a nation than "hot" portfolio speculation treated as present moment and a sentence consistently utilized for hot cash is "hot cash consumes economy". FDI is a classification of cross-line speculation related with an inhabitant in one economy having control or a critical level of impact on the administration of an endeavor that is occupant in another economy. FDI Relationships emerge when an immediate financial backer straightforwardly claims value that qualifies it for 10% or a greater amount of the democratic force in the immediate speculation venture. It is helpful for the two economies (Remitter and Beneficiary) through flood sway. It's a chance for a financial backer to make an interest in non-industrial nations and thrive his business and it is likewise helpful for the economy to draw in financial backers for the advancement in foundation of the nation and furthermore human resources and per capita pay. FDI assumes a significant part in the development of the economy and furthermore a feeling of contest to deliver better. It is a non-commitment new asset. The work of the FDI is exceptionally huge concerning the trading of advancement in innovation and abilities. Late years

have seen an enormous change in the direction of the world's FDI, as non-mechanical country fires the top decision for MNEs to set up their business. There are different theories that explain the reasoning and factor behind the hypothesis decision away from the nation of origin (Pattayat, 2016).

Furthermore, FDI provides chances to enhance proficient advancement in technology, capital information sources, human resources improvement through preparing of local using foreign skills, and adds to corporate tax incomes in the host country (Feldstein 2000). An increase in production with better quality, export out and up-gradation in delicate and hard infrastructure will lead the economy to better economic growth and increase in Balance of payment condition i.e increase in exports and decrease in imports. Conversely, Foreign Portfolio Investment (FPI) are capital streams into a country that look for monetary returns in the short and medium terms through an interest in the stock and security markets. FPI is not most recommended by countries since it is connected with quick outpourings in emergency times just to make a profit and leave the stocks, destabilizing the operations of local financial markets.

Momentary financial matters including India need FDI inflow for its overall turn of improvement. Advancement methodology of the mid is 90s ready for unfamiliar resources including FDI. FDI inflow has been extending immensely after the tremendous progression program following the conversion scale emergency in India. The key objective of the progression program was to bring steadfastness, monetary turn of events and improvement through Liberalization, Privatization and Globalization (LPG) measure. Neoclassical development model considers FDI to immediately affect development rate however the new Growth Theory assesses FDI endogenously in the model and perspectives it as influencing development rate through advancement and overflow sway (Hsiao and Hsiao, 2006; Jayachandran and Seilan, 2010).

The design of the paper is as per the following. Section 2 literature writing proof of FDI, Section 3 clarifies methodology. At last, the conclusion portion of this paper may furnish some planning and strategy for policymakers to flourish certain ideas concerning FDI in Netherland.

Literature Review

Reuber et al. (1973) in their examination on the determinants of US FDI into Western Europe tracked down that the fundamental factors that pulled in the US venture were worthwhile market, liberal host govt. strategies, mechanical framework and social vicinity. While trying to investigate the determinants of FDI on the move economies Garibaldi et al. (2001), while analyzing the determinants of unfamiliar capital in 26 changes over a period 1990 to 1999 reasoned that the significant components that impact the FDI inflows in these economies were market size, financial shortage, expansion, and conversion standard system, hazard investigation, monetary changes, exchange transparency, accessibility of normal assets, boundaries to venture and organization. Bilgili et al. (2012) Conducted the determinant of unfamiliar direct interest in Turkey. This investigation zeroed in on time-series information from 1988 to 2010. The powerful model applied the probability philosophy of the Markov Regime exchanging Model that remembers decidedly influenced since a long time ago run development for FDI and capital gathering. Derazo (2013) aimed to dissect the connection between market size, exchange receptiveness, topographical vicinity and unfamiliar Direct Investment. The investigation utilized OLS. The investigation utilized OLS and Multiple Regression Methodology by utilizing the board information from 1990

to 2010. The outcomes show that FDI two-sided impact and gravity factors dependent on the consistent re-visitation of scale. Addison et al (2003) portrayed the connection between Foreign Direct Investment, total national output and exchange transparency. The investigation utilized the board information from 1988 to 2000. The experimental outcomes show that GDP development and exchange receptiveness emphatically affect FDI.

In Japan, Kimino et al. (2007) investigated an unexpected Direct interest. The exam was based on information from the board from 1989 to 2002. The pooled Ordinary Least Square Methodology was used in the study. The findings added a new dimension to the factors that influence FDI inflow in Japan. Cavallori and Addona (2013) used board data from 1985 to 2007 to define the role of foreign direct investment on economies. The examination utilized the Regression approach that shows the outcomes pay impacts adversely and yield is emphatically identified with conversion scale. Yield is having less affected while financing cost and more impacted by FDI. Kachoo and Khan (2012) assessed what the components of Foreign Direct Investment meant for non-industrial nations. The examination utilized the board information from 1982 to 2008. The Ordinary Least Square technique is utilized for this reason. The outcomes show that GDP is decidedly related and the pay rate is adversely identified with FDI. Pattayat (2016) determines the impacts of Foreign Direct Investment by utilizing the time series information from 1980 to 2013. The examination utilized numerous relapse methods on various macroeconomic factors like GDP, Trade receptiveness, swapping scale and FDI inflows. The outcomes show that the GDP directly affects FDI.

Faroh and Shen (2015) assessed the Sierra Leone economy using data throughout the hour of 1985–2012 found that the swelling rate is pathetically conversely related to FDI inflows, while loan fees have no effect, swapping scale solidness and higher exchange transparency immovably and basically attract more FDI. The assessment suggests that to draw in an always expanding number of inflows of unfamiliar capital these countries need to stay aware of improvement energy to additionally foster their market size, exchange approaches, use bountiful work supply, address establishment bottlenecks and follow more open exchange strategies. Abbott et al. (2012) observationally reviewed the effect of swapping scale systems on unfamiliar direct venture (FDI) streams on a leading group of 70 agricultural nations for the period 1985–2004 and found that non-modern countries with fixed or midway frameworks basically defeated those with resolute conversion standard framework structure in attracting FDI streams.

Also, Garibaldi et al (2002) investigate the FDI and portfolio venture streams to 26 change economies in Eastern Europe including the previous Soviet Union from 1990 to 1999. The relapse assessment shows that the FDI streams are very much clarified by standard financial basics, for example, market size, monetary deficiency, expansion and conversion scale system, hazard examination, monetary changes, exchange receptiveness, accessibility of normal assets, obstructions to ventures and administration. Notwithstanding, the portfolio streams are ineffectively clarified by the basics. Rather than it, Pravakar Sahoo (2006) directed an investigation to recognize the determinants of FDI in South Asian nations over the period 1975-2003. The nations remembered for the example were India, Pakistan, Bangladesh, and Srilanka. The strategies used to discover the FDI determinants were Panel Cointegration and Pooled OLS and factors remembered for the model were FDI as the reliant variable and the other 11 informative factors. The exact consequences of the examination mirror that significant determinants of FDI were market size, workforce development rate, framework record and exchange transparency. Duty yeyati et al (2002) analyze the degree of business cycles and loan cost patterns of created

nations sway on FDI streams to agricultural nations for the period 1980 to 1990. They consider the determinants of reciprocal FDI utilizing a gravity model. They find that FDI streams from the US and Europe move counter-repeating to the business cycle in the source country, just as, the loan fee cycles are the significant determinants of FDI inflows.

Data and Methodology

The current paper uses foreign direct investment as the dependent variable and gross domestic product, inflation and natural resource rent is used as independent variables. The data is sourced by World Development Indicator (WDI). The study covers the data from 1980-2018 for the Netherlands.

The study uses time series econometric methodology Autoregressive Distributed Lag Model on the behalf of stationarity results (Augmented Dickey-Fuller and Phillips Perron test). Autoregressive Distributed Lag Model (ARDL) is most suitable in case-mix order integration. This methodology has advantages over traditional econometric methodologies such as It can be applied even in case of small sample; It is suitable if all variable is stationary at the level $I(0)$ or at 1st difference or mix the order of integration. The study has applied the F-bound test to check the co-integration among variables in the long run.

Results and Discussion

Descriptive Statistics and Correlation Matrix

The results of descriptive statistics show the mean, median, maximum and minimum value of the data of all variables. This table also shows the standard deviation, Skewness and Kurtosis of the data. The following table 4.1 portrays the descriptive statistics and correlation matrix.

Table 4.1: Descriptive Statistics and Correlation Matrix Results

	FDI	GDP	INF	TNRR
Mean	9.37E+10	6.78E+11	2.254282	0.683434
Median	2.05E+10	7.10E+11	2.113788	0.497602
Maximum	7.34E+11	9.47E+11	6.738930	1.856437
Minimum	-3.61E+11	4.20E+11	-0.691203	0.094484
Std. Dev.	1.71E+11	1.73E+11	1.552631	0.441841
Skewness	1.219023	-0.130353	1.186813	1.029180
Kurtosis	7.310618	1.533825	4.945912	3.209919
Jarque-Bera	39.85393	3.603659	15.30859	6.956480
Probability	0.000000	0.164997	0.000474	0.030862
Sum	3.65E+12	2.65E+13	87.91699	26.65393
Sum Sq. Dev.	1.10E+24	1.13E+24	91.60514	7.418507
Observations	39	39	39	39

Correlation Matrix

FDI	GDP	INF	TNRR
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FDI	1			
GDP	0.486	1		
INF	-0.218	-0.397	1	
TNRR	0.077	-0.254	0.415	1

Unit Root Test Results

The following table 4.2 show the Augmented Dickey-Fuller and Phillips Perron test results. The results explain variable FDI and GDP are non-stationary at a level and they are stationary at first difference. On the other hand variable INF and TNRR are stationary at both level and first difference.

Table 4.2: Unit Root Test Results

	ADF Test		PP Test	
	Level	1 st Difference	Level	1 st Difference
FDI	-2.717	-6.040***	-2.671	-5.960***
GDP	-0.400	-3.879***	0.017	-3.818***
INF	-3.246**	-5.246***	-3.246**	-5.353***
TNRR	-3.337**	-5.661***	-3.300**	-8.561***

ARDL Bound Test Results

The following table shows the results of long-run cointegration. The value of the F-test is clearly upper than upper bound that shows a long-run association among the variables.

Table 4.3: ARDL Bound Test Results

Test Statistic	Value	k
F-statistic	4.646705	3
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.72	3.77
5%	3.23	4.35
2.5%	3.69	4.89
1%	4.29	5.61

Long Run/Short-Run Results and Diagnostic Checking

The following table 4.4 explains the main ARDL results. The results show all variables are significant in the long run and short run. More specifically, GDP and total natural resource rent are affected foreign direct investment positively. While inflation has a negative association with foreign direct investment in both the long run and short run.

Table 4.4: Long Run/Short-Run Results and Diagnostic Checking

Cointegrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LGDP)	16.35	5.32	3.06	0.004
D(LINF)	-0.511	0.249	-2.048	0.052
D(LTNRR)	0.640	0.213	2.997	0.006
CointEq(-1)	-0.644	0.158	-4.064	0.000
Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LGDP	7.327	0.495	14.789	0.000
LINF	-0.463	0.201	-2.298	0.031
LTNRR	0.697	0.153	4.522	0.000
C	-175.382	13.497	-12.994	0.000
Diagnostic Checking				
$R^2=0.94$	J.B Test	0.774 (0.678)	Hetero Test	1.532 (0.207)
			Ramsey RESET	
Adj. $R^2=0.93$	LM Test	0.094 (0.910)	Test	1.270 (0.268)

Conclusion and Policy Implication

Our study explores the impact of gross domestic product, inflation and natural resource rent on foreign direct investment in the Netherland. The study applies the Autoregressive distributed lag model for the period 1980 to 2018. The empirical results show gross domestic product and natural resource rent positively affected foreign direct investment while inflation affected negatively in both the short-run and long run. This study recommends the government officials and policymakers formulates policies to promote foreign direct investment for the development of the economy of the Netherland.

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