DEMOCRACY AND FOREIGN DIRECT INVESTMENT (FDI) RELATIONSHIP: EMPIRICAL EVIDENCE FROM BANGLADESH (1975-2015)*

Demokrasi ve Doğrudan Yabancı Yatırım (DYY) İlişkisi: Bangladeş'ten Ampirik Kanıtlar (1975-2015)

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Abstract

The present study investigates the relationship between democratic practice and foreign direct investment (FDI) in Bangladesh. There is an ongoing debate in academia regarding the effect of democracy on FDI inflow. Historically, FDI depends on stable democracy apart from many other relevant factors. This study used time series data from 1975 to 2015 for Bangladesh and estimated suitable econometric models. This study showed that the relationship between democracy and FDI is statistically insignificant in the long run.

Keywords: *Bangladesh, Democracy, FDI, Political rights, civil liberties, OLS, ECM.*

Öz

Bu çalışma Bangladeş'te demokratik uygulama ile doğrudan yabancı yatırım (DYY) arasındaki ilişkiyi araştırmaktadır. Demokrasinin doğrudan yabancı yatırım akışı üzerindeki etkisine ilişkin akademik çevrede süregelen bir tartışma var. Tarihsel olarak doğrudan yabancı yatırımlar diğer birçok ilgili faktörün yanı sıra istikrarlı demokrasiye de bağlıdır. Bu çalışmada Bangladeş için 1975'ten 2015'e kadar olan zaman serisi verileri kullanılmış ve uygun ekonometrik modeller tahmin edilmiştir. Bu çalışma, demokrasi ile doğrudan yabancı yatırım arasındaki ilişkinin uzun vadede istatistiksel olarak anlamsız olduğunu göstermiştir.

Anahtar Kelimeler: *Bangladeş, Demokrasi, DYY, Siyasi haklar, sivil özgürlükler, OLS, ECM.*

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INTRODUCTION

Over the past three decades, there has been a significant shift in Foreign Direct Investment (FDI) to developing countries. Since the 1990s, FDI to developing nations has increased dramatically. 2007 witnessed a steep decline in FDI due to the global economic downturn. In 2008, total FDI decreased from $3.065 trillion in 2007 to $1.361 trillion. In 2015, it stood at $2,136 trillion, representing 2.812% of the global GDP (Nishat, S. A., Ahmed, Z., & Hossain, M. A. 2022) . Although Bangladesh is a rapidly developing economy with a growth rate of over 5% since the 1990s, foreign direct investment (FDI) is not a significant source of investment in Bangladesh, unlike other developing nations. Until 2015, the total net inflow of FDI (BoP, current US dollars) was only $3.38 billion, or 1.73 percent of the gross domestic product (GDP). Comparatively, India's total net FDI inflow was 44 billion, or 2.107 percent of its GDP, while Malaysia's total inflow was 11 billion, or 3.75 percent of its GDP (WorldBank, 2016). Bangladesh's favourable and reliable policies regarding FDI have earned it a reputation as one of South Asia's most FDI-friendly policy regimes (Islam, M. S., Faruque, O., & Ahmed, Z., 2021). The question arises as to why FDI in Bangladesh is so low.

Since the country's independence, various market-seeking and resource-seeking FDIs have sought to invest there. The trend of foreign direct investment was inconsistent. That was practically nonexistent in the 1970s, possibly due to the unfavourable effect of many political and economic factors. Such factors include- a weak macroeconomic environment, the dominance of public sector firms, a small domestic market, the early phase of the rise of the export-oriented readymade garments (RMG) industry, and political instability, among others. During this period, democracy was practically nonexistent in Bangladesh.

Since the mid-1990s, FDI inflows have increased primarily in the energy, power, and RMG sectors. In the 2000s, the sectors of telecommunications, banking, and, more recently, RMG and textiles saw the largest increase in FDIs. The enhanced domestic market, improved infrastructure, and robust export growth of woven wear and knitwear products under positive market access to developing and developed countries, as well as the availability of low-cost labour, may have been the most significant contributors (Hanif, Abu, et al. 2023). Interestingly, Bangladesh's new beginning began in 1991 with a democratic government. This positive correlation between FDI and democracy

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initially piqued our interest in this topic, and we wondered if there was a causal link.

Numerous international development agencies, for example, the World Bank, view FDI as one of the most effective tools in the worldwide fight against poverty and thus actively urge poor nations to pursue policies that will increase FDI inflows. However, many countries that want to attract FDI also have weak or nondemocratic democracies and governments. Consequently, it is crucial to comprehend the impact of democratization on FDI.

The relationship between FDI and democratic institutions is particularly complicated and unclear. Although it is widely believed that developing economies should develop more democratic institutions to attract foreign investment, the empirical and theoretical evidence to support this assertion is scant. There is a common perception of general people that an increase or decrease in the democracy of a country influences the Foreign Direct Investment of that country. After the liberation war of 1971, Bangladesh was mostly under autocratic rule until 1990 when, for the 1st time, this country experienced a free and fair parliament election. As mentioned above, FDI inflow also started to increase in the 1990s. Despite having an FDI-friendly policy regime, foreign investment is still very low.

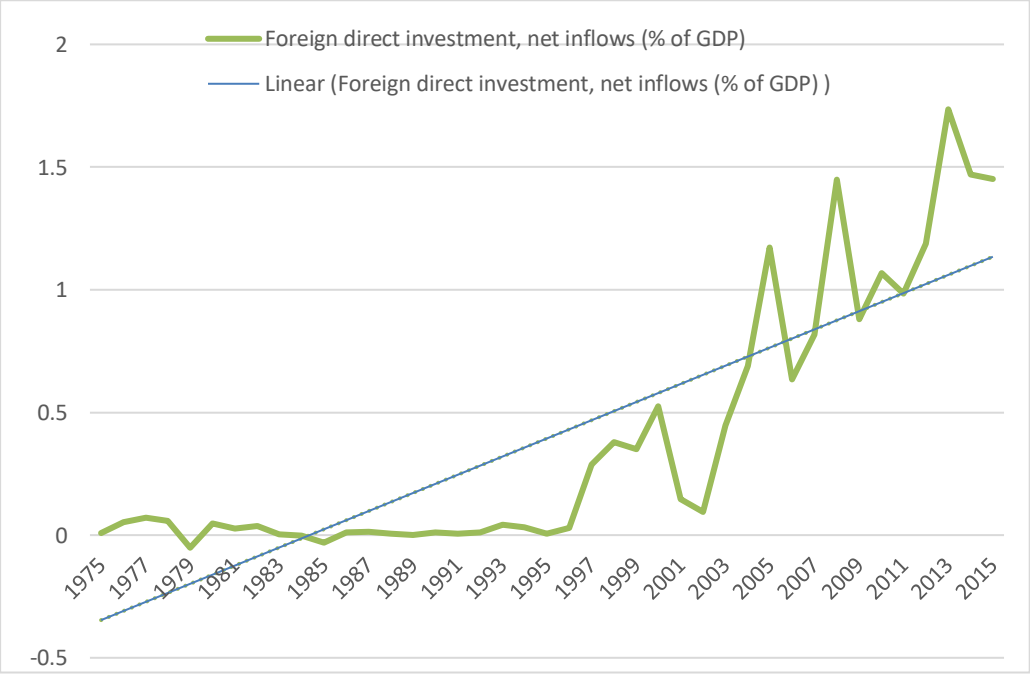

Figure-1: Foreign Direct Investment as Percentage of GDP

It is a harsh truth that democratic practice in Bangladesh is extremely disappointing and the country is ranked among the lowest in international indexes. Bangladesh had ranked 86th place in the Economist Intelligence Unit's (EIU) Index of Democracy 2015. For this reason, many believe that foreign investors do not prefer Bangladesh due to bad political conditions. Even if we look at the Figure-1 of FDI inflow in Bangladesh, whenever there are threats to democracy, there is also a fall in FDI inflow. In the years 2000, 2005, 2008, and 2013, political conditions were adverse, and the figure shows a fall in FDI inflows. However, the trend line shows an upward trend during this period. Since there is no practical evidence to accept or reject this belief, here I feel the urgency to find the reality of this perception. Because it will be helpful for our policymakers to take decisions about attracting foreign investors. For the robustness of the result, we tried to use the maximum data available.

Most existing research on Democracy and FDI failed to reach a conclusion. Maximum studies used panel and cross-sectional data and found mixed results. These studies recommend time series analysis for specific nations. In Bangladesh, empirical research on this topic is almost nonexistent. This paper is about to find the answer to the question "Is poor democratic practice a major factor behind low foreign direct investment in Bangladesh?" utilizing time series data of 40 years from 1975 to 2015. This paper is formed into six sections. Following the introduction, the second section presents the literature review. After that comes the methodology section, followed by the results and discussions. The paper ends with the concluding remarks and policy recommendations.

LITERATURE REVIEW

OVERVIEW OF THE LITERATURE

Numerous scholars have written about democracy from social, political, and economic viewpoints. The focus was on trade for an expanded period. Therefore, articles about democracy were also produced from an economic standpoint. On the other hand, FDI is a more recent field spoken about for the past three decades. Not only for its economic importance across the world but also for its academic importance as well. Hence, studies about democracy from an economic perspective started to include FDI. A number of these research will be discussed below. This section will clarify whether an agreement has been achieved about the

impact of democracy on FDI. To make this easily understandable for readers, these discussions come in three clusters in the literature: studies that find a significant result but a negative effect means increased democracy reduces FDI inflows, studies that find a positively significant result and studies that find the insignificant result.

HISTORICAL PERSPECTIVES ON DEMOCRACY AND FDI NEXUS

Academics and experts have argued about the relationship between democracy and FDI for a long time. A historical analysis of democracy and FDI reveals numerous tendencies.

Early in the 20th century, until the Second World War, economic instability, protectionism, and political conflicts limited foreign direct investment (FDI) flows. Political unpredictability in several countries also discouraged foreign investors. The primary focus of FDI in colonial regions was resource extraction and exploitation (Dupasquier & Osakwe, 2006). Democratic countries such as the United States, the United Kingdom, and France invested in their colonies or signed exclusive commercial agreements, even though their territories were not democratic (Olson, 1993).

After the Second World War, establishing democratic institutions and the liberalization of economies in numerous nations created a favourable environment for foreign direct investment (FDI). The democratic countries advocated strongly for free markets and international investment. For example, the Marshall Plan aimed to reconstruct war-ravaged Europe and increase FDI (Eichengreen, 2001). After the spread of democracy, India and numerous African nations gained independence and sought FDI for economic expansion. However, Investors were concerned about the stability and policies of these new democratic administrations, which limited FDI flows.

During the Cold War, the ideological clash between democratic and communist countries affected FDI flows. The United States and its democratic allies desired FDI to stimulate their economy and compete with the Soviet Union and its supporters. This led to increased FDI in Western-aligned democratic countries (Goldgeier & McFaul, 1992).

After the end of the Cold War and the rise of democracy in many nations, foreign direct investment (FDI) increased. The economic expansion of China and India attracted global investment. Nonetheless,

robust consumer markets and abundant natural resources have attracted FDI to certain autocratic governments (Li & Resnick, 2003). Due to technical advancement and the knowledge economy, FDI flows to democracies increased throughout this time. FDI was attracted significantly to the democratic system with strong institutions, the rule of law, and property rights. Which pushes up the trade and economy as the trade and FDI go together (Burkhart & de Soysa, 2003). Moreover, international organizations such as the World Bank and the International Monetary Fund (IMF) require democratic governance, influencing FDI trends for financial support.

In the contemporary era, the importance of good governance, transparency, and the rule of law has increased in attracting foreign direct investment (FDI). Due to stable administration, independent judiciaries, and protection of property rights, the democratic system is regarded as investment-friendly. However, the pattern of democratic practice is also important; FDI is not very attractive to poor democracy. The historical perspective demonstrates that FDI inflows require good governance, political stability, sound economic policies, and strong institutions (Mengistu & Adhikary, 2011).

LITERATURE THAT FOUND NEGATIVE RELATIONSHIP

A lot of researchers have found that democracy and foreign direct investment are negatively related to each other. One of the most powerful voices of this group is Oneal (1994), who stated that foreign investors make supernormal profits in developing countries where democracy is absent. He is not alone. Another powerful statement in support of this group came from (Li & Resnick, 2003). Their analysis of fifty-three countries (including Bangladesh) using pooled time series cross-sectional (TSCS) design from 1982-1995 argues that democracy has negative effects on FDI inflows. However, they also found that improved democracy positively increases property rights protection, which has a favourable impact on FDI inflows. Both of the results are statistically significant. They conclude that democracy's positive influence on the preservation of property rights is not as significant as the negative effect of democracy on FDI flows. Rent-seeking autocratic government overrules the positive effect. O'donnell (1978) also finds autocratic regimes and foreign investors have positive relationships. Some other studies including 105 countries (Adam & Filippaios, 2007) (Mencinger, 2003) on eight East European transition countries (Asiedu & Lien, 2011)

on 22 countries (Mathur & Singh, 2013) including 29 countries (Chan & Mason, 1992) also find negative relationships.

STUDIES THAT FOUND POSITIVE RELATIONSHIP

As it was said, there is no agreement in the researchers' world on the influence of democracy on FDI becomes vivid as we consider the reaction of Jakobsen and De Soysa (2006) on all the papers that claim negative relation, especially since they do not agree with the theoretical examination of Li and Resnick rearranged the model with a large sample and claim that in long run negative impact of democracy on FDI disappears and become optimistic (Jakobsen & De Soysa, 2006). They conclude that better democratic countries are far more attractive to foreign investors. Jensen (2003) argues that a higher level of democratic practice leads to more favourable policies towards MNE's. Li (2006) argues that democratic countries offer lower taxes to attract FDI. Some researchers (Blanton & Blanton, 2006) (Busse & Hefeker, 2007) (Busse, 2004) (Busse, 2003) (Feng, 2001) (Henisz & Williamson, 1999) (Meyer, 1998) (Knack & Keefer, 1997) (Sobel, 2002) (Wheeler & Mody, 1992) (Asiedu & Lien, 2011) claimed positive impact of democracy on FDI inflows (Harms & Ursprung, 2002). Nevertheless, these researches are conducted in multiple countries, but as a developing country, Bangladesh's data is also included in many of them.

NO EFFECT

Very few researchers conclude that democracy does not affect FDI. One of them (Büthe & Milner, 2008) argued that trade agreements play a bigger role than the political environment; a country becomes investment-friendly if it has a trade agreement. Oneal (1994) showed that the association between democracy and FDI was favourable but not statistically significant when he treated both rich and developing nations as one sample. Two Bangladeshi researchers (Goswami & Haider, 2014) concluded their paper by refuting the notion that government failure causes low FDI inflow. According to Goswami and Haider, it is not only a lack of governance but also the traditional aspects and attitudes of the partners that largely impact the entrance of foreign direct investment.

METHODOLOGY

In this research, all the data come from two major sources. They are World Development Indicators (WorldBank, 2016) and Democracy

indicators from Freedom House (Freedom-House, 2016). to secure the toughness of the studies, we included the maximum number of observations available for Bangladesh from 1975 to 2015. Seven variables were used in this analysis. Yearly time series data has been used for easy estimation, and World Bank data has been transformed into a log.

In this study, FDI is considered the dependent variable since the main focus of our study is the relationship between Democracy and FDI. Data of per capita FDI inflow in current US$ was collected from (WorldBank, 2016). The democracy indicators are civil liberties and political rights provided by the Freedom House (2002), a non-governmental organization founded in the United States. Since 1972, Freedom House has assessed the democratic rights of every nation in the world using a single index for both indicators. According to Freedom House, political rights (the variable will be termed POL) enable people to participate freely in politics, including the freedom to cast ballots, seek office, and elect representatives who have the last say over governmental decisions. Civic liberties (CIV) include the freedom to create one's own institutions, ideas, and way of life without intervention from the government. A scale from 1 to 7 is used to rate each indicator, with higher numbers indicating fewer rights and liberties.

The Freedom House indicators are commonly regarded (and utilized) as a high-level indicator of democratic rights in practical research (K. Bollen, 1993; K. A. Bollen & Paxton, 2000). Though critics argue that both indicators are biased in favour of Western democracies (Poe & Tate, 1994), Despite these critiques, both Freedom House indicators have a strong correlation with other democratic metrics. According to estimates by Bollen (2000), (Quinn & Woolley, 2001), the intercorrelations of the Freedom House indicators with the four other democratic indicators published by (Bank, 1979; Jaggers & Gurr, 1996; Rodrik, 1996; Sussman, 1982) indicate a very strong positive relationship. The Freedom House indicators will be used in the empirical research that follows since they have the merit of being stable and accessible over a longer period of time relative to these other measurements of democracy.

Four variables are utilized in OLS regressions to control for characteristics other than democracy: 1) Gross National Income per capita. 2) The Rate of Exchange (EXRATE). 3) The imports and exports to GDP ratio (OPENNESS). 4) The Rate of Pay (WGRATE). Primarily, the selection of these four control variables was motivated by the key results

of the vast literature on the factors that influence foreign direct investment. All other factors of FDI flow, such as country risk, labour costs, inflation, black-market premiums on currency rates, taxes, and trade deficits, have mixed empirical evidence, meaning they may have a positive, negative, or zero impact on FDI. In the vast majority of research, openness to trade, GNI, exchange rate, and wage rate have a significant statistical (positive) effect on FDI.

Table-1: Data Sources and Definition of Variables

Variables	Interpretation	Sources
GNI	Gross National Income per capita in current US$	(WorldBank, 2016)
FDI	Foreign Direct Investment inflows per capita	(WorldBank, 2016)
OPENNESS	Total export +import / GDP	(WorldBank, 2016)
EX.RATE	Value of US$ in exchange for BDT	(WorldBank, 2016)
WAGE RATE	Monthly average wage of workers	(WorldBank, 2016)
POL	Index for political right scale 1-7	(Freedom-House, 2016)
CIV	Index for civil liberties, scale 1-7	(Freedom-House, 2016)

DESCRIPTIVE STATISTICS

In this part, statistical descriptions of all variables are presented. The raw data set is described in depth in Table-2 through descriptive statistics. The time series data, 38 observations, are over a period from 1975 to 2015.

Table-02: Descriptive Statistics of the Variables

Variable	Obs	Mean	Standard Deviation	Maximum	Minimum
FDI	38	-1.248610	2.706096	3.044328	-6.621235
GNI	38	5.961788	0.572449	7.162678	4.854975
OPENNESS	38	3.188252	0.416888	3.853339	2.137265
EXRATE	38	3.705484	0.550724	4.405043	2.500303
WGRATE	38	7.468273	1.016755	9.093694	5.398163
POL	38	1.261984	0.362890	1.945910	0.693147
CIV	38	1.412259	0.114898	1.609438	1.098612

Note: All values are logarithmic form.

EMPIRICAL MODEL AND METHODOLOGY

Data were tested and analyzed by using the most popular software for econometric software called "E-VIEWS". A log-log linear model was used; the idea was taken from previous empirical studies to measure the impact of democracy on FDI inflows.

$$FDIt = \beta 0+\beta_1 GNIPPt +\beta_2 OPENNESSt+\beta_3 EXRATEt+\beta_4 WGRATEt +\beta_5 POLt +\beta_6 CIVt + et$$

Where,

FDI = log FDI per capita inflow

GNIPP = log Gross National Income per capita

OPENNESS = log Trade Openness per capita

EXRATE = log Exchange Rate

WGRATE = log Wage Rate

CIV = Index for Civil Liberties, scale from 1-7

POL = Index for Political Rights, scale from 1-7

The error term is β_0 is both the constant and the intercept of this regression line. Equation is regressed by OLS regression in order to measure the long-run relationship between democracy and FDI. There is also a short-run model, which is regressed by the Error Correction Model (ECM) to measure short-run measures. The Error Correction Model (ECM) is-

$$FDIt=\beta 0+\beta 1D(GNIPPt)+\beta 2D(OPENNESSt)+\beta 3D(EXRATEt)+\beta 4D(WGRATEt)+\beta 5D+\beta 6\ D(CIVt\ )+ et(-1)+ ut$$

Where D means the first difference of the variables, e_t (-1) is the error correction term, and u_t is the error term of this ECM model.

EMPIRICAL FINDINGS

JOHANSEN COINTEGRATION TEST

Here, the Johansen Cointegration test is utilized to examine long-term linkages.

Table-03: Johansen Cointegration test findings

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.838715	178.3112*	139.2753	0.0000
At most 1 *	0.755476	119.9245*	107.3466	0.0058
At most 2	0.567285	74.85433	79.34145	0.1039
At most 3	0.542572	48.04869	55.24578	0.1845
At most 4	0.325390	23.02035	35.01090	0.5074
At most 5	0.192259	10.42450	18.39771	0.4405
At most 6	0.106180	3.592042	3.841466	0.0581

Note: The trace test reveals three cointegrating eqn(s) at the 0.05 level. (*) indicate the rejection of the null hypothesis at a significance level of 5%. ** p-values.

The preceding result suggests that at least two long-term relationships exist between variables.

THE RESULTS OF ORDINARY LEAST SQUARES ESTIMATION

The following table displays the findings of an ordinary least squares estimate of the association between per capita FDI and DEMOCRACY and other variables. Since the variables are defined as natural logarithms, the coefficients are interpreted as elasticity measures (Baum, 2006).

Table-04: The results of Long-run equation model

Method : OLS Regression
Sample range : 1975 to 2015
Included observations: 38 after adjustment
Dependent Variable: Log of FDI

Variable	Coefficient	Std. Error	t-statistic	probability
Intercept	-22.2717	3.240078	-6.873834	0.0000
Log of GNI per capita	5.040772	1.267704	3.976299	0.0004
Log of trade openness	4.610627	1.041606	4.426461	0.0001
Log of exchange rate	4.718399	2.542511	1.855803	0.0730
Log of wage rate	-4.973892	1.840035	-2.703150	0.0110
Log of political right	**0.517974**	0.693810	0.746563	**0.4610**
Log of civil Libarties	**3.161156**	1.860840	-1.698780	**0.0994**
R-squared		**0.874122**		
Adjusted R-squared		**0.849758**		
F-statistic		**35.87834**		
Probability(F-statistic)		**0.000000**		
Std.Error of regression		1.011872		
Sum squared residuals		31.74043		
Durbin-Watson statistics		**1.449023**		

From the above table, the results of OLS regression found Political Rights and Civil Liberties insignificant at 5%, meaning democratic practice doesn't affect FDI inflows in Bangladesh. But if we consider the result at a 10% significance level, civil liberties have a major influence on FDI inflows. Results show that a 1% increase in freedom of civil liberties will lead to a 3% increase in FDI inflow in Bangladesh.

All other variables show expected signs and are statistically significant. According to the result, every variable positively relates to FDI except the wage rate, which is also likely. This model best fits the data since the adjusted R-squared value is extremely high (85%), and the explanatory factors can explain the dependent variable by 87%. The F-statistic value is also significant, and the probability value is considerably low. The F-statistic value is found to be statistically significant. The Durbin-Watson value proves that the model is not erroneous.

DIAGNOSTIC TESTS OF THE OLS REGRESSION MODEL

Unit root tests for residuals of a regression model will indicate whether the results of the OLS Regression Model are spurious or not. Suppose the p-value of the ADF test is less than 5%. Unit root test for residuals of a regression model in the relevant table [All the tables are in the Appendix] demonstrates that the findings of OLS regression model 1 are not spurious because the p-value is less than 5%, which means that the null is invalid. The results of the serial correlation test using EViews 8 show that the null hypothesis cannot be rejected because the p-value is more than 5%. This signifies that no serial correlation exists. Another test shows there is no heteroskedasticity issue with the OLS regression model. Ramsey (1969) established the Regression Specification Error Test (RESET) to detect specification errors in regression models, regardless of whether the OLS model is defined correctly or not. At a 5% level of significance, the null hypothesis cannot be rejected. So, It is possible to conclude that the OLS regression model does not contain specification errors. This model is precisely described. Normality tests are used to identify whether or not a data set has a normal distribution. The E-views estimate that the Jarque-Bera value is 3.732 and the corresponding probability value is 0.1547, larger than 5%. Therefore, the residuals of (ECM) have a normal distribution.The null hypothesis cannot be rejected since the CUSUM line lies between two red lines representing the 5% significance level. This ECM model has been determined to be structurally stable throughout time.

FINDINGS OF THE ERROR CORRECTION MODEL (ECM)

To investigate democracy's impact on Bangladesh's FDI inflows in the short-run along with adjustment speed toward equilibrium, Error Correction Model (ECM) is applied. The error correction model is utilized to determine the speed of disequilibrium adjustment to long-term equilibrium. If all variables are stationary in the first difference I (Ahuja, 2016), the error correction model can be regressed (ECM). The results obtained from ECM are presented in Table-05 below.

Table-05: Results for Error Correction Model (ECM)

Method: Ordinary Least Square Regression
Sample Range: 1975 to 2015
Included Observations: 38 after adjustments
Dependent Variable: Log of FDI

Variable	Coefficient	Std. Error	t-Statistics	Probability
Intercept	-0.393692	0.515791	-0.763279	0.4519
D(log of GNI)	3.280180	2.387658	1.373806	0.1808
D(log of OPENNESS)	4.231780	2.232063	1.895906	0.0687
D(log of EX. RATE)	1.177290	4.270602	0.275673	0.7849
D(log of WAGE RATE)	2.476348	2.476348	0.528848	0.6012
D(log of POL)	**1.098296**	1.011423	1.085892	**0.2871**
D(log of CIV)	**3.945264**	-3.945264	1.866471	**0.0439**
RESID(-1)	**-0.743968**	0.220024	-3.381302	**0.0022**

The preceding table illustrates the short-term relationship between Democracy (POL & CIV) and Foreign Direct Investment (FDI) flows, as well as other variables. The above results indicate that civil liberties positively influence foreign investment in the short run, but political rights are still found to be insignificant as they were in the long run. Other variables, except for trade openness, were also found to be insignificant in the short run.

It is evident from the preceding data that the ECT coefficient (RESID (-1)) is negative and statistically significant. Therefore, the short-run variations are substantial. This means that both the long-term and short-term relationships are stable. Since all short-run coefficients are statistically significant, this shows a short-run causality between the variables. It implies that the disequilibrium adjustment rate in a year is 74.39%, also called the error correction speed. It implies that all explanatory variables respond quickly to correct long-run disequilibrium if the system is shocked.

DIAGNOSTIC TESTS FOR ECM

This study utilizes the Breusch-Godfrey Serial Correlation Lagrange Multiplier (LM) test for serial correlation. The test result [in the Appendix] shows that the null hypothesis cannot be rejected since the p-value exceeds 5%. In the error correction model, there is no serial (ECM). Normality tests evaluate whether or not a set of data follows the normal distribution. T-ratios could not be accurate if the residual distribution is not normal. E-views estimate the Jarque-Bera value to be 1.372696 and

the related probability to be 0.5034, which is larger than 5%. The null hypothesis cannot be denied at the 5% significance level based on the Jarque-Bera statistic. Therefore, the Error Correction Model (ECM) residuals are normally distributed, and the above ECM decisions are legitimate. The Breusch-Pagan-Godfrey heteroskedasticity test was used to identify heteroskedasticity for the Error Correction Model (ECM). The results for heteroskedasticity show using E-views 8 that the observed R square corresponds to a p-value more significant than 5%. Therefore, the null hypothesis can't be rejected, and the ECM model is free from Heteroscedasticity at the 10% significance level. The regression Specification Error Test (RESET) was designed by Ramsey (1969) to find specification errors in the regression model, regardless of whether ECM models are correctly identified or not. The results of the test show that the null hypothesis cannot be rejected, indicating that the ECM model is adequately identified. The null hypothesis will be rejected if the p-value corresponding to the F-statistic is less than 5%. Otherwise, the null hypothesis cannot be rejected.

DISCUSSION

Most of the research on democracy and FDI linkage are cross-country analyses. The result of this research varies in the case of developed, developing and underdeveloped nations. In developing nations, results were found to be negative in most cases (O'donnell, 1978) (Li & Reuveny, 2003) (Mathur & Singh, 2013). Our research aims to find an answer to the famous question, "Is poor democratic practice a major factor behind low foreign direct investment in Bangladesh?" or the relationship between democracy and FDI in Bangladesh by using OLS & ECM approaches. Interestingly, there is no meaningful association over the long term, yet there is a relationship over the short term.

OLS regression results indicate that there is no correlation between democracy and FDI. Political rights (POL) AND civil freedoms are two indicators of democracy (CIV). At the 5% significance level, both are deemed inconsequential over the long term. But civil liberties are significant if we consider it at 10% level. In this OLS regression model, adjusted R2 is so high (0.87.), the corresponding probability value of F-statistic is very low (0.000) and there is no serial correlation. On the other hand, the results of ECM, a short-run equation model, show slightly different results. The political right is still found insignificant, but civil liberties are now significant at 5% level, which means in the short run, civil

liberties have a positive relationship with Foreign Direct Investment inflows. The result shows 1% increase in CIV will result in 3% increase in FDI. The sign of error correction term is opposite and significant at 1% level of significance. The rate of disequilibrium adjustment speed toward equilibrium, in the long run, is 73.17%, and it is highly significant at the 1% level of significance. We have tested unit root (Augmented Dickey-Fuller), Serial Correlation (Breusch-Godfrey), normality (Jarque-Bera), Cointegration (Johansen) Regression Specification Error Test (Ramsey Reset) for both OLS and ECM to confirm the validity of the data's and models.

According to our findings, democracy is not a major factor that influences low FDI inflows in Bangladesh. The possible reason would be that the position of democracy didn't change that much in Bangladesh. Whoever is in the government doesn't matter as much because of the structure of our society and cultural facts. There are only two big political parties, BNP & AWAMI LEAGUE and their political belief and ruling style doesn't differ a lot (Hossain, 2013). The democracy index of Freedom House also supports our argument. But that doesn't mean that democracy has no relationship with FDI. According to the results from the ECM approach, civil liberties are positively related to FDI. Political rights are the institutional form of government, but civil liberty is democracy in regular life. We have mentioned above that whenever the political condition is adverse, FDI declines; this trend supports our result. If people can move freely, it will obviously improve the economic environment for investors and FDI.

CONCLUSION

Democracy and FDI are closely related variables both historically and empirically. However, the effect of democracy on the FDI inflow is quite a debatable issue in academia. As a developing country, Bangladesh has experienced a long period of democratic government. Eventually, in the case of Bangladesh, the nexus between democracy and FDI was not investigated scientifically. Such a study has both theoretical and policy implications. Given this context, the present study explored the relationship between democracy and FDI using time series data from Bangladesh. The OLS and ECM models are estimated, followed by some popular diagnostic tests. OLS regression results indicate that there is no correlation between democracy and FDI. On the other hand, the results of ECM, a short-run equation model, show slightly different results.

Political rights are still found to be insignificant, but civil liberties are now significant at a 5% level. In the short run, civil liberties have a positive relationship with Foreign Direct Investment inflows. The study also tested unit root (Augmented Dickey-Fuller), Serial Correlation (Breusch-Godfrey), normality (Jarque-Bera), Cointegration (Johansen) Regression Specification Error Test (Ramsey Reset) for both OLS and ECM to confirm the validity of the data's and models. However, the present study still has some limitations. It is clear that apart from the FDI, some other factors play a significant role in low FDI in Bangladesh. The effect of FDI in the neighbouring countries with similar levels of per capita GNI may affect the FDI in the home country. Thus, future studies can include all other relevant variables to determine the effects of democracy on FDI.

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APPENDIX

Table-06: Test for stationary of the residual of regression model

		t-Statistic	Prob.*
Statistics for the augmented Dickey-Fuller test		-5.089701	0.0002
Test critical values:	1% level	-3.653730	
	5% level	-2.957110	
	10% level	-2.617434	

Table-07: Results for Autocorrelation of OLS Regression Model 1

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	4.504307	Prob. F(2,29)	0.0598
Obs*R-squared	9.006573	Prob. Chi-Square(Sharif & Abdullah)	0.0411

Table 08: Results for heteroskedasticity of OLS

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	1.182833	Prob. F(6,31)	0.3409
Obs*R-squared	7.078928	Prob. Chi-Square(6)	0.3136
Scaled explained SS	5.027571	Prob. Chi-Square(6)	0.5403

Table 09: Results for Ramsey RESET test of OLS

	Value		df	Probability
t-statistic	1.366575		30	0.1819
F-statistic	1.867527		(1, 30)	0.1819
Likelihood ratio	2.294826		1	0.1298

Figure-2: Result for normality test of ECM (the Jarque-Bera test)

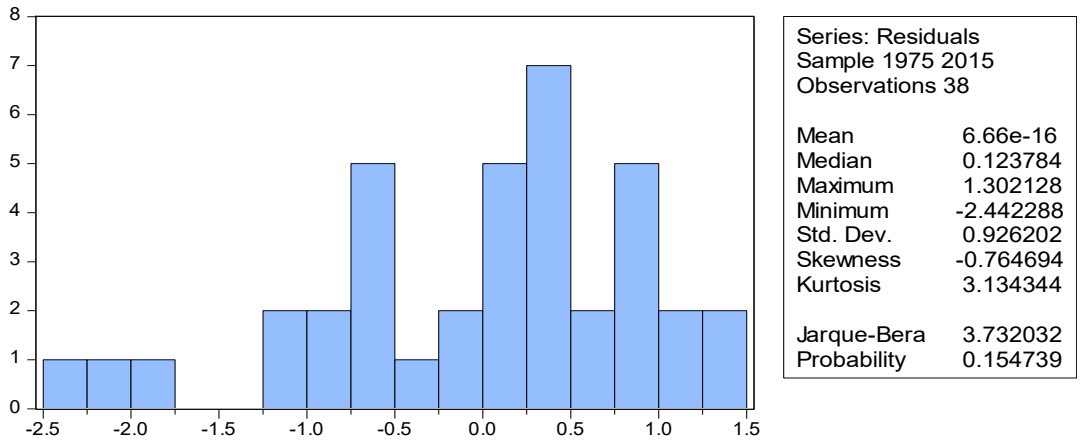

Figure-3: CUSUM Test for OLS

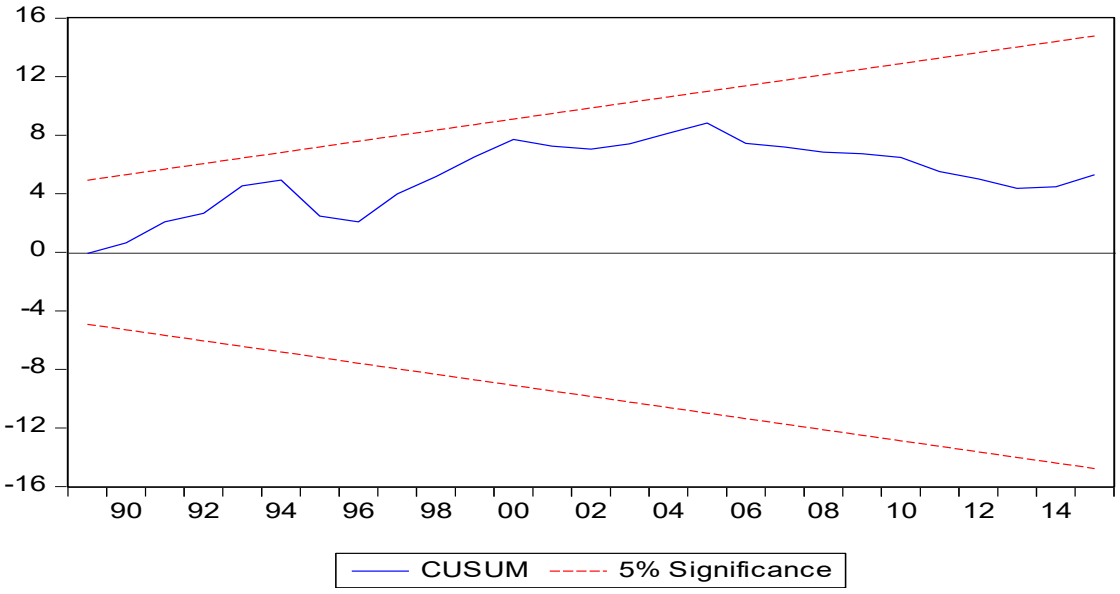

Table-10: Results for Autocorrelation of Error Correction Model (ECM)

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.130810	Prob. F(4,23)	0.9696
Obs*R-squared	0.778525	Prob. Chi-Square(4)	0.9413

Figure 4: Result of normality test of ECM (the Jarque-Bera test)

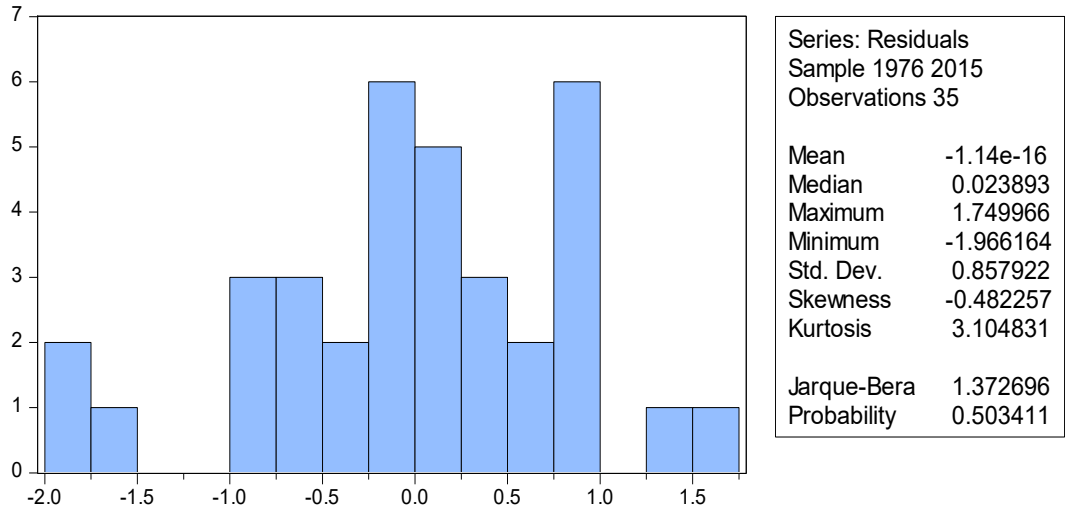

Table 11: Results for heteroskedasticity of ECM

Breusch-Pagan-Godfrey			
F-statistic	1.221240	Prob. F(7,27)	0.3255
Obs*R-squared	8.416734	Prob. Chi-Square(7)	0.2973
Scaled explained SS	5.271356	Prob. Chi-Square(7)	0.6269

Table 12: Results for Ramsey RESET test of ECM model.

	Value	df	Probability
t-statistic	0.045061	26	0.9644
F-statistic	0.002031	(1, 26)	0.9644
Likelihood ratio	0.002733	1	0.9583