Political Globalization and Foreign Direct Investment Inflows in Turkey

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ABSTRACT

This article examines the impact of political globalization on foreign direct investment inflows to Turkey. Existence of foreign missions in a country, membership in international organizations, participation in U.N. Security Council Missions, and International Treaties are all seen as indicators of political globalization. Using different econometric techniques, this study aims to find out whether any empirical relationship between political globalization and FDI exists. The analysis in this article covers the period in Turkey between 1970-2012. The results of cointegration analysis provide no evidence of a long-run or short-run relationship between political globalization and FDI.

Keywords: Cointegration, FDI, Pesaran bound test, political globalization

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1.0 Introduction

Foreign direct investment is accepted as one of the most important sources of economic development, particularly so after 1980s. FDI has indeed grown at a phenomenal rate since the early 1980s. Therefore many researchers in finance and economics try to find the factors that affect the FDI (Haksoon, 2010: 59). According to the UNCTAD report (1998), for example, the determinants of FDI could be classified into 3 main categories. These are political factors, business facilitation and economic factors.

The basic aim of this article is to demonstrate the impact of political globalization of Turkey on FDI. It is analyzed with four main sources. According to the our results, ceteris paribus, investors from different
countries are likely to invest in Turkey. Thus the relation between political globalization and FDI into Turkey is positive.

The stock of FDI in Turkey was only $ million in 1971, and up until 1980 the average annual inflow of FDI was only $ 90 million. As Balasubramanyam (1996) shows, this was far less than other comparable countries, and FDI did not increase significantly for most of the 1980s (Loewendhal and Ertugal, 2000: 3).

This article contains six sections. In section two we give Literature Review of FDI and political globalisation. In section three Turkey and Foreign Direct Investment. In section four empirical Analysis that the relationship between FDI and political globalisation is examined. In the last section we present empirical results and then conclude the results.

2.0 Literature review

In recent years hundreds of theoretical and empirical studies have tried to explain these kind of questions; what drives decisions on where to invest? How do countries, especially developing and underdeveloped countries attract foreign direct investment and which conditions are convenient for FDI.

The findings are related with these kind of questions presented in the literature that several factors could facilitate or hinder foreign direct investment inflows. So modeling FDI is a complicated task because so many variables are involved (Mohsin and Zurawicki, 2002: 291). However, several studies have analysed the relationship between FDI and many things. Coughlin, Terza and Arromdee (1991) found for 1981 – 1983 within the United States that states with higher per capita incomes and higher densities of manufacturing activity attracted relatively more foreign direct investment Habib and Zurawicki (2002), in their article analysed the impact of corruption on foreign direct investment. The results showed that although their perceived high corruption China, Brazil, Thailand and Mexico attract large flows of FDI, Belgium, which is similarly rated on corruption (by Transparency International) attracts substantial FDI.

Brewer (1993), indicated that, the effects on FDI of government policies, moreover depend on the relative cross – national changes in policy as well as the cross – national differences in the levels of policies. Busse and Hefeker (2005), using different econometric techniques for a data sample of 83 developing countries and the period 1984 to 2003, explained that investment conflict, ethnic tensions and democratic accountability are important determinants of FDI flows.

Kenyon and Margalit (2014), they have analyzed the empirical relationship between treaty signing and FDI inflows. They showed that signing of international economic treaties can help boost foreign investment inflow via its direct effect on the opportunities to benefit from expanded commerce.

Kilmek (2015) in his article examined the relationship between quality of institutional environment and FDI inflows. Using cross – sectional and panel data techniques, he found that quality of institutional environment plays important role in the process of capital abroad in the form of FDI for 125 economies across 7 geographic regions over the period of time 1996–2011. Anghel (2004), argues that countries whose governments are hishing ranked according to various indices tend to do better in attracting foreign direct investment. According to the findings of her research countries with corrupt, less efficient governments tend to be less attractive for foreign investors. Madeni and Nobakth (2014), in their article accounted for the political determinant of foreign direct investment inflows for 31 Upper – Middle – Income Countries (UMCs) over the period of 1990 – 2011. The main findings of the empirical analysis are that democracy enhances FDI toward UMCs.

On the Contrary Castro (2014), found that there is no relationship between democracy and FDI. He claimed that although lagged FDI is statistically significant and positively correlated with FDI inflows, democracy is not statistically significant and it has a limited effect on FDI.

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Hakro and Ghumro (2011), in their article analysis the determinants of FDI flows and to quantify relevant policy shocks for Pakistan economy, by using dynamic econometric VAR model. Their analysis showed that the investment environment improving factor statistically significant not only in short run but also in long run. Krifa and Matel (2010), explained by applying two panel models : a fixed effect model and a dynamic panel model (the Arellano – Bond GMM estimator) for a data sample of 33 developing countries covering the period 1996 – 2008 that reduced levels of political risk, are associated with an increase in FDI inflows and the business operation conditions appear as an important determinant of the FDI.

Büthe and Milner (2008), explained by focusing on a particular type of international institution that international institutions increase the credibility of government commitments and these institutions affect FDI by giving foreign investor access to markets for inputs and outputs

Nuno Carlos Leitao (2012), in his article argued and provided that globalization has positive effect on FDI. Using static and dynamic panel data techniques he showed that market size, globalization, openness trade and urban population are important for the countries selected are members of OECD in between 1990 – 2008. Caroline Witte et al., (2015) in their article analyze what drives MNEs to select low income Sub-Saharan Africa countries. They found that political violence has a negative effect on propensity of a MNE to invest a location. Using a unique dataset comprised of greenfield FDI in low income Sub-Saharan they also showed that the coefficient of colony variable is positive and high significantly, indicating that MNEs from former colonizer are more likely to invest in a location. Coupet and Mayer (2005), based their study on the relationship between FDI and institutional determinants. They found that institutions matter independently of GDP per capita. According to their empirical results, for a sample 52 countries, public efficiency in broad sense as a major determinant of inward FDI. Brunetti and Woder (1998), by using large number of uncertainty variables in a standardized data set, showed that there is negative association between political violence and FDI. Biglaise and De Rounen (2006), they have analyzed the determinants of FDI inflows in Latin America for 14 countries between 1980 and 1996. By using panel data technique, they found that most economic reforms have limited effect on FDI flows. They also pointed out that international capital liberalization and privatization are unlikely to attract foreign interests and regime type seems to have little impact on foreign investors.

3.0 Turkey and foreign direct investment

Although liberalization programme and export oriented strategy of development initiated in the early 1980s, Turkey was one of the lowest recipients of FDI among the developing countries until 2000s. During the 1980s cumulative inflows of FDI was about $0,168 billion or 0.86 % of gross domestic investment (Vural and Zortuk, 2011:15). Because of the unstable political scene, Turkey was not able to utilise its economic growth in 1990s (Demir, 2013). Thus, in terms of international capital with the cumulative FDI/GNP ratio and the per capita cumulative FDI was well below the average (17.3%) for Turkey (4.4%). Moreover this ratio was 28% in developing countries (Akgül and Ucal, 2003: 9).

In Conclusion, although Turkey shifted to free market economy gradually, FDI flows and export volume remained at low levels during the period 1980 – 2001 because of the financial crises and political instability (Bayar, 2014: 26). Come to 2000s a key feature of the Turkish economy over the last decade has been the robust economic growth with an average annual rate of 5 percent. This remarkable performance of growth together with prudent fiscal policies and major structural reforms has integrated the Turkish economy into the globalized world, while transforming Turkey into one of the major recipients of FDI in its region. Turkey has become the 13th most attractive FDI destination in the world by $123 billion of FDI in the past decade (Dalgıç, at al., 2012: 10).

4.0 Empirical analysis

The co-integration relationship between globalization and foreign direct investments in Turkey has been analyzed in the empirical part of this work, using annual data for 1970-2012. Foreign direct investment data has been obtained from UNCTAD . KOF index has been used as political globalization data. It is first
necessary to perform unit root tests in order to determine whether any relationship exists between FDI and political globalization.

| Variables | Model | Mackinnon Critical Values (5%) | Augmented Dickey-Fuller test statistic | Results |
|-----------|-------|---------------------------------|--------------------------------------|---------|
| FDI       | I**   | -2.943427                       | -7.905179                            | l (0)   |
|           | I***  | -3.520787                       | -9.285521                            | l (0)   |
|           | II **** | -1.951000                      | -3.987709                            | l (0)   |
| POLGLB    | I**   | -2.933158                       | -0.769667                            | l (1)   |
|           | I***  | -3.520787                       | -1.966761                            | l (1)   |
|           | II **** | -1.948886                      | 1.866934                             | l (1)   |
|           | IV ***** | -2.935001                     | -7.994112                            | l (1)   |

For this purpose, stationarity of variables were done using Augmented Dickey Fuller (ADF) test. Augmented Dickey Fuller (ADF) test contains three different regression equations.

\[
\Delta Y_t = \mu Y_{t-1} + \sum_{i=2}^{p} \beta_i \Delta Y_{t-i+1} + u_t \\
\Delta Y_t = \alpha_0 + \Delta Y_{t-1} + \sum_{i=2}^{p} \beta_i \Delta Y_{t-i+1} + u_t \\
\Delta Y_t = \alpha_0 + \alpha_2 t + \mu Y_{t-1} + \sum_{i=2}^{p} \beta_i \Delta Y_{t-i+1} + u_t
\]

(1) (2) (3)

\(\tau, \tau_1, \tau_2\) and \(\tau_3\) statistics are used for the testing of \(\mu = 0\) (Dickey and Fuller (1981)). To test joint hypothesis on the coefficient provide three additional F-statistics that name are \(\Omega_1, \Omega_2\) and \(\Omega_3\). The null hypothesis \(\mu = \alpha_0 = 0\) is tested by equation \(\Omega_1\) using statistics. \(\Omega_2\) is tested by taking a time trend in regression, i.e. by using (4.3) - joint hypothesis \(\alpha_0 = \mu = \alpha_2 = 0\) statistics. Finally \(\mu = \alpha_2 = 0\) joint hypothesis is tested using statistics \(\Omega_3\) (Enders, 1995: 221-222). Within the scope of these regressions, FDI stability and POLGLB variables have been tested and the results were shown in Table 1. According to the results of the unit root tests, it can be said that the FDA data is constant, while POLGLB data contains a unit root and is first-degree cointegrated. Therefore, Peseran, et al., (2001) test has been used to determine the co-integration relationship.

4.1 Co-integration test

Once it has been established that FDI series is stationary and, POLGLB series is cointegrated in the first order, an unconstrained Vector Autoregression (VAR) model has been developed to determine the optimal level of delay to be employed in co-integration. Optimal lag number was determined as 1 using, LR test statistic (Likelihood Ratio), Final Prediction Error (FPE), Akaike Information Criterion (AIC), Schwarz Information Criterion (SC), Hannan-Quinn Information Criterion (HQ).

Through the bounds test developed by Peseran, et al., (2001), cointegration relationship can be investigated regardless of whether the series are \(I(0)\) or \(I(1)\). For this purpose, firstly an Unrestricted Error Correction Model (UECM) was developed. Adopted version of this model for our study is as follows.

\[
\Delta FDI_t = \alpha_0 + \alpha_1 t + \sum_{i=1}^{p} \alpha_2 \Delta FDI_{t-i} + \sum_{i=0}^{p} \alpha_3 \Delta POLGLB_{t-i} + \alpha_4 FDI_{t-1} + \alpha_5 POLGLB_{t-1} + u_t
\]

\(F\) test is calculated for detecting the presence of the co-integration relationship. The basic hypothesis for the \(F\)-testing is, \(H_0: \alpha_4 = \alpha_5 = 0\). Calculated \(F\) test statistics is compared against the lower and upper critical values of Peseran, et al., (2001). If the \(F\) statistic is smaller than the Peseran, lower critical value than it is concluded that no co-integration relationship exists. If the \(F\) statistics is between the lower and upper values, than no-conclusive comment can be made about the existence of a co-integration relationship.
Political globalization and foreign direct investment relationship. Finally, if the F statistic is above the upper value, this indicates the presence of a co-integration relationship.

| Table 2: Unrestricted Error Correction Model |
|---------------------------------------------|
| k   | F-statistics | Test Critical Values (level 5%) |
|-----|--------------|---------------------------------|
| 1   | 3.095177     | lower limit: 4.94, upper limit: 5.73 |

Critical values were obtained from table C (iii) in Pesaran, et al., (2001:300) wherein . k is the number of independent variables.

Results obtained from the Unrestricted Error Correction model are shown in Table 2. According to these findings, as a result the analysis performed for the period between 1970 and 2012 in Turkey it was concluded that no co-integration relationship exists between Foreign Direct Investment and Political Globalisation.

5.0 Conclusion

The term “globalization” came into popular usage in the second half of the 1980s in connection with the huge surge of foreign direct investment (FDI) by multinational corporations (Gilpin, 2001:7). Meanwhile many indicators shows that FDI’s are determined not only by multinational corporations or firms, but also by culture, historical connection, and political regime in which economic operations are embedded. For this reason FDI’s are strongly affected by social and political climate.

Because of the foreign direct investment is accepted one of the most important source of economic development many researchers try to find the factors that affect the FDI. The main theoretical determinants of FDI can be summarised as market access, transport costs, size of the host market, factor costs, trade barriers or openness and investment climate. However, empirical analysis for Turkey between the years of 1970-2012 indicate no cointegration relations between political globalisation and FDI.

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