The Effect of Country Risk on Foreign Direct Investment: A Dynamic Panel Data Analysis for Developing Countries

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Abstract. Issues created by inconsistency make difficult for investors to make healthy decisions. Risks and uncertainty may lead investors to have bad decisions which result in low level of profit from investments. The purpose of this study is to analyze the effect of country risk on the direct foreign investments (FDI). In the study in which annual data between the years of 2002 and 2014 belong to 49 countries are utilized, the relationships between the variables are analyzed through two phase system-GMM dynamic panel method. Three model assumptions are made for the study. According to the assumption results of the first model which focus on the country risk's effect on the FDI inflows; the decrease in the country risk increases the FDI inflows. The results of second model through which the effects of sub elements of country risk (financial, economic and political risk) on the FDI are analyzed separately show that financial risk does not create statistically meaningful effect while the decrease in economic and political risk affects the FDI inflows in positive means. Finally, according to the results of the third model which focus on the effect of FDI inflows on the country risks; FDI creates a decreasing effect for country risk and indirectly inconsistencies.

Keywords. FDI, Developing countries, Country risk, Twostep system-GMM.

JEL. C33, C36, E22, F22.

1. Introduction[1]

Foreign investment could be defined as the transferring of economic resources among countries through individuals or multinational enterprises (MNEs). If the transfer is happened by security purchase or short term loans, these kinds of investments are called as portfolio investment. If the capital movement is happened through a production center establishment in another country, acquiring an existing production facility and/ or participation in capital increase; these kinds of investments are called as FDI (Arık, et al., 2014). According to the definition of International Monetary Fund (IMF); FDI is investments which MNEs make as at least 10% capital partnership and for the purposes of establishing long term relationship with other countries (IMF, 1993). Indirectly, FDI could be regarded as a tool for both long term relationships and global integration within the capital

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movements. If compared to short term loans and other portfolio investments, FDI is a more consistent investment which creates value added for the economy.

Depending on the criteria as through which channels FDI entered into the country and whom are affected by the FDI, it could be said that FDI effects might differ on economies (Ünver & Erdoğan, 2015). However, the general approach is that the foreign investments, which creates good and services manufacturing through especially leaning toward the new investment areas or acquiring the existing firms could offer more contribution for the country economy. This contribution could be experienced as intermediation for country development, increasing the economy's and existing firms' managerial capacities and capacities for spreading new markets, using the financial sources more efficiently and increasing the employment (Kriuki, 2015). Additionally, FDI provides technology trasfer for the host country so that contributes to the country's human capital capacity (Artan & Hayaloğlu, 2015). Today the globalization has reached to upper levels; FDI becomes an important factor for the developing countries which have low level of capital accumulation and development facilities since of its economic benefits (Kargı, 2014). Countries create competitive environment for attracting more FDI in order to be able to increase the welfare level and economic development trend. Developing countries try to attract foreign investments as especially turning the trade regimes to free, creating new economic cooperation or offering privilege incentives for MNEs (Zeren & Ergun, 2010; Kargı, 2013).

However, the MNEs which plan to make investments to other countries decided firstly whether the related country or the sector is suitable for the investment as considering the country's corporate social, cultural, financial and economic conditions. Therefore, FDI is affected by many factors. Especially, up to day from 80s when trade activities became free; an intense academic interest has existed to research about the factors which affect the FDI inflows. This academic interest could simply be categorized into to group. The first group academicians work on the economic and financial factors which affect the FDI inflows. According to the common findings of these studies; FDI relatively prone to be made on open economies which have wide market, high level of economic growth rate and human capital stock and low level of labor price (Bevan & Estrin, 2004; Özcan & Arı, 2010; Vjayakumar et al., 2010; Ranjan & Agraval, 2011). On the other hand, it could be seen that the recent studies which are conducted related to FDI focus on the corporate factors. Three main findings from these studies show that the improvement in the corporate quality indicators including political consistency, high level of bureaucracy quality, not having corruption, implementing law state rules, guaranteeing the property rights, advanced democracy, not having societal conflict and threats are as effective as macroeconomic factors for FDI inflows (Carstensen & Tubal, 2003; Busse & Hefeker, 2007; Gedik, 2013; Khan & Akbar, 2013, Erdoğan & Ünver, 2015, Artan & Hayaloğlu, 2015).

Another key concept in the analysis of international capital movement is the country risk. Considering that MNEs prefer the countries which may offer low risk and high return levels, it could be said that countries' risk prims are important guidance for investors. In the literature review related to country risk analysis, studies relatively focus on the political risk. However, country risk is not a single component factor. Political consistency is an important factor affecting the FDI inflows however, economic and financial uncertainty also impact the investment decisions. In this study, it is targeted to reveal the relationship between country risk and its components (economic, financial and political risk), and FDI flows. In this context, theoretic discussions related to this subject matter are provided in the second section. The third section in which before conducted studies about the subject is presented is followed by the fourth section in which the data set and

methods used in the analyses are introduced. In the fifth section, descriptive statistics and empirical findings are provided. The sixth and final section consists of the conclusion and suggestions.

2. Country Risk and FDI Inflows

Risks, which could be defined as the possibility to happen unexpected incidents in the future, make difficult to have decisions as creating uncertainties. The risk, which is stemmed from externally for companies and could not be controlled by companies, is called as systematic risk. On the other hand, investors prefer non-systematic and measurable risks. Investors are very sensitive to systematic risks since it is very difficult to oversee and control them. All components composing the country risk is a type of systematic risk and these may be determinant power on FDI inflow as creating uncertainties.

It is hard to claim a complete consensus on how to define the country risk and their components. Although there are many different approaches in the related literature, country risk is generally evaluated in the concept of uncertainties which are created by economic, financial and political structure. For example, according to White & Fan (2006), country risk could be stated as an undesired breakdown which is caused by international trade relationships in the basic performance indicators or strategic targets. Additionally, country risk could be categorized into subgroups as economic, financial, political and cultural risks (White & Fan, 2006). On the other hand, Hoti & McAleer (2002) define country risk as that the host country which takes loan is not able to meet part of or majority of its liabilities. According to the authors, country risk could be ordered as the risks caused by economic, financial and political environment (Hoti & McAleer, 2002).

2.1. EconomicRisk

Economic risk defines the unexpected developments in the general structure of the economy in such a way that investors may make changes their investment projects (Topal & Gül, 2016). The change in the economic risk level is measured by the changes in the country economy's strengths and weaknesses. If the economy's strengths are enough to compensate the weaknesses, this situation could be interpreted as the economic risk is decreased (PRS, 2014). Foreign investors prefer countries which have wider markets in order to take benefit of large scale of economies. For this reason, as an indicator of market growth; economic growth and income per capita are among the variables used in measurement of economic risks. Other economic indicators used to measure the economic risk are budget deficit, inflation rate and current account balance. If the budget deficit becomes chronic in a country, it reveals the weaknesses of the country as increasing the country's debt stock and indirectly its economic vulnerability. At the same time, budget deficit impacts the country's investment-saving balance as creating breakdowns for inflation, current account deficit and foreign trade indicators (Çavdar & Karaman, 2013; Altunöz, 2014). On the other hand, high level of inflation rates decrease the reel values off investment and create low returns to investors so that it causes value losses for future earnings of investors (Arık et al., 2014). Additionally, high level of inflation increase the balance of payment deficits and increase uncertainties and investment risk (Çetin & Şeker, 2014). Therefore, the change, which is happened through above-mentioned variables, is given importance by the foreign capital owners as it may change the risk perception.

2.2. Financial Risk

Financial risk is defined as the decrease in ability of country to meet its liabilities toward abroad (White & Han, 2006). A country, which has high level of financial risk, most probably would face a financial crisis. Its economy's foreign

debt stock, export income level, current account deficit, international liquidity and exchange rate consistency are used to determine its financial risk prime (PRS, 2014). The increase of a country's foreign debt stock in the national income increases its financial risk level as decreasing its ability to meet foreign liabilities. Oreign companies are very sensitive to financial risk so that they prefer making investment on the countries which have low level of foreign debt stock and indirectly low level of financial risk. If a country's foreign debt stock and financial risk level becomes chronic, the current deficit is impacted by this situation in negative manner (Doğan & Bayraç, 2014). The presence of current account deficit and high level of foreign debt increase the turbulence of exchange rate and weakens the country's international liquidity. Then the inconsistency on the exchange rates (rates' extensive and high level of turbulences) affect FDIs in negative fashion as creating serious uncertainties for foreign investors (Lee & Naknoi, 2014). In order to be able to close the balance of payment deficit and sustain the consistency for exchange rates, high level of foreign currency inflow is required. Especially, difficulties are experienced in management of these deficits since the foreign currency incomes, which are obtained through product and service exportation in the developing countries, is less than the payment made to imports (currency expenses) (Çiftçi, 2014). Therefore, it could be said that financial risk is an important reasons of why these countries could not attract FDI in a sufficient level.

2.3. Political Risk

Political risk reflects a country's quality of corporate structure. As showing low level of corporate quality and political inconsistency, political risk decreases the investors' profitability (Busse & Hefeker, 2007). Political consistency, social compliance, bureaucracy quality, level of corruption, law superiority and democracy are the most important indicators for a country's corporate quality. FDI especially include high level o sunk costs makes MNEs more sensitive to uncertainties (Helpman et al., 2004). Sunk costs include also the costs which are paid to establish good relationships with the host country and to obtain necessary information. Governmental inconsistency, not being able to prevent the property rights, slow bureaucracy, license and permission processes which takes long time, which are caused by a result of weak corporate quality and reflects the political risk level of a country, increase the production costs of MNEs (Morrisey & Udomkerdmongkol, 2011; Khan & Akbar, 2013; Elleuch et al., 2015). Additionally, corruption implementation including monetary benefit or tips which could be applied on managerial processes such as exchange controls and tax transactions make it difficult for foreign companies to make business efficiently. All of these are considered as aversive factors for FDI inflows.

3. Literature Review

Especially, FDI is regarded as an important factor for development and growth processes of less developed and developing countries which have low level of saving and insufficient level of capital accumulation. Therefore, the related countries could not attract sufficient FDI or face with capital outflows. Although there could be found different results in the studies conducted in the subject matter, strong proofs are found showing that risks carried by host countries have powerful effects. In this section of the study, summary information about the findings and the related studies is presented as keeping chronological order.

As analyzing the FDI determinants made on Central and East European Countries from OECD countries, Carstensen and Toubal (2003) reaches the findings that in addition to traditional determinants including market potential, low

labor force cost, privatization level and qualified labor force; the decrease in country risk as a transition-specific factors has positive effects on FDI. In their studies where they worked on Middle East and North Africa (MENA) countries, Sekkat and Varoudakis (2007) determined that the decrease in the economic and political risk affects the FDI inflows in increasing fashion. Busse and Hefeker (2007) analyzed the relationship between political risk and institutions, and DI for 83 developing countries. According to the result of the analysis in which 12 different variables are used as obtaining from ICRG as indicator of political risk and institutions; government stability, the absence of internal conflict, basic democratic rights and law and order are found as important indicators of FDI inflows. Gast and Herrmann (2008) researched the determinants of FDI. For this purpose, they reached proofs which show the negative directed relationship between country risk and DI as a result of cross section analysis. Therefore, researchers concluded that the countries which have high level of political and economic stability and low level of risk are more attractive in terms of FDI. As stating that FDI has important roles on integration processes of developing countries with global economy, Musonera (2008) studied the effects of country risk factors (economic, financial and political risk) on FDI flows through Sub-Saharan Africa (SSA) countries. The findings obtained as a result of the analysis show that FDI inflows depend on the level of host country's economic, financial and especially political risk. Researcher, who emphasizes that international investors prefer making investment on the countries which have low level of risk, claims that the countries should implement economic policies which may decrease the risk level in order to attract more FDI.

Hakayawa et al. (2011) researched the effect of political and financial risk on FDI inflows about totally 93 countries as 63 of them were developing countries. According to the Dynamic GMM and constant effects model results; high level of political risk decreases FDI inflows and financial risk does not important effect on FDI inflows. Therefore, according to the authors; foreign investors do not concern much about financial risks in the host country. Baek and Qian (2011) analyzed that whether political risk affected FDI accumulation on developed (industrialized) and developing countries. According to the System GMM assumptions; 1) political risk is a determinant of FDI in both country groups although it is more important and meaningful in the developing countries. 2) The effect political risk components on FDI stock differentiates depending on the countries' development levels. In the regression analysis conducted by Palacios and Griffin (2011), the correlation between FDI and 13 risk variables including financial, political and macroeconomic risks are analyzed for 6 Latin America Countries (Argentina, Brazil, Chile, Colombia, Mexico and Venezuela). The regression assumption, which was created for this purpose, concluded a powerful and negative directed correlation between countries' risk levels and FDI. In their studies where they considered 94 countries with different income levels, Khan and Akbar (2013) analyzed the relationship between political risk and FDI. In the analysis, 12 different risk component taken from ICRG were used. The empirical proofs at the end of the analysis show that FDI has negative direction with most of the political risk indicators of all income groups while it is more powerful on upper-middle income level countries. In their studies Ali et al. (2014) analyzed whether financial risk affects FDI inflows to Pakistan economy. The time series analysis, which was conducted with 4 different financial risk indicators, it was found out that foreign debt services, exchange rate and current account had negative effect and efficient use of foreign debt had positive effect on FDI.

In the empirical literature, on the contrary to above-mentioned studies which generally show that there is a negative directed relationship between countries' risk

levels and FDI; there could also found some studies which show that the related relationship is positive or meaningless. For example, Jiménez (2011), who worked on FDI movements from South Europe countries to North Africa and central and west European countries as fresh members of EU, claimed that high level of political risk was an attractive factor for FDI, on contrary to general approach. According to Sanjo (2012), who shared a similar idea, the important factor on investment decision for foreign firms was not the host countries' high or low level of risks but whether the market was large enough to make investment. In the countries where political risk is high, investors would prefer making investment to risky country if its market size is larger comparing to less risky countries' market size. In the time series analysis, which they made for Turkey, Emir et al. (2013) concluded that the relationship between FDI and country risk differentiate in the short and long terms. Accordingly, while there is not a meaningful relationship between the related variables in the short term, FDI is affected from country risk in the long term. Finally, in the study where Kariuki (2015) researched on FDI determinants for African union countries, the results were reached that economic risk had negative effects on FDI while political and financial risks did not have any effects.

4. Data and Methodology

In this study, which considers the development classification made by IMF[2], annual data for the year of 2004-2014 belong to 49 developing countries (provided in Appendix-1) are used. Descriptive information about the variables used in this study is provided in Table-1. FDI statistics are obtained from United Nations Conference on Trade and Development (UNCTAD) database. The statistics related to country risk and components are obtained from PRS-ICRG (Political Risk Services-International Country Risk Guide) which is a Canada registered risk evaluation firm. As have been focusing on risk evaluation up to day, PRS Group regularly calculates annually[3] risk index for 140 countries. Detailed information about ICRG risk methodology could be found in Appendix -2.

Table 1. *Descriptions of Variables*

Variables	Explanation
FDI	Foreign direct investments which are made to countries in terms of dollar currency with current prices. It is used with logarithmic values in the analyses.
ECO-R	Economic Risk. The increase in index value which has value ranging from 0 to 50 shows the decrease in economic risk.
FIN-R	Financial Risk. As taking values ranging from 0 to 50, its increase in values shows the decrease in country's financial risk.
POL-R	Political Risk. As taking values ranging from 0 to 100, its increase in values shows the decrease in country's financial risk.
COUN-R	Country Risk. An integrated risk level, calculated as *COUN-R = 0,5 x (ECO-R + FIN-R + POL-R)*. The increase in index value which can have values in scale of 0-100 shows the decrease in country risk.

The relationship between FDI inflows and country risk is analyzed through panel data analysis. Panel data analysis which has two dimensions as time series and cross section offers advantages as to have many amounts of observation and freedom degree, to be able to observe the unobservable effects (unit and time

[2]IMF classifies countries in terms of their development levels as considering export diversification, national income per capita and integration criteria with global financial system.
[3]Monthly data is converted to annual data as taking averages.

effects) and assumption on complex behavioral models. In the sight of the related advantages, panel data analysis, which allows more efficient and reliable econometric assumptions comparing to cross section and time series analyses, is intensely used in empirical literature (Hsiao, 2007). Below mentioned three models are assumed in the econometric analysis. In Model (1), the effect of country risk in the related countries on FDI inflows, in Model (2), the effects of country risk components (economic, financial and political risk) on FDI inflows, and finally in Model (3), the effect of FDI on country risk is tested.

Model I:

$$FDI_{it} = \beta_1 FDI_{it-1} + \beta_2 COUN\text{-}R_{it} + \eta_j + \gamma_i + \varepsilon_{it} \qquad (1)$$

Model II:

$$FDI_{it} = \beta_1 FDI_{it-1} + \beta_2 ECO\text{-}R_{it} + \beta_3 FIN\text{-}R_{it} + \beta_4 POL\text{-}R_{it} + \eta_j + \gamma_i + \varepsilon_{it} \qquad (2)$$

Model III:

$$COUN\text{-}R_{it} = \beta_1 COUN\text{-}R_{it-1} + \beta_2 FDI_{it} + \eta_j + \gamma_i + \varepsilon_{it} \qquad (3)$$

In the model, η_i represents the unobservable individual effects, γ_i represents the unobservable time effects and ε_{it} represents the error terms. In the models, η_i and γ_i are assumed to be constant. However, in the assumption of these kinds of models, dynamic panel data method is the most suitable model to be able to consider the possible endogeneity problem between independent variables and lagged values of dependent variables and the presence of unobservable effects (Baltagi, 2014). In this study, system generalized model (System-GMM) which was developed by Arellano-Bover (1995) and Blundell-Bond (1998) among other dynamic panel data methods. As Roodman (2006) stated, this method is a suitable method for cases in which model's time size is short and unit size is larger (T<N). In this study, T=13 and smaller than the amount of country, as N=49. On the other hand, this method indeed is a tool variable method. Tool variables are created which show similar moment character instead of variables which probably carry endogeneity problem (Yıldırım & Kesikoğlu, 2012). Possible endogeneity problem in the independent variables are eliminated as adding lagged values of dependent variables as tool variables to the model.

Additionally, the ability to make assumptions with GMM assumers is depended that there is no correlation between error terms in the model and to sustain the assumption that tool variables are valid. The validity of the related assumptions are tested with AR(1), AR(2), Sargan, Hansen J and Fark Hansen tests. Among the tests, AR(1) and AR(2), which are developed by Arellano-Bond (1991) tests are used to test whether error terms have correlation. In AR(1) test, the hypothesis of "there is no first degree auto correlation" and in AR(2) test, the hypothesis of "there is no second degree auto correlation" is tested. It is expected to have AR(1) test statistics as meaningful and negative, AR(2) test statistics as meaningless in other words, accepting the hypothesis in the meaningful level of at least 5% in terms of efficiency (Abdullah et al., 2009). Two alternative tests are used in order to test whether extensive limitation descriptions (tool variables) are valid or not. These are as Sarganand Hansen J tests. In both tests, the empty hypothesis is as "the tool variables are valid" and it is expected to be accepted. On the other hand,

Fark Hansen test gives more reliable results in case of presence of varying variance of Hansen J test[4].

5. Descriptive Statistics and Empirical Findings

Descriptive statistics about the variables used in this study is provided in Table-2. In the related period, DI inflows average is about 6.99 billion dollar. The lowest amount of FDI inflow was experienced in 2012 in Senegal and the biggest amount of FDI inflow was experienced in 2003 in Azerbaijani.

In the related period, integrated risk was in middle level as average of 68.8. In the related period, the average economic, financial and political risks were as 35.1, 38.3 and 64.3 respectively. The highest level of country risk was experienced in 2003, in Nigeria while the lowest level of country risk was experienced in 2012, in Bostwana. Mali (in 2006) was the country which had the highest level of economic risk while Katar (in 2011) became the country which experienced the lowest level of economic risk. Argentina (in 2002) was the country which had the highest level of financial risk while Chili (in 2012) became the country which experienced the lowest level of financial risk. Nigeria (in 2002) was the country which had the highest level of political inconsistency while Hungary (in 2002) became the country which had the strongest political consistency.

Table 2: *Descriptive Statistics*

| Variable	Observation	Mean	Std. Error	Minimum	Maximum
FDI	637	6.99	16.45	0.276	45.14
COUN-R	637	68.8	0.65	51	84.5
ECO-R	637	35.1	0.45	24	50
FIN-R	637	38.3	0.47	18	49
POL-R	637	64.3	0.84	39	83.5

In order to obtain prior information about the relationship between the variables in the analysis, Pearson correlation analysis id applied and the related findings are provided in Table-3.

Table 3: *PearsonCorrelation Matrix*

	FDI	COUN-R	ECO-R	FIN-R	POL-R
FDI	1.000				
COUN-R	0.092**	1.000			
ECO-R	0.109*	0.78*	1.000		
FIN-R	0.107*	0.60*	0.55*	1.000	
POL-R	0.0232	0.80*	0.38*	0.07***	1.000

*, ** and *** represent statistically meaningful levels as 1%, 5%, and 10% respectively.

[4] Econometric analyses are conducted with Stata 12 econometric package program. xtabond2 command is used which was developed by Roodman (2006) in the analysis in which two phase-System GMM is applied. This code also makes corrections related to elimination of small sample deviations offered by Windmeijer (2005).
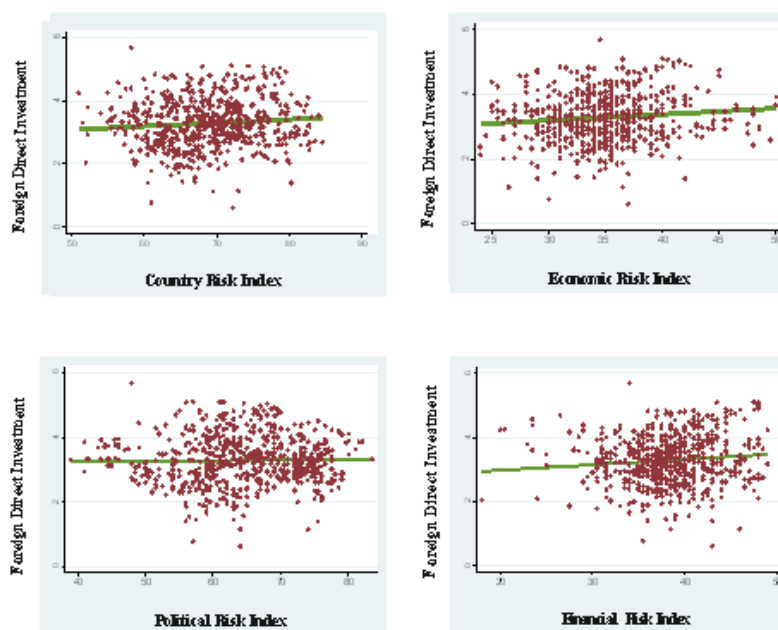
After correlation and scatter diagram analyses, the relationship assumption about country risk and FDI inflows are applied through three different models. For this purpose, two phase-system GMM analysis findings are provided in Table-4. Before interpretation of the findings, whether the applied diagnostic tests and system GMM assumer are consistent or not is tested.

For this purpose, Wald test is applied and Wald (χ^2) test statistics, which are applied for each of three models, are found as meaningful in level of 1%. After Wald test, which shows that assumption models are meaningful as a whole, Hansen-J test is applied and the results show that tool variables do not carry endogeneity problems as expected so that they are valid. Finally, AR(1) test statistics are found statistically meaningful for each of the models after the Arellano-Bond auto correlation test. These findings, which mean that there is first degree auto correlation in the models, are an expected situation. Additionally, with parallel to the same expectation, AR(2) test statistics are found as meaningless (p > 0.05) so that the hypothesis which assume that there is no second degree auto correlation in each of the models is accepted. After the diagnostic tests, which reveal that two phase-system GMM assumer is consistent, the analysis results are interpreted.

According to the assumption results of *first model* in which the relationship between country risk and FDI is tested, it is found that there is a positive and meaningful relationship as statistically in level of 1% between country risk index and FDI inflows. Accordingly, 1 unit increase in country risk index means to increase FDI inflows at a rate of 1.39%. In sight of the increase in index value means the decrease in country risk; in economic means, the decrease in country risk means the increase in FDI inflows.

According to the assumption results of s*econd model* in which the relationship between sub components of country risk and FDI is analyzed, there is no meaningful relationship between financial risk index and FDI inflows while there is a positive and meaningful relationship at level of 1% between economic and political risk indexes and FDI inflows. Accordingly, 1 unit increase in economic risk index (decreasing the economic risk level) increases FDI inflows at a rate of

2.08% and 1 unit increase in political risk index (decreasing the political risk level) increases FDI inflows at a rate of 0,35%. According to these findings, it could be said that FDI inflows is mostly sensitive to economic risk in developing countries.

According to the results of *third model* in which the effects of FDI inflows on country risk is assumed, it is found a positive and meaningful relationship at a level of 1% between FDI inflows and country risk index. 1 unit increase in FDI inflows increases the country risk index with 0,09 units (decreasing country risk). Thesefindings could be interpreted as economically that FDI make contribution to economic stability as decreasing risks although it is in lower level s in developing countries.

Table 4: *Results of Twostep System-GMM Dynamic Panel Data Analysis*

Independent Variables	Dependent Variables		
	Model I	Model II	Model III
	FDI_{it}	FDI_{it}	$COUN\text{-}R_{it}$
FDI_{it-1}	0.713^*	0.720^*	
	(86.91)	(131.08)	
$COUN\text{-}R_{it}$	1.397^*		
	(39.15)		
$COUN\text{-}R_{it-1}$			0.953^*
			(307.1)
FDI_{it}			0.09^*
			(15.04)
$ECO\text{-}R_{it}$		2.084^*	
		(50.19)	
$FIN\text{-}R_{it}$		-0.051	
		(-0.26)	
$POL\text{-}R_{it}$		0.354^*	
		(6.04)	
Wald (χ^2)	227134.17	497420.68	1.37e+07
	[0.000]	[0.000]	[0.000]
Hansen-J (χ^2)	48.59	46.65	48.99
	[0.994]	[0.997]	[0.993]
Difference Hansen (χ^2)	48.76	47.11	48.98
	[0.934]	[0.954]	[0.991]
AR(1) Test	-2.66	-2.64	-5.90
	[0.008]	[0.008]	[0.000]
AR(2) Test	0.77	0.85	-1.72
	[0.440]	[0.396]	[0.086]
Observation	588	588	588
Cross Section	49	49	49
Instrumental Variables	78	80	78

*stands for the statistically meaningful at a level of 1%. The values in the brackets show the probability values of test statistics. Small sample correction is made which was offered by Windmeijer (2005) in GMM Assumption and robust standard errors are used.

7. Conclusion and Recommendations

In this study, the relationship between country risk and FDI inflows is analyzed. Theoretic studies put that foreign investors (firms) avoid from risk and uncertainty so that there is a negative directed relationship between risk and investment preferences. Again, majority of the related studies reveals that FDI offers more consistency to host countries' economies as comparing to other capital investment types. In the empirical literature review in which the studies conducted in this subject is mentioned, it could be seen that the theoretic approach that FDI is affected from country risk in negative means is relatively supported. Additionally,

empirical literature findings include that financial risk has weak or meaningless, and economic and especially political risk have powerful effects on FDI inflows.

With the analysis result, parallel results are obtained with the prior studies. The opposite directed relationship between risk and investment preferences is clearly brought forward with this study. As in many other studies, it is found out that financial risk has not meaningful effect on FDI inflows while the decrease in level of economic and political risk affect FDI inflows in positive ways. Finally, although it is very weak, it is found out that the increase in FDI inflows decrease the country risk levels and make contribution to consistency. According to the findings, it could be said that developing countries should establish more quality corporate structure and consistent macroeconomic structure in order to attract more FDI. Therefore, the policies which are implemented in this purpose make developing countries more attractive for foreign investors as positively affecting the risk perception.

Appandix-1: *Country List*

Argentina	China	India	Nigeria	Senegal
Armenia	Costa Rica	Indonesia	Oman	Sierra Leone
Azerbaijan	Croatia	Jamaica	Pakistan	South Africa
Bangladesh	Dominican R.	Lebanon	Panama	Sri Lanka
Belarus	Ecuador	Lithuanian	Paraguay	Suriname
Bolivia	Egypt	Malaysia	Peru	Trinidad & Tobago
Bostwana	El Salvador	Mali	Philippines	Tunisia
Brazil	Ghana	Mexico	Qatar	Turkey
Bulgaria	Honduras	Morocco	Romania	Ukraine
Chile	Hungary	Namibia	Russia	

Appendix-2: ICRG Methodology

Political Risk: It is calculated for countries' corporate environment quality level and political stability level to be measured. The index is consisted of 12 different components. Each of the factors is called as political risk components take values ranging from 0 to the established maximum value, and as summing them together the country's political risk index value (0-100) is obtained.

✓ *Government Stability;* It is about in which degree the government is loyal to its commitments and how long the power could be sustained. It has 3 sub components; government's internal compliance, legal power and support level.

✓ *Socioeconomic Conditions:* Socio-economic pressures or full social dissatisfaction in community and business world which may restrict the government. It has 3 sub components; unemployment, customer satisfaction and corruption.

✓ *Investment Profile:* As being an independent risk element from other political, financial and economic elements which increase the investment making risk, it has 3 sub components; contract right, ability to transfer the profit to the main country and payment delays.

✓ *InternalConflict:* Political threat which may occur through managerial gap. It has 3 sub components; civil war/ coup threat, terrorism/ political blackmail, civil disobey

✓ *External Conflict:* Government disability to meet its responsibilities due to external pressures. It has 3 sub components; war, conflict behind borders and external pressure.

✓ *Corruption:* Spreading of unfair benefit seeking activities which occur in case that political system does not work well.

✓ *Military in Politics*: Interference level of military to governmental power.

✓ *ReligiousTensions:* Cases including that a religious institution absorbs religious rules, creates pressure for government, manages the social processes, restricts the religious freedom; religious groups regard superior their identities over national values.

✓ *Law and Order:* Legal superiority

✓ *EtnicTensions:* Pressures created by the differences on race, language or identity.

✓ *Democratic Accountability:* It is about which degree government meets its responsibilities toward society. High level of accountability is accepted if democratic processes are implemented.

✓ *Bureaucracy Quality:* It is about bureaucracy size, objectivity and continuity of public services.

Table: *Political Risk Components*

	POLITICAL RISK COMPONENTS	Points (Max.)
1	Government Stability	12
2	Socioeconomic Conditions	12
3	Investment Profile	12
4	InternalConflict	12
5	ExternalConflict	12
6	Corruption	6
7	Military in Politics	6
8	ReligiousTensions	6
9	Law and Order	6
10	EtnicTensions	6
11	Democratic Accountability	6
12	Bureaucracy Quality	4
	Total	100

Economic Risk: Economic risk is risk factor related to a country's current strengths and weaknesses. Generally, risk levels of a country are accepted as low if the country has more strengths comparing to weaknesses. On the other hand, risk levels of a country is accepted as high if the country has more weaknesses comparing to strengths. The index is composed of 5 different economic components. Each of the factors is called as economic risk components take values ranging from 0 to the established maximum value, and as summing them together the country's political risk index value (0-50) is obtained.

Table: *Economic Risk Components*

	ECONOMIC RISK COMPONENTS	Points (Max.)
1	GDP Per Head	5
2	Real GDP Growth	10
3	Annual Inflation Rate	10
4	Budget Balance / GDP	10
5	CurrentAccount / GDP	15
	Total	50

Financial Risk: Financial risk is about country's ability to meet its commercial and monetary liabilities. The index is composed of 5 different economic components. Each of the factors is called as financial risk components take values ranging from 0 to the established maximum value, and as summing them together the country's political risk index value (0-50) is obtained.

Table: *Financial Risk Components*

	FINANCIAL RISK COMPONENTS	Points (Max.)
1	Foreign Debt / GDP	10
2	Foreign Debt / Exports	10
3	CurrentAccount / Exports	15
4	Net International Liquidity as Months of ImportCover	5
5	Exchange Rate Stability	10
	Total	50

Composite Risk (Country Risk) Rating = 0.5 * (Political Risk + Economic Risk + Financial Risk)

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