The Impact of Institutional Quality on Foreign Direct Investment (FDI) Inflows to Vietnam

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Abstract

Researches on the impact of institutional quality in general and of its different components on foreign direct investment (FDI) inflows to a particular country are being undertaken worldwide. In Vietnam, discourses prevail concerning the effect of institutional quality on FDI inflows, but there are no studies on the impact of its particular components. Hence, with reference to the International Country Risk Guide provided by the Political Risk Services (PRS) group, along with the 1996 to 2011 data, through the "fixed" effect technique, our findings support the positive effect of institutional quality in general on FDI inflows to Vietnam. Furthermore, related findings strongly prove the role of 3 out of 6 institutional quality components—***Political Stability and Absence of Violence, Regulatory Quality, and Control of Corruption***—to be essential factors of attracting FDI to Vietnam. Likewise, the following were also revealed: (i) the possible substitution of FDI by domestic investment for investors in Vietnam's country partners as their institutional quality goes up; (ii) institutional quality still plays an important role as Vietnam exposes to further openness; and (iii) institutional quality captures all the effects of macroeconomic and infrastructure changes.

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1. Introduction

According to the United Nations Conference for Trade and Development (UNCTAD) statistics shown in Figure 1, FDI to Vietnam has risen drastically and played an increasingly important role to Vietnam's development. The value of FDI inflows to Vietnam has climbed to more than 6000 million USD in 2007 and reached the peak of nearly 10000 million USD in 2008. After 2008, eventhough the FDI value decreased, the number was still high at more than 5000 million USD. After slightly increasing in 2010 and a reduction in 2011, the value stood nearly 8000 million USD. Like many other developing countries, the purpose of attracting more FDI is a high priority by the country.

Figure 1: Foreign Direct Investment into Vietnam for the period of 1995-2012.

Unit: Million USD[*]
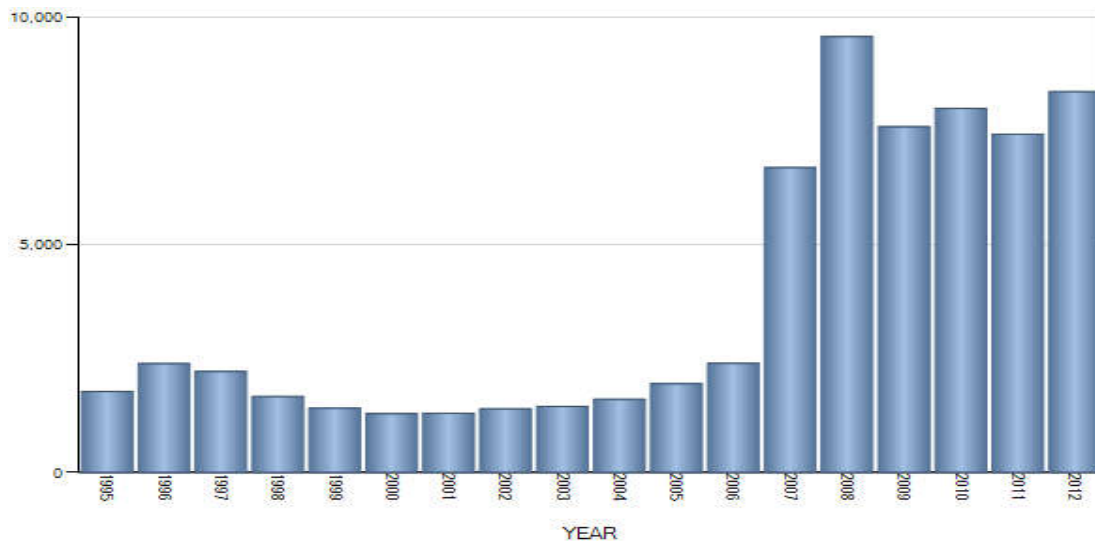
(* in current price and exchange rate)

Source: UNCTAD Online-Statistic Database.

Aside from economic factors, institutional determinants are considered by host countries as key factors to attract FDI from other countries. This is affirmed by various studies where the role of institutional quality to FDI inflows to a country is not only in general terms, but also covers its different components. While the institutional quality in general brings people the intuition about the idea of the real impact of institutions, the effect of components help countries get to know exactly the investors' perspectives of what they care about. Hence, host countries need to determine both the general and particular impacts of institutional quality necessary to set up and adjust suitable institutional

policies for FDI attraction. However, despite the number of studies that exist in the world, only a few researches about institutional quality on FDI in Vietnam persist. Among those studies on the impact of institutional quality in general, nothing about the particular effects of institutional quality's components on FDI inflows to Vietnam.

To narrow the above gap, using a panel data for a period of 1996-2011, a gravity model with panel data techniques of "Fixed effects" (Instrument Variable method to control for causality effect between institutional quality and FDI is also considered) was considered. to determine both the general and the detailed impacts of institutional quality on FDI inflows to Vietnam. The data for institutional quality is based on the six components of the International Country Risk Guide (ICRG) data (i.e., Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption).

From the obtained results, we are supportive of the positive effect of institutional quality in general on FDI inflows to Vietnam. That means that the rise in institutional quality will create higher motivation for FDI investors. Furthermore, we also **strongly prove for the roles of Political Stability and Absence of Violence, Regulatory Quality, and Control of Corruption**, 3 out of 6 components, **to play an essential role for FDI attraction**. In addition to these main points, we also figure out new interesting findings including: (i) *the possible substitution of FDI by domestic investment for investors in Vietnam's country partners as their institution quality goes up; (ii) institutional quality still plays an important role as Vietnam exposes to further economic openness and (iii) institutional quality captures all the effects of macroeconomic and infrastructure changes.*

The remainder of the paper is organized as follows. Section 2 presents the literature review. Section 3 presents the data. Next section is about the empirical strategies. Section 5 shows the main results. The final section is the conclusion.

2. Literature review

Few studies existed in Vietnam on the impact of institutional quality in general and the different specific aspects on the country's foreign direct investment.

2.1 In the world

In general, many scholars in the world such as Gastanaga, et al. (1998), Campos, et al. (1999), Asiedu and Villamil (2000), Wei (2000), Asiedu (2006), and Ting and Tang (2010) had figured out that poor institutions discouraged investors, hence, reducing FDI. Supporting this point, Bénassy-Quéré, et al. (2007) presented three main reasons for the above effects, namely: (i) good governance helps firms to increase their productivity; (ii) poor institutions can raise additional costs; and (iii) poor government efficiency causes higher uncertainty, leading to firms' higher vulnerability.

Empirical studies used different variables to measure the effect of institutional quality on FDI flows. One of the first proxies for institutional quality was political risk. Levis (1979), Root and Ahmed (1979), Schneider and Frey (1985), Stevens (1969), and Wei (1997) showed that political factors are important determinants for FDI inflows. Jensen (2003) indicated that democratic governments attracted more FDI than their authoritarian counterparts. But Green and Cunningham (1975), Schneider and Frey (1985), Schollhammer and Nigh (1987), Fatehi-Sedeh and Safizadeh (1989, 1994), Wheeler and Mody (1992), Loree and Guisinger (1995), and Sethi, et al. (2003) concluded that the political factors have an insignificant effect on FDI flows.

Other variables used to examine the impact of institutional quality on FDI flows are corruption and weak enforcement of contacts. Using corruption as a proxy for institution quality, Smarzynska and Wei (2002) also found out that corruption reduces inward FDI. According to their point of view, the decrease of institutional quality (as corruption increases) led to: (i) less transparency of local bureaucracy; raising costs for investors; (ii) higher value in local partner in dealing with the bureaucratic problems; (iii) a fall in effective protection of investors' intangible assets; and (iv) a reduction in fair dispute settlement between foreign investors and their local partners. Habib and Zurawicki's findings (2002) also supported the negative effects of corruption on FDI. However, Wijeweera and Dollery (2009) found no statistically significant impact of corruption on FDI.

Aizenman and Spiegel (2006) examined the role of strength in the enforcement of property rights on the pattern and behavior of Multinational Companies (MNCs). They concluded that institutional efficiency was robustly correlated with the ratio of FDI to total domestic investment. Knack and Keefer (1995) and Lee and Mansfield (1996) also proved the importance of property rights for attracting FDI.

Many researchers also tried to combine different variables of institutional quality. Kaufman, et al. (1999) analyzed different indicators and indicated that political instability and violence, government effectiveness, regulatory burden, rule of law, and graft were significant institutional determinants of FDI; only the voice-and-accountability indicator seems to be non-significant. Using data from World Bank, United Nations Development Programme (UNDP), and Environmental Sustainability Index, Globerman and Shapiro (2002) indicated that governance infrastructure was an important determinant for both FDI inflows and outflows. Stein and Daude (2002), who take advantages of International Country Risk Guide (ICRG) data, concluded that inward FDI was significantly affected by political instability and violence, government effectiveness, regulatory burden, rule of law, and graft. Gani (2007) concluded that rule of law, control of corruption, regulatory quality, government effectiveness, and political stability had positive impacts on FDI.

Daude and Stein (2007) proposed two channels through which poor institutional quality could deter FDI inflows. They said that poor institutions could act like a tax, therefore, being a cost to FDI investors. Poor institutional quality could also increase the uncertainty associated with all types of investment, including FDI. The authors analyzed a wide range of institutional variables as determinants of the location of FDI. Firstly, they used the set of institutional variables developed by Kauf-mann, et al. (1999), such as Voice and Accountability, Political Stability and Lack of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. Secondly, a subset of the indicators (composing Risk of Expropriation, Government Stability, Democratic Account-ability, Law and Order, and Corruption) from the ICRG database (compiled by the PRS Group) was added. Finally, the average of the countries' responses to the survey questions conducted by the World Bank comprised the following variables: (i) Quality of the courts; (ii) Quality of central government; (iii) Corruption; and (iv) Change in law and regulations. They concluded that better institutions had an overall positive and economically significant effect on FDI. Likewise, some institutional aspects mattered more than the others. The important determinants were unpredictability of laws, regulations and policies, excessive regulatory burden, government instability, and lack of commitment.

Buchanan, et al. (2011) supported that institutional quality had a positive and significant effect on FDI. It was the first research measuring the effect of institutions on

the FDI volatility. They concluded that if there were institutional determinants of FDI volatility and if such volatility was associated with lower economic growth, then the usual policy prescription of attracting FDI into countries by offering the "correct" macroeconomic environment would be ineffective without an equal emphasis on institutional reform.

2.2 About Vietnam

In contrast to a great number of empirical studies about institutional quality on FDI in the world, in our perception, not many researches focusing on institutional quality in general and its different specific aspects on FDI in Vietnam have been carried out. Meyer and Nguyen (2005) looked into the theoretical frameworks regarding the sub-national institutions on two dimensions of location and entry-mode of FDI in Vietnam. Using the Provincial Competitiveness Index (PCI) in 2006 as a proxy for institution quality, Nguyen and Nguyen (2007) showed that provinces with higher PCI (better provincial governance) were more successful in attracting FDI. Nevertheless, in this paper, the authors do not take components of the index into consideration. This could become a weakness because we could not be sure of the root of institutional quality needed improving. Hoang (2012) applied the general index of ICRG to support the effect of better institutional quality on FDI. However, like Nguyen and Nguyen (2007), he did not consider the impact of different components (i.e., just Control of Corruption) on FDI.

This research is expected to fill in the gap by looking into details the impact of institutional especially from the more detailed perspectives of its different components on FDI into Vietnam.

3. Data

Institution data: This main data is taken from the International Country Risk Guide, PRS group. It includes six indexes presenting the countries' institution-related risks such as Political Stability and Absence of Violence ($Prspv_{it}$ *and* $Prspv_{vnt}$), Regulatory Quality ($Prsrq_{it}$ *and* $Prsrq_{vnt}$), Control of Corruption ($Prscc_{it}$ *and* $Prscc_{vnt}$), Voice and Accountability ($Prsva_{it}$ *and* $Prsva_{vnt}$), Government Effectiveness ($Prsge_{it}$ *and* $Prsge_{vnt}$) and Rule of Law ($Prsrl_{it}$ *and* $Prsrl_{vnt}$). The higher the values of the indexes, the lower risks the countries' institutional aspects are.

FDI data: The bilateral FDI data from country i to Vietnam at time t is collected from reputable and creditable sources such as Vietnam General Statistics Office (GSO)-Statistical Year Book, Ministry of Planning and Investment, ASEAN Statistical Year Book, Nguyen Thanh Xuan and Yuqing Xing (2006) and Pham Thi Hong Hanh (2011).[2] The number of partner countries, which have FDI inflows to Vietnam during the period of consideration included in the database is 56. The list of these partners is shown in Appendix-Table 15.

Country characteristics: Yearly data for country i and Vietnam such as Gross Domestic Product (GDP), Infrastructure (measured by the telephone user ratio, Internet user ratio), Inflation, Interest rate, and Tax rate are provided by World Bank, while the Real Exchange rate is taken from the Bruegel Exchange rate data of Darvas (2012).

Time-invariant data: Distance ($Dist_{ivn}$) and Common Border ($Contig_{ivn}$) are the two main time-invariant variables to be considered. Those are obtained from the source of Institute for Research on International Economy (CEPII).

Crisis data: From the banking crisis of Laeven and Valencia (2012), the dummy $Crisis_{it}$ is constructed with the value of one from the year that country i/Vietnam is affected by the banking crisis until it is not affected anymore. The value is equal to zero otherwise.

Openness data (WTO membership and Openness in general): We collect the information for World Trade Organization (WTO) membership from the WTO website. From this, two dummies of WTO_{it} and WTO_{vnt} which are set equal to one since the year of country i/Vietnam's became a WTO-member and zero otherwise. For openness in general, yearly data for this ($Open_{it}$ and $Open_{vnt}$) is collected from the Penn World Table 7.1.

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[2] As the overlapping in the data from different sources appears, the priority will follow the above listed order.

4. Empirical strategies

4.1 The main model specification

We take advantage of the gravity model[3] to consider the impact of institutional quality on FDI inflows to Vietnam. The main empirical specification for Fixed effect[4] model for panel data is as follows:

$$LogFDI_{ivnt} = \alpha_1 LogPRS_{it} + \alpha_2 LogPRS_{vnt} + \beta_1 Loggdp_{it} + \beta_2 Loggdp_{vnt} +$$
$$\beta_3 Logdist_{ivn} + \beta_4 Contig_{ivn} + \gamma_j W_{ivnt} + \theta_{ivn} + \epsilon_{ivnt} \qquad (1)$$

$$LogFDI_{ivnt} = \alpha_{1k} LogPRS_{kit} + \alpha_{2k} LogPRS_{kvnt} + \beta_1 Loggdp_{it} + \beta_2 Loggdp_{vnt} +$$
$$\beta_3 Logdist_{ivn} + \beta_4 Contig_{ivn} + \gamma_j W_{ivnt} + \theta_{ivn} + \epsilon_{ivnt} \qquad (2)$$

where i denotes country i, vn denotes Vietnam, t is year t, k is the kth ICRG component. While the first equation brings the overview about the effect of institutional quality in general on FDI inflows, the second gives the idea about the impact of different aspects in institutional quality. The denotation are explained in the following way:

❖ **$LogFDI_{ivnt}$** is the FDI inflow from country i to Vietnam in year t;

❖ **$LogPRS_{it}$/$LogPRS_{vnt}$** in (1) denotes the log of the simple average value of the adjusted 6 ICRG indexes[5] of country i/Vietnam in year t;

❖ **$LogPRS_{kit}$/$LogPRS_{kvnt}$** in (2) denotes the log of the adjusted k^{th} ICRG index[6] of country i/Vietnam in year t;

❖ **$LogGDP_{it}$/$LogGDP_{vnt}$** denotes the log gross domestic product of country i/Vietnam in year t;

❖ **$LogDist_{ivn}$** is the log distance between country i and Vietnam;

❖ **$Contig_{ivn}$** is a dummy variable with the value of 1 if country i and Vietnam have common border and 0 otherwise;

❖ **θ_{ivn}** controls for country pair i-vn in fixed effects.

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[3] Gravity model, which is originally applied to international trade flows, has now become more and more popular to be considered in FDI-related researches (especially bilateral FDI).

[4] The test for the selection between the techniques of Fixed effects and Random effects will be mentioned in the later section.

[5] *The adjusted 6 ICRG indexes are set up as follows: from the original values ranging from 0 to 1, we multiply those with 100. This changes the range to 0 and 100. To avoid the 0 value, especially as natural logarithm is taken later, we plus the new values with 1.*

[6] This includes Political Stability and Absence of Violence (*Prspv_{it} and Prspv_{vnt}*), Regulatory Quality (*Prsrq_{it} and Prsrq_{vnt}*), Control of Corruption (*Prscc_{it} and Prscc_{vnt}*), Voice and Accountability (*Prsva_{it} and Prsva_{vnt}*), Government Effectiveness (*Prsge_{it} and Prsge_{vnt}*) and Rule of Law (*Prsrl_{it} and Prsrl_{vnt}*).

❖ **W$_{ivnt}$** is a vector including the following variables:

- *Wto$_{it}$/WTO$_{vnt}$* is a dummy variable which is equal to 1 if country i/Vietnam is a GATT/WTO member in year t and 0 otherwise;

- *Open$_{it}$/Open$_{vnt}$* denotes the openness of country i/Vietnam in year t;

- *Crisis$_{it}$/Crisis$_{vnt}$* is a dummy variable equal to one if country i/Vietnam is affected from a banking crisis in year t and zero otherwise;[7]

- ϕ_t denotes time dummies[8];

- *Inflation$_{it}$ /Inflation$_{vnt}$* is the inflation rate of county i/Vietnam in year t;

- *Logexchangerate$_{it}$/Logexchangerate$_{vnt}$* is the natural logarithm of real exchange rate of the currency of country i/Vietnam against the US. Dollars in year t (2007 is the base year);

- *Telephone$_{it}$/Telephone$_{vnt}$* is the percentage of telephone users in country i/Vietnam in year t;

- *Internet$_{it}$/Internet$_{vnt}$* is the percentage of internet users in country i/Vietnam in year t; and

- *Taxrate$_{it}$/Taxrate$_{vnt}$* is the tax rate (of profit) in country i/Vietnam in year t.

The coefficient of interest in the previous equations are α_2. This coefficient measures the effect of institutional quality of Vietnam on its FDI inflows. If the increase in institutional quality, illustrated by the higher value of ICRG indexes, does help Vietnam attract more FDI, the coefficient will be positive.

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[7] Laeven and Valencia (2012) consider a country being affected by a banking crisis when two conditions are met; (i) there exist significantly negative changes in the banking system (such as loss, reduction in liability) and (ii) the government has important banking policy intervention in response to the above negative changes in the system. Based on these two conditions, Vietnam is only regarded by Laeven and Valencia (2012) to be affected by banking crisis in 1997, but not 2008.

[8] Including time dummies is not necessary for the data. This is affirmed by the test results in Appendix-Table 13.

Table 1. Summary statistics of main variables.

Variable	Obs	Mean	Std. Dev.	Min	Max
logfdi_ivnt	366	16.979	2.665479	10.12663	23.42926
logprs_it	366	4.335285	.2087448	3.516508	4.611814
logprs_vnt	366	4.052646	.0570075	3.951244	4.145777
logprsva_it	366	4.377707	.3074303	2.890372	4.61512
logprsva_vnt	366	3.469747	.1912869	2.890372	3.7612
logprspv_it	366	4.334196	.1473659	3.663562	4.59512
logprspv_vnt	366	4.464858	.0376947	4.382027	4.543295
logprsge_it	366	4.365532	.3361728	3.258096	4.61512
logprsge_vnt	366	3.931826	0	3.931826	3.931826
logprsrq_it	366	4.401003	.243366	3.332205	4.61512
logprsrq_vnt	366	4.127669	.150335	3.610918	4.304065
logprsrl_it	366	4.351816	.2721494	3.526361	4.61512
logprsrl_vnt	366	4.254726	.078858	4.219508	4.430817
logprscc_it	366	4.035805	.4141769	2.890372	4.61512
logprscc_vnt	366	3.681925	.3281219	3.258096	4.077538
loggdp_it	366	26.76526	1.576166	22.56818	30.37404
loggdp_vnt	366	24.88739	.5207749	23.92835	25.63253
logdist	366	8.561643	.7850891	6.766232	9.780935
contig	366	.0355191	.1853412	0	1
year	366	2005.363	4.098336	1996	2011

Table 1 presents the summary statistics of the main variables (Appendix-Table 9 for other variables).

4.2 Endogeneity problem

There could exist an endogeneity problem due to causality between a country's FDI inflows and its institutional quality. It could be seen, on one side, that the improvement of institution raise the trust of investors, lifting up the FDI inflow value. On the other side, its FDI rise in turns creates more motivations for the country to enhance its institution. This two-way effect could lead to the appearance of endogeneity. If this happens, our specification in equations (1) and (2) will bring the doubtful results.

To deal with this problem, we will apply Instrumental Variables methodology. Our first instruments include *Lag1logprs$_{it}$, Lag2logprs$_{it}$*--instruments for Logprs$_{it}$; *Lag1logprs$_{vnt}$ and Lag2logprs$_{vn}$* --for Logprs$_{vnt}$. From Appendix-Table 17, we could see the group of instruments have low correlation with LogFDI$_{ivnt}$; Lag1logprs$_{it}$ has high correlation with its Logprs$_{it}$. Although instruments for Vietnam are not of such high correlation with Logprs$_{vnt}$, it could be fine due to not having much change in the value of Logprs$_{vnt}$. As a result, we include all instruments to better capture the endogeneity problem.

In addition to the above group of instruments, we consider other group, including **_ethnic and cultural fragmentation_** taken from Fearon and Laitin (2003). These are variables from the perception withdrawn from previous studies about determinants of institutional quality, which indicate that there exists negative correlation between ethnic, cultural fragmentation and institutional quality. This means the more fragmented the ethnicity and/or culture of a country is, the lower institutional quality it has. However, in our data, we couldn't find a strong correlation between these two variables with Logprs, and even observe the higher correlation with LogFDI (Appendix-Table 11). Hence, we ignore this group of instruments.

5. Results

The very first results of the impact of institutional quality on FDI inflows to Vietnam are shown in Table 2. In all estimations, the identifier *Id* in the bottom of the tables refers to the individual identifier i-vn-t, for home country i, host country Vietnam and year t. The sample is of panel data and it covers 366 observations. The estimators for two techniques of Fixed effect (FE) and Random effect (RE) for panel data are presented.

5.1 Baseline results

Baseline estimation results for the effect of institutional quality and its six particular components in the database of 366 observations are presented in this section.

5.1.1 Results for institutional quality in general

In addition to the basic variables of institutional quality in general ($Logprs_{tt}$ and $Logprs_{vnt}$), Gross Domestic Products ($Loggdp_{it}$ và $Loggdp_{vnt}$), Distance between Vietnam and its partner—country i ($Logdist_{ivn}$), and Common Border dummies ($Contig_{ivn}$) are key variables of gravity model.

Table 2 shows the estimation results applying two panel data techniques of Fixed effect—FE (Column (1) and (3) and Random effect—RE for the rests of Column (2) and (4). The two first columns (1) and (2) present the initial results for simple FE and RE (without instruments). While columns (3) and (4) are for FE and RE applying Instrumental Variables (IV). The instruments are used in (3) and (4) are 4 Lag of Log variables ($Lag1logprs_{it}$, $Lag2logprs_{it,}$ $Lag1logprs_{vnt}$ and $Lag2logprs_{vnt}$). The pair-wise partial and semi-partial correlation of these instruments with $LogFDI_{ivnt}$ and Logprs ($Logprs_{it}$ and $Logprs_{vnt}$) are displayed in Appendix-Table 10.

Table 2. Baseline results for FDI

	$LogFDI_{ivnt}$			
	(1)	**(2)**	**(3)**	**(4)**
$Logprs_{it}$	**-2.857***	3.063***	12.13	6.518***
	(1.636)	(0.995)	(7.755)	(2.251)
$Logprs_{vnt}$	**5.278***	4.123***	4.722	6.648
	(1.592)	(1.592)	(6.962)	(7.927)
$Loggdp_{it}$	0.212	0.498***	-1.018	0.384**
	(0.502)	(0.153)	(0.924)	(0.160)
$Loggdp_{vnt}$	**1.337***	1.112***	2.140***	1.098***
	(0.348)	(0.200)	(0.560)	(0.386)
$Logdistanti_{vn}$		**-1.488***		-1.837***
		(0.369)		(0.389)
$Contig_{ivn}$		0.775		1.695
		(1.814)		(1.743)
$Ob.$	366	366	364	364
$Rsquared$	0.733			
$No. Id$	56	56	55	55
$Type$	**FE**	RE	FE	RE
$Timedummies$	No	No	No	No
$Instruments$	**No**	No	Yes	Yes

(Dependent variable is Natural logarithm of FDI from country i to Vietnam at year t. The panel techniques of Fixed effect and Random effect are applied. Id denotes country i - vietnam. The asterisks (***/**/*) present the significant level of t-statistics at 1%/5%/10% level.)

To see if the results with or without instruments are better, we run the Hausman tests for both FE and RE. Appendix-Table 12 shows that for both cases of FE and RE, Prob>chi2 are quite high (>0.1). This means that the null hypothesis could not be rejected or the coefficients for the alternative hypothesis of simple FE and RE (without instruments) should be selected. Based on these results, we just apply simple panel techniques (without instruments) in our next estimations.

For *the choice of FE or RE (without instruments),* we utilized the Hausman test. The results shown in Table 3 support the application of FE with the very low value of Prob>chi2 (nearly equal to 0). From this clear result, the FE estimators are considered for the analysis, except for the time-invariant variables such as LogDist and Contig which only appear as RE techniques are applied.[9]

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[9] In our point of view, the use of FE which controls for all time invariant characteristics of each countries and country pair will help to better deal with endogeneity problem if it is available.

Table 3: Results for Hausman test for Fixed effect (vs. Random effect).

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             ---- Coefficients ----
          |      (b)          (B)            (b-B)      sqrt(diag(V_b-V_B))
          |      fe           re           Difference          S.E.
----------+-----------------------------------------------------------------
       e1 |  -2.856593     3.062552        -5.919145          1.29829
       e2 |   5.277624     4.123051         1.154572             .
      g11 |    .2116852     .4980849        -.2863997          .477644
      g12 |   1.336908     1.111741         .2251667          .2849755
----------+-----------------------------------------------------------------
                       b = consistent under Ho and Ha; obtained from xtreg
          B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                        =        21.48
              Prob>chi2 =       0.0003
              (V_b-V_B is not positive definite)
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From all of these, what is important for us in Table 2 is the result in Column (1) with FE and no instruments. The details for basic variables are as follows:

For ***institutional quality in general*** (Logprsi$_{t,}$ Logprs$_{vnt}$), we could see a very interesting result that the *higher institutional quality* in general of Vietnam (the lower risk for investors) *helps the country attract further FDI*. In particular, if the institutional quality of Vietnam increases by 1 percent, FDI inflows to Vietnam will go up by 5.278 percent. The high value in magnitude implies the importance of institutional quality improvement for the country. In contrast, different from the result for Vietnam, the sign of the coefficient for its partners illustrates an opposite effect. As institutional quality for Vietnam's partners rises by 1 percent, its FDI into Vietnam will decrease by 2.857 percent. Substitution of FDI by domestic investment happens in these countries as their institutional quality goes up. The opposite effects[10] of institutional quality in general of Vietnam and its partners are also supported by the information achieved from Section 5.2 as the openness, crises, economic shocks, macro-economic, and infrastructure are controlled.

For Loggdp$_{it}$ and Loggdp$_{vnt}$ (presenting for ***Market size***), the results for Fixed effect in Table 2 Column (1) support the fact that the market size of Vietnam is very important for investors. As GDP from Vietnam increases by 1percent, Vietnam's FDI rises by 1.337%. The coefficient for GDP of Vietnam's partners captures the sign but it is

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[10] To see further the underlying information of these opposite effects, we consider the absolute value in the difference of institutional quality between Vietnam and country i (in log form). The results in Appendix-Table 14, Column (1) illustrates no significant effect on FDI inflows into Vietnam if the difference increases. Figure 2 in Appendix shows the kernel density of institutional quality of partners i (in log form). Based on the density, almost all partners having FDI into Vietnam with relatively high value of institutional quality is higher than that of Vietnam. This point is affirmed further by the mean of Logprs$_{it}$, which is bigger than the mean of Logprs$_{vnt}$ for Vietnam (Table 1).

statistically insignificant. The positive impacts of market size on FDI, especially for Vietnam are consistent with what are expected from gravity model.[11] As the market size of host country (i.e., Vietnam) becomes larger, more opportunities for sales and profits for enterprises will appear. Likewise, attract investors, especially market-seeking ones.

For time-invariant variables, the results are taken from RE-applying technique in Column (2). The sign, magnitude, and significance level of **Distance** (Logdist$_{iv}$) indicate the negative effect of the change in distance between Vietnam and its partner on FDI inflows to Vietnam. If distance goes up by 1 percent, FDI reduces by 1.488 percent. This negative impact of distance is also consistent with gravity model. The increase in distance reflects the rise in transportation cost, discouraging investors in their investment activities. However, despite the above significant consistency of distance, the other variable representing for transportation cost such as common border (Contig) has no significant influence on FDI into Vietnam. This could be explained by the fact that not many partners included in the sample share common borders with Vietnam.

5.1.1 Results for different components of institutional quality

These different particular components on FDI inflows also play a key role for policymakers. The results for the impact of six components are illustrated in Table (4) applying FE techniques. What we could find out clearly is the positive coefficients for all components for Vietnam, showing the positive impact on FDI inflows. However, 3 out of 6 for *Political Stability and Absence of Violence (Logprspv$_{vnt}$), Regulatory Quality (Logprsrq$_{vnt}$) and Control of Corruption (Logprscc$_{vnt}$)* are significant, especially for Political Stability and Absence of Violence. From Column (1), it could be seen that if the index for Political Stability and Absence of Violence goes up by 1 percent, FDI inflows climb by nearly 9 percent. The figures are 2.317 percent and 0.713 percent, respectively, for the increase in Regulatory Quality and Control of Corruption. The results revealed that these factors are put into priority by investors before they pour money into the country.

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[11] The positive impact of market size - proxied by loggdp on FDI for panel data is strongly supported by Asiedu (2006), Mohammed and Sidiropoulos (2010), Vijayakumar, et al. (2010), and Botrić and Škuflić (2006).

Table 4. Results for effects of institutional components.

	LogFDIivnt						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
$Logprsva_{it}$	-0.765						-0.928
	(0.869)						(0.908)
$Logprsva_{vnt}$	0.837						-0.638
	(0.563)						(0.753)
$Logprspv_{it}$		**-2.524****					-2.169
		(1.247)					(1.397)
$Logprspv_{vnt}$		**8.712****					-2.214
		(4.240)					(7.065)
$Logprsge_{it}$			0.710				1.012
			(1.637)				(1.642)
$Logprsrq_{it}$				**-1.843*****			-1.626**
				(0.607)			(0.764)
$Logprsrq_{vnt}$				**2.317*****			2.829**
				(0.681)			(1.253)
$Logprsrl_{it}$					0.374		1.321
					(0.837)		(0.949)
$Logprsrl_{vnt}$					0.613		-0.224
					(1.467)		(2.399)
$Logprscc_{it}$						-0.237	0.172
						(0.496)	(0.545)
$Logprscc_{vnt}$						**0.713****	0.486
						(0.318)	(0.487)
$Loggdp_{it}$	0.274	0.316	0.327	0.198	0.288	0.218	0.106
	(0.509)	(0.480)	(0.485)	(0.481)	(0.499)	(0.498)	(0.525)
$Loggdp_{vnt}$	1.354***	1.841***	1.506***	1.515***	1.600***	1.315***	1.216*
	(0.355)	(0.449)	(0.344)	(0.339)	(0.376)	(0.356)	(0.682)
Ob.	366	366	366	366	366	366	366
Rsquared	0.724	0.729	0.722	0.734	0.722	0.726	0.740
No. Id	56	56	56	56	56	56	56
Timedummies	No	No	No	No	No	No	No
Instruments	No	No	No	No	No	No	No

(Dependent variable is Natural logarithm of FDI from country i to Vietnam at year t. The panel technique of Fixed effect is applied. Id denotes country i - vietnam. The asterisks (***/**/*) present the significant level of t-statistics at 1%/5%/10% level.)

For Vietnam's partners, the large magnitude coefficients for *Political Stability and Absence of Violence (Logprspv_{it})* and *Regulatory Quality (Logprsrq_{it})* are statistically significant. The same pattern of effects to Vietnam could further support the above point of substitution between domestic investment and FDI for Vietnam's partners.[12] If the two

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[12]To consider further these opposite effects for Vietnam and its partners, we also look at the absolute value in the difference of each component of institutional quality (in log form). The results in Appendix-Table 14, Columns (2) to (7) also illustrate no significant effects on FDI inflows into Vietnam if the difference in each component increases.

components—Political Stability and Absence of Violence and Regulatory Quality—improve for Vietnam, investors will have higher motivation to carry out FDI into the country. In another case, if they get better for Vietnam's partners, investors will prefer domestic investment to FDI.

5.2 Other results

For further clarification about institutional quality as other factors are considered, we focus on the impact of institutional quality in general on FDI inflows in the following subsections.

5.2.1 Results for Openness with WTO, crises and time shocks

In this subsection, we want to see how the effect of institutional quality will change as Vietnam opens it market and increases its exposure to the world economic shocks such as crises and time shocks. The results are presented in Tables 5 and 6.

Regarding **WTO membership** and **openess in general**, Table 5 indicates the fact that the positive effects of institutional quality *for Vietnam* do not change much where magnitudes are still very high given these controlled variables. It means that the quality of institution is of high importance as Vietnam exposes further to openness. Besides, as Vietnam opens its market, it helps attract more FDI.

On the contrary, as Vietnamese partners become WTO members too and begin to be more open to the world market, their upgrade in the institutional quality further lowers FDI into Vietnam. This is indicated by the higher magnitude of $Logprs_{it}$ and highly negative value of WTO_{it}. The results prove that the subtitution of domestic investment for FDI into Vietnam is stronger as openness is controlled. However, looking at the coefficient of interaction on $Logprs_{it}*WTO_{it}$, given a specific level of institutional quality, if Vietnam's partner i joins WTO, FDI into Vietnam will increase. This interesting point could be attributed to the WTO membership which brings partners the opportunities to enjoy more favorable conditions than non-WTO membership. Likewise investor motivations are created , This specifically happened in 1996-2011 period, when Vietnam sought for WTO membership status and become a WTO member in 2007.

Table 5. Results for FDI controlling for openness.

	LogFDIivnt			
	(1)	**(2)**	**(3)**	**(4)**
$Logprs_{it}$	**-2.872****	**-17.55****	**-3.149****	**-4.952***
	(1.280)	(7.424)	(1.388)	(2.847)
$Logprs_{vnt}$	**6.072*****	**4.945*****	**4.277*****	4.603
	(1.313)	(1.476)	(1.525)	(6.404)
$Loggdp_{it}$	0.0245	0.209	-0.0351	0.0153
	(0.431)	(0.411)	(0.728)	(0.704)
$Loggdp_{vnt}$	1.639***	1.750***	0.831	0.785
	(0.403)	(0.415)	(0.545)	(0.544)
WTO_{it}	0.963	-60.26*		
	(1.645)	(30.59)		
WTO_{vnt}	-0.304	-22.55		
	(0.333)	(15.58)		
$Logprs_{it}*WTO_{it}$		**15.26****		
		(7.471)		
$Logprs_{vnt}*WTO_{vnt}$		5.414		
		(3.786)		
$Open_{it}$			-0.00233	-0.0681
			(0.00547)	(0.0970)
$Open_{vnt}$			**0.0176***	0.0324
			(0.0100)	(0.238)
$Logprs_{it}*Open_{it}$				0.0148
				(0.0212)
$Logprs_{vnt}*Open_{vnt}$				-0.00349
				(0.0573)
$Ob.$	366	366	326	326
$Rsquared$	0.734	0.740	0.718	0.719
$No. Id$	56	56	53	53
$Time dummies$	No	No	No	Yes
	WTO	WTO&Inter	Open	Open&Inter

(Dependent variable is Natural logarithm of FDI from country i to Vietnam at year t. The panel technique of Fixed effect is applied. Id denotes country i - vietnam. These ***/**/* present the significant level of t-statistics at 1%/5%/10% level.)

Economic shocks and crises, are represented by time dummies and *Crisis* variables (i.e., $Crisis_{it}$, $Crisis_{vnt}$, t2008 and their lags for 1 and 2 years). Table 5 affirms that these variables are very important for FDI attraction. The values connote some significantly positive impacts on FDI. The effects to Vietnamese partners are still significantly positive. The magnitudes are a little bit higher as crises are controlled. Such consequence has been attributed to the institutional quality mechanisms that capture all the effects of economic shocks and crises. This affirms the role of high institutional quality for a country to overcome shocks and crises to attract FDI.

Table 6. Results for crises and time shocks.

	LogFDIivnt		
	(1)	**(2)**	**(3)**
Logprs_{it}	**-2.764***	**-3.030***	**-2.873***
	(1.674)	(1.649)	(1.648)
Logprs_{vnt}		**5.405***	**4.987***
		(1.602)	(1.638)
Loggdp_{it}	-0.0770	0.171	0.198
	(0.528)	(0.515)	(0.507)
Loggdp_{vnt}	**1.160***	**1.390***	**1.311***
	(0.403)	(0.371)	(0.351)
_It_1998	-0.502		
	(0.535)		
_It_2000	-0.361		
	(0.443)		
_It_2002	-0.774*		
	(0.443)		
_It_2003	-0.548		
	(0.394)		
_It_2004	-0.0335		
	(0.396)		
_It_2005	0.269		
	(0.365)		
_It_2006	0.528		
	(0.370)		
_It_2007	**0.808****		
	(0.353)		
_It_2008	**0.706****		
	(0.336)		
_It_2009	0.144		
	(0.353)		
_It_2010	0.545		
	(0.431)		
Crisis_{it}		-0.165	
		(0.257)	
Crisis_{i(t+1)}		0.142	
		(0.233)	
Crisis_{i(t+2)}		-0.360	
		(0.228)	
t2008			0.211
			(0.294)
lead1t2008_{vn}			0.0229
			(0.277)
lead2t2008_{vn}			-0.186
			(0.274)
Ob.	366	364	364
Rsquared	0.740	0.733	0.731
No. Id	56	55	55
Timedummies	Yes	No	No

(Dependent variable is Natural logarithm of FDI from country i to Vietnam at year t. The panel technique of Fixed effect is applied. Id denotes country i - vietnam. The asterisks (***/**/*) present the significant level of t-statistics at 1%/5%/10% level.)

5.2.2 Macroeconomic and Infrastructure

Considering the macroeconomic and infrastructure variables, Tables 7 and 8 reveal that the effects of institutional quality in general for Vietnam and its partners, along with the main variables of the gravity model using FE techniques (Loggdp) are still relatively consistent.

Table 7. Results for FDI controlling for macro-economic variables.

	LogFDIivnt			
	(1)	(2)	(3)	(4)
$Logprs_{it}$	**-2.931***	**-3.031****	**-3.077***	-0.793
	(1.719)	(1.327)	(1.746)	(4.011)
$Logprs_{vnt}$	**5.373****	**5.799****	**5.949****	**5.795****
	(1.612)	(1.261)	(1.280)	(2.149)
$Loggdp_{it}$	0.109	0.121	-0.0226	1.341
	(0.526)	(1.198)	(1.288)	(0.875)
$Loggdp_{vnt}$	1.264***	1.531**	1.464**	-0.00764
	(0.361)	(0.651)	(0.684)	(0.532)
$Inflation_{it}$	-0.00608		-0.00412	
	(0.0289)		(0.0327)	
$Inflation_{vnt}$	0.0143		0.0178	
	(0.0186)		(0.0226)	
$Logexchangrate_{it}$		-0.0628	-0.0330	
		(1.903)	(2.124)	
$Logexchangrate_{vnt}$		-1.946	-2.135	
		(1.452)	(1.453)	
Tax_{it}				-0.0108
				(0.0207)
Tax_{vnt}				-0.0296
				(0.0510)
Ob.	365	366	365	221
Rsquared	0.728	0.734	0.731	0.070
No. Id	55	56	55	55
Timedummies	No	No	No	No

(Dependent variable is Natural logarithm of FDI from country i to Vietnam at year t. The panel technique of Fixed effect is applied. Id denotes country i - vietnam. The asterisks (***/**/*) present the significant level of t-statistics at 1%/5%/10% level.)

However, macroeconomic (i.e, $Inflation_{it}$, $Inflation_{vn}$, $Logexchangrate_{it}$, $Logexchangerate_{vnt}$, Tax_{it}, and Tax_{vnt}) and infrastructure (i.e., Telephone User Ratio $Telephone_{it}$, $Telephone_{vnt}$, Internet User Ratio $Internet_{it}$, and $Internet_{vnt}$) variables for both Vietnam and its partners are insignificant. This amazing point proves the essence of improving institutional quality in attracting FDI. Just as what we found for openness and crises, institutional quality again captures all the effects of macroeconomic and infrastructure changes. The point could be withdrawn from the fact that for such a

developing country as Vietnam, as institutional quality in general is still at low level, an improvement for that quality could have a very high effect on investors' behaviors, hence making other effects not significant anymore.

Table 8. Results for FDI controlling for infrastructure variables.

	LogFDIivnt		
	(1)	**(2)**	**(3)**
Logprs$_{it}$	**-2.802****	**-3.040****	**-2.513***
	(1.360)	(1.201)	(1.361)
Logprs$_{vnt}$	**4.997*****	**5.744*****	**2.659**
	(1.468)	(1.333)	(1.766)
Loggdp$_{it}$	0.238	0.323	0.0724
	(0.559)	(0.585)	(0.569)
Loggdp$_{vnt}$	1.215***	0.686	0.711
	(0.414)	(1.216)	(1.500)
Telephone$_{it}$	-0.0136		-0.0343
	(0.0291)		(0.0313)
Telephonevnt	0.0124		0.0271
	(0.0306)		(0.0355)
Internet$_{it}$		0.0120	0.00709
		(0.00977)	(0.00957)
Internet$_{vnt}$		0.00922	0.0667
		(0.0482)	(0.0551)
Ob.	336	363	319
Rsquared	0.731	0.735	0.754
No. Id	56	56	56
Timedummies	No	No	No

(Dependent variable is Natural logarithm of FDI from country i to Vietnam at year t. The panel technique of Fixed effect is applied. Id denotes country i - vietnam. The asterisks (***/**/*) present the significant level of t-statistics at 1%/5%/10% level.)

6. Conclusion and recommendations

Taking advantage of a wide range of data from 1996 to 2011 and Fixed effect technique of panel data, evidences were established supporting the positive effect of institutional quality in general and its three important components—***Political Stability and Absence of Violence, Regulatory Quality, and Control of Corruption*** for Vietnam to attract more FDI. In addition to other FDI determinants (i.e., labor force, natural resources, market size), the institutions play an important role in attracting FDI into Vietnam. In order to increase the volume of FDI inflows, Vietnam should consider improving its quality of institution in general. The country should especially maintain the government stability, avoid internal and external conflicts and ethnic tensions, improve the business environment, and control corruption. *Government stability,* which is a

priority characteristic about Vietnam being considered by investors, plays an important role for investors' selection. Hence, the country need to stabilize its political setting. *Regulatory quality* requires considerable attention. An improvement in the quality of legal framework is never an easy task for any governments, especially for developing countries with weak institutional quality and insubstantial sources. For Vietnam, it requires extensive efforts to review all relevant Vietnam regulations on international agreements of their memberships, specifically, the overall suitability of particular policies with the country's economic situation. On *control of corruption*, a pressing concern to investors in which Vietnam has to find solutions. More anti-corruption policies, which are feasible and enforceable, should be issued and implemented.

Other findings affirmed that *institutional quality is important as Vietnam indulges to further openness. Institutional quality captures all the effects of macroeconomic and infrastructure changes.* Hence, Vietnam needs to make better its institutions in order to become competitive; institutional quality improvement should be continued.

Moreover, this research also found out *the possible substitution of FDI by domestic investment for investors in Vietnam's country partners as their institutional quality advances*.

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APPENDIX

Table 9. Summary statistics of other variables.

Variable	Obs	Mean	Std. Dev.	Min	Max
crisisaffe~it	366	.1803279	.3849866	0	1
crisisaffe~vnt	366	0	0	0	0
gattwto_it	366	.9508197	.2165404	0	1
gattwto_vnt	366	.4590164	.4989997	0	1
open_it	326	107.0658	90.02942	19.12478	440.4322
open_vnt	326	141.0566	24.93758	92.7719	174.4877
inflation_it	365	3.424658	4.437347	-4	58
inflation_vnt	366	9.07377	6.908999	-2	23
logbruegel~it	366	4.592426	.1246247	3.934003	5.022946
logbruegel~vnt	366	4.647098	.0762057	4.527139	4.769778
taxrate_it	221	43.1267	14.68494	14	113
taxrate_vnt	225	39.37778	1.996525	33	40
telephone_it	366	39.21038	19.72071	0	73
telephone_vnt	336	10.59821	5.808064	2	20
internet_it	363	47.07438	28.70131	0	94
internet_vnt	366	15.95082	12.06706	0	35

Table 10. Partial and semi-partial correlations between instrumental variables (Lag1 and Lag2) and (a) LogFDI$_{ivnt}$, (b) Logprs$_{it}$ and (c) Logprs$_{vnt}$.

(a)

Variable	Partial Corr.	Semipartial Corr.	Partial Corr.^2	Semipartial Corr.^2	Significance Value
lag1logprs_it	0.1008	0.0995	0.0102	0.0099	0.0557
lag1logprs_vnt	0.1135	0.1122	0.0129	0.0126	0.0310
lag2logprs_it	-0.0323	-0.0317	0.0010	0.0010	0.5411
lag2logprs_vnt	0.0530	0.0521	0.0028	0.0027	0.3151

(b)

Variable	Partial Corr.	Semipartial Corr.	Partial Corr.^2	Semipartial Corr.^2	Significance Value
lag1logprs_it	0.6152	0.4732	0.3785	0.2239	0.0000
lag2logprs_it	0.0115	0.0070	0.0001	0.0000	0.8271

(c)

Variable	Partial Corr.	Semipartial Corr.	Partial Corr.^2	Semipartial Corr.^2	Significance Value
lag1logprs_vnt	0.2086	0.2013	0.0435	0.0405	0.0001
lag2logprs_vnt	0.2073	0.2000	0.0430	0.0400	0.0001

Table 11. Partial and semi-partial correlations between instrumental variables (Ethnicfr and Culturefr) and (a) LogFDIivnt and (b) Logprsit.

(a)

Variable	Partial Corr.	Semipartial Corr.	Partial Corr.^2	Semipartial Corr.^2	Significance Value
ethnicfr_it	-0.3183	-0.3173	0.1013	0.1007	0.0000
culturefr_it	0.2665	0.2614	0.0710	0.0683	0.0000

(b)

Variable	Partial Corr.	Semipartial Corr.	Partial Corr.^2	Semipartial Corr.^2	Significance Value
ethnicfr_it	-0.1329	-0.1276	0.0177	0.0163	0.0152
culturefr_it	0.0068	0.0064	0.0000	0.0000	0.9021

Table 12. Results for Hausman test for (a) Fixed effects and (b) Random effects with vs. without instruments.

(a)

```
             ---- Coefficients ----
         |     (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
         |    feiv           fe          Difference          S.E.
---------+-------------------------------------------------------------
    e1 |   12.12884     -2.856593        14.98544          7.580929
    e2 |   4.722069      5.277624        -.5555548         6.777976
   g11 |  -1.018429      .2116852        -1.230114          .775989
   g12 |   2.139873      1.336908         .8029649          .4389424
---------------------------------------------------------------------
             b = consistent under Ho and Ha; obtained from xtivreg
        B = inconsistent under Ha, efficient under Ho; obtained from xtreg

 Test:  Ho:  difference in coefficients not systematic

         chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                 =          3.93
         Prob>chi2 =      0.4155
```

(b)

```
             ---- Coefficients ----
         |     (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
         |    reiv           re          Difference          S.E.
---------+-------------------------------------------------------------
    e1 |    6.51787      3.062552        3.455318          2.019877
    e2 |   6.648005      4.123051        2.524954          7.764945
   g11 |   .3839586      .4980849        -.1141263          .0467115
   g12 |   1.097969      1.111741        -.0137721          .3302704
    g3 |  -1.836771     -1.488323        -.3484472          .1237241
    g4 |   1.694999      .7746214         .9203777             .
---------------------------------------------------------------------
             b = consistent under Ho and Ha; obtained from xtivreg
        B = inconsistent under Ha, efficient under Ho; obtained from xtreg

 Test:  Ho:  difference in coefficients not systematic

         chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                 =          3.17
         Prob>chi2 =      0.7872
         (V_b-V_B is not positive definite)
```

Table 13. Results for test for including time dummies.

```
    ( 1)   _It_1998 = 0
    ( 2)   _It_2000 = 0
    ( 3)   _It_2002 = 0
    ( 4)   _It_2003 = 0
    ( 5)   _It_2004 = 0
    ( 6)   _It_2005 = 0
    ( 7)   _It_2006 = 0
    ( 8)   _It_2007 = 0
    ( 9)   _It_2008 = 0
    (10)   _It_2009 = 0
    (11)   _It_2010 = 0

       F( 11,    296) =     1.79
              Prob > F =    0.0547
```

Table 14: Results for effects of difference in average institutional and institutional components.

	LogFDIivnt						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
$Logabdprs_{ivnt}$	0.0605						
	(0.200)						
$Logabdprsva_{ivnt}$		-0.219					
		(0.481)					
$Logabdprspv_{ivnt}$			0.260				
			(0.168)				
$Logabdprsge_{ivnt}$				0.739			
				(0.912)			
$Logabdprsrq_{ivnt}$					-0.135		
					(0.208)		
$Logabdprsrl_{ivnt}$						0.0212	
						(0.421)	
$Logabdprscc_{ivnt}$							0.0236
							(0.212)
$Loggdp_{it}$	0.341	0.347	0.247	0.0190	0.347	0.697	-0.0962
	(0.487)	(0.534)	(0.492)	(0.590)	(0.546)	(0.636)	(0.519)
$Loggdp_{vnt}$	**1.495***	**1.459***	**1.545***	**1.755***	**1.532***	**1.332***	**1.845***
	(0.343)	(0.357)	(0.352)	(0.385)	(0.384)	(0.415)	(0.381)
$Ob.$	366	357	356	308	346	307	330
$Rsquared$	0.722	0.716	0.726	0.695	0.728	0.735	0.722
$No.\ Id$	56	55	56	43	56	50	52
$Timedummies$	No	No	No	No	No	No	No

(Dependent variable is Natural logarithm of FDI from country i to Vietnam at year t. The panel technique of Fixed effect is applied. Id denotes country i - vietnam. The asterisks (***/**/*) present the significant level of t-statistics at 1%/5%/10% level.)

Table 15. List of partner countries of Vietnam.

UAE	UNITED KINGDOM	NORWAY
AUSTRALIA	GERMANY	NEW ZEALAND
AUSTRIA	HONG KONG	PAKISTAN
BELGIUM	HUNGARY	PANAMA
BANGLADESH	INDONESIA	PHILIPPINES
BULGARIA	INDIA	POLAND
BAHAMAS	IRELAND	ROMANIA
BRUNEI	ICELAND	RUSSIA
CANADA	ISRAEL	SINGAPORE
SWITZERLAND	ITALY	SLOVAKIA
CHINA	JAPAN	SLOVENIA
COSTA RICA	KOREA	SWEDEN
CYPRUS	LEBANON	THAILAND
CZECH	SRI LANKA	TURKEY
DENMARK	LUXEMBOURG	UKRAINE
EGYPT	MOROCCO	URUGUAY
SPAIN	MALAYSIA	UNITED STATES
FINLAND	NIGERIA	SOUTH AFRICA
FRANCE	NETHERLANDS	

Figure 2. Kernel density of Logprs for Vietnam's partners in the sample.