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Political environment and attraction of foreign direct investment: an institutionalist approach

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Abstract

The study examines the relationship between the quality of the institutional arrangements of political environment and the attraction of foreign direct investment (FDI). Panel models were estimated for 123 countries from 2011 to 2016, where the dependent variable was the FDI net inflows, explained by two institutional variables related to the political dimension. Due to the strong correlation between the institutional variables, they were evaluated in separate models, in addition to versions with and without the use of instruments. The results suggest that the quality of the institutional arrangements of the political environment is essential to attract FDI.

1.   Introduction

Foreign Direct Investment (FDI) is a driver of economic growth observed by policymakers and private investors. Having a clear sense of the most critical determinants to decide on productive investments abroad is crucial for governments to develop adequate policies, and for companies to increase their chances of success.

According to North (1990), institutions influence economic activities by affecting the company's transaction and production costs. The reduction of these costs is of utmost importance in the investor's decision-making process about entering a new location. Therefore, institutions emerge as rules of a game, represented formally or informally, reflecting the structure of relationships between individuals in society. North (1994) says that formal institutions are composed of declared laws and rules, while informal ones are presented by socially accepted norms of behavior and conventions.

North's (1990) institutional theory and several other factors have contributed to the growing interest in the relationship between FDI and institutions. These factors draw attention to the role of institutions in creating incentives for economic activity (in general), and investment (in particular). The increasing FDI net inflows since the 1990s has increased the interest of economies, especially emerging ones, in assessing which factors influence FDI attraction. Ali, Fiess, and MacDonald (2010) emphasize the quality of institutional arrangements as one of these factors, arguing that foreign investors pay special attention to these arrangements when choosing where to allocate investments.

In this context, Busse and Hefeker (2005) state that political risk influences decisions on FDI allocation, and is as important as the size of a market. Another crucial element is political freedom, a feature that attracts investments since it produces more stable environments (Feng, 2001). Similarly, countries that have unstable and uncertain political regimes often find it challenging to attract international investment (Oneal, 1994). Athukorala and Waglé (2011) add that civil liberties, respect for contracts, and conflict resolution favor the emergence of FDI friendly political-legal environments. In addition, preferential trade and investment agreements, both bilateral or regional, influence the strategies of foreign investors (Büthe & Milner, 2008). Finally, Globerman and Shapiro (2002) argue that political infrastructure is one of the major determining factors in attracting FDI. For the authors, the concept of political infrastructure includes an efficient legal system, stability, and institutional credibility, as well as open and free markets.

This study seeks to provide evidence on the hypothesis that the quality of political institutions is crucial for attracting FDI, observing the relationship between those institutions and FDI inflows. The research analyzed a broader sample of 123 countries for the period 2011 to 2016, which is more recent than most studies in the area. The econometric models were estimated with panel data. The study adopted varied metrics based on a fixed-effects estimator, as well as a two-stage least squares modeling with instrumental variables, in order to generate more robust results using a different estimation strategy than the most.

Since the 1990s, several studies (Oneal, 1994; Serven & Solimano, 1992; Summers, 1991) have shown a positive relationship between more democratic political institutions and foreign direct investment. In recent years, however, core democratic norms and political stability of democratic countries have been questioned. This paper examines whether the positive correlation still holds when only very recent years are taken into account. Few studies so far address the challenges that arise in trying to estimate the FDI effects of political institutions by using instruments. This paper

identifies a feasible instrument to overcome a well-known but often unaddressed challenge in estimating the economic effects of political institutions.

2.   Political Institutions and FDI

The literature on the determinants of FDI can be organized around four aspects that influence decision-making: economy, geography, culture, and politics (Wint & Wilians, 2002; Gao, 2005; Hilal & Hemais, 2003; Büthe & Milner, 2008). Emphasizing the political dimension, Feng (2001) argues and shows that the stability of the political environment is crucial as a parameter for the allocation of international investment. Wint and Willians (2002), furthermore, argue that the determinants of economic policies in the host country, such as taxes, macroeconomic stability, degree of economic openness, political environment, and market regulation, directly affect the flow of FDI and are equally relevant.

Nevertheless, conventional wisdom assumed that FDI was more likely to flow to authoritarian regimes that, according to Oneal (1994), despite their lower contractual reliability and poor record of the rule of law, were more efficient in suppressing labor movements. Therefore, whenever the main point of foreign investment was access to cheap labor or natural resources extracted by using the labor force, investing in authoritarian regimes was the best option. O'Donnell, Schmitter, and Whitehead (1986), for example, emphasized the complementary interests of bureaucratic authoritarian regimes and international capital. The authors stated that these governments, often controlled by the military, created beneficial conditions for multinationals in exchange for foreign investments to accelerate the process of industrialization. Foreign investors have been essential players in promoting the flow of capital to peripheral countries. They had a strong affinity for authoritarian regimes, considering the fragility of democratic institutions in many developing countries. According to Oneal (1994), many decision-makers operating FDI were unsure about the intelligence of an open economy.

In the 1990s, however, studies such as those by Serven & Solimano (1992) and Oneal (1994), raised questions about the continuity of this traditional affinity between FDI and what appeared to be weak political institutions. Feng's study (2001) highlights that a stable political environment attracts foreign investment. The author states that political freedom, particularly by developing human capital, promotes private investment, while political instability and uncertainty negatively affect it. Along the same lines, several studies have identified elements that promote accelerated economic growth, such as foreign investment and the quality of political institutions (Barro, 1996; Barro & Lee, 1994).

Thus, a shift toward democracy reduces the negative effects caused by changes in the political system, while the shift away from democracy intensifies such effects (Feng, 2001). However, the instability of the political regime is often seen as an issue beyond government control. According to Feng (2001), although a government may change its level of political capacity to fit a political goal, it cannot easily do the same to improve the regime instability, which is supported by national culture and value systems. Both culture and value systems are accentuated by particular political events that may act as catalysts for political changes that governments cannot control.

In this context, culture is a possible instrumentalizing variable of political institutions in econometric models. The cultural transaction costs are an aspect that takes culture as a determinant of foreign direct investment. Hanson (1999) points out that cultural convergence is an outcome of economic globalization, and the level of globalization is determined by the level of cultural proximity between countries. The

author argues that developing countries' low attractiveness to FDI persists due to cultural distances between them and the source of their investments. This distance may impose transaction costs that jeopardize the investments, as well as creating miscommunication, personal and linguistic incompatibilities, and conflicting notions of ownership. However, Hofstede (1994) identifies culture as one of the fundamental issues for the management of multinational corporations. The author reviews cultural and political patterns, delineating the characteristics of large social groups, and analyzes administrative practices that would be incompatible with culture in certain regions.

Regarding the political institutions, Jensen (2003) promoted a debate in academia when attempting to separate the characteristics of domestic political institutions that mattered to foreign investors, focusing on why and how institutions worked. The author concludes that democratic institutions have a significant positive effect on FDI inflows and that democracy reduces country-risk for both creditors and investors. Jensen's empirical evidence suggests that democratic regimes attract 70% more FDI as a percentage of GDP than authoritarian regimes (Jensen, 2003) and that democratic institutions attract multinational corporations. The debate about the relationship between political institutions and economic performance has been framed around democracy and economic growth. In this aspect, North (1990) emphasizes that securing property rights is a central element of economic development because this drives democracies to grow at faster rates than authoritarian regimes – considering that autocrats in these regimes cannot guarantee credible protection of property rights (Olson, 1991). Although classical works in political science have argued that democracy has a positive impact on economic growth, there are several dissenting contributions. One example is Huntington's famous study (1968), emphasizing that democracy leads to higher consumer demands. Along the same line, more recently, Przeworski, Alvarez, Cheibub, and Limongi (2000) conclude that there is no difference between the growth rates of democratic and authoritarian regimes.

Büthe and Milner (2008), on the same path as Jensen (2003), argue that political factors affect foreign investment inflows, and are indispensable to the smooth running of international trade. Trade agreements emerge as tools to ensure commitments to foreign investors about the treatment of their assets, reassuring them, and increasing investment. For Büthe and Milner (2008), these international commitments are more reliable than domestic policy choices, considering the high costs of denying them or breaching contracts. The authors' statistical analyzes provide strong empirical support for assumptions about the effect of internationalized institutional commitments on FDI inflows. Also, the authors demonstrated that being a member of the World Trade Organization (WTO) increases FDI inflow, and the more Preferred Trade Agreements (PTAs) a country signs, the more FDI it receives (Büthe & Milner, 2008). This effect may explain why developing countries have been eager to join the WTO. The conclusions of Büthe and Milner (2008) on trade agreements based on commitments to more economically liberal policies, may explain results obtained in other studies about PTA. An example of these studies is by Lall (2005), who found that when countries sign PTAs, there is an increase of FDI inflows from other nations that were not part of the specific signed agreement, showing that this kind of contract may inspire trust.

Therefore, a shift toward democracy and economic openness alleviates the negative consequences of political instability and generates a political environment conducive to attracting international investment (Feng, 2001; Jeng, 2003). Feng and Zak (1999) argue that, for countries that need political changes, a gradual process of openness and expanding civic freedoms will help create stability and stimulate markets. In turn, this could lead to better political conditions, economic development, better environment

for governments to build institutional credibility (Feng, 2001) and, over time, help to reduce the investors' fear of political uncertainty. Rovai, Campanário, and Costa (2011) consider that economies are eager for FDI, as it contributes to growth by providing capital, bringing new technology, and promoting training for workers and managers. In this context, a trade opening from political institutions bound to international agreements generates a favorable environment for FDI (Büthe & Milner, 2008), as well as creating confidence for the international investor. Thus, the political environment proves to be a relevant institutional factor for attracting international investment, besides having an impact on physical capital accumulation, which affects economic growth (Feng, 2001).

3.   Data and Method

To identify the relationship between the quality of institutional arrangements of the political environment and the attraction of FDI to countries with different levels of development, a set of panel data models was estimated for 123 countries for the period 2011 to 2016. A table with the selected countries can be seen in the Appendix. The dependent variable (FDI) refers to the FDI net inflows, expressed as a percentage of gross domestic product (GDP), minus divestments, retrieved from the World Bank's database 'World DataBank.'

For the quality of institutional arrangements of the political environment, two variables were selected from the "The Global Innovation Index (GII) - Human Factor in Innovation." The first variable, 'political environment' (POLENV), consists of the average of three factors that together represent the political environment of a country: political balance, government effectiveness, and freedom of the press. The second was the 'political stability and absence of violence/terrorism' (POLSTA), which captures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means. The scores for this variable are standardized.

Many variables determine FDI attraction. Among them, four control variables were chosen for the model, retrieved from the World Bank's database 'World DataBank.' They are 'inflation' (INF), as a proxy for economic stability and measured by the consumer price index; exchange rate (EXRA), referring to the exchange rate determined by the national authorities or the rate determined in the legally established exchange market; gross capital formation (GCF) as a percentage of GDP, consisting of expenditures on additions to the fixed assets of the economy, plus net changes in inventory levels; and annual GDP percentage growth rate (GDPRATE) at market prices based on constant local currency.

The literature studying institutional arrangements of countries and how these arrangements influence the conditions for economic development often uses instrumental variables to control the problem of endogeneity observed when using institutional variables. Religion was chosen as the basis for the set of institutional variables because religious belief systems and values strongly influence institutional arrangements. The restriction and incentives of religion affect the behavior of individuals and enterprises that drive the process of economic development. Religion, reflects how countries were colonized (Acemoglu, 2001), as well as their historical development and behavior patterns defined over time (Guiso, Sapienza & Zingales, 2003). The values imposed on society through religion shape the rules of the institutional environment. According to Landes (1998) and La Porta, Lopes-de-Silanes, Shleifer, and Vishny (1999), religious organizations around the world influence the countries' institutional arrangements, as they represent the society's ethical standards and beliefs.

The instrumental variables used in this research, capture the impact of culture – particularly religion – on the institutional political arrangements of the countries. They reflect the initial conditions of the endowment of each country involved in the sample, differentiating them regarding how society is organized considering the variety of religions. The two instrumental variables used in this study were retrieved from the *Pew Research Center: Religion & Public Life*. The first was the Euclidean Distance from religion (EUDREL), which considers the percentage of each country's population of Christians, Hindus, Muslims, Jews, native beliefs, other religions, and those not affiliated with any religion, in comparison to the percentages observed in the population of the United States (used as the basis for measuring the cultural distance among countries). The second was the Majority Religion (MAJREL), which considers the percentage of participation of the predominant religion in relation to the total of other religions present within a country. Other studies that support the decision of using the pattern of population distribution among the several religious beliefs in order to instrumentalize institutional variables are Barro and McCleary (2003), Landes (1998), Willianson (2000), and La Porta, Lopes-de-Silanes, Shleifer, and Vishny (1999).

Distinct models were created for each institutional variable to understand them separately, considering that correlation problems were found when applying the variables in the same model. The following equation represents the models used for panel data analysis with fixed effects estimator:

$$FDI_{it} = \alpha_i + \delta_i\,INST_i + \lambda_1 INFLA_{it} + \lambda_2 EXRA_{it} + \lambda_3 GCF_{it} + \lambda_4 GDPRATE_{it} + u_{it}, \quad (1)$$

where FDI_{it} is the dependent variable representing the foreign direct investment, u_{it} is the estimated random error, $INST_i$ represents each institutional variable of interest (POLENV and POLSTA) in separate models, and the other control variables are the ones detailed above.

The two-stage least squares models (2SLS) used are presented through the following equation:

$$INST_i = \beta_0 + \beta_1\,EUDREL + \beta_2\,MAJREL + \delta X_i + v_i, \quad (2)$$

where $INST_i$ represents each institutional variable applied in separate models, EUDREL and MAJREL are the instrumental variables linked to religion; X_i represents the matrix of control variables (composed of $\lambda_1 INFLA_{it} + \lambda_2 EXRA_{it} + \lambda_3 GCF_{it} + \lambda_4 GDPRATE_{it}$), and v_i is the random error term.

The second stage of the 2SLS method is:

$$FDI_i = \alpha_0 + \alpha_1 INST_i + \phi X_i + \varepsilon_i, \quad (3)$$

where FDI_i is the dependent variable, and ε_i is the random error. The term $INST_i$ is estimated in the first stage of the 2SLS method.

Each of the equations generated two models that were analyzed separately, considering that the institutional variables were correlated. First, models 1A and 1B were created, where the number 1 indicates models with panel data and fixed effects estimator, letter A the use of the institutional variable 'political environment' (POLENV), and letter B the use of the institutional variable 'political stability' (POLSTA). In the second stage, models 2A and 2B were created, which underwent a 2SLS approach with instrumental variables, indicated by number 2, in order to achieve more robust results, correct different sources of bias, and achieve better significance levels.

4.   Results and Discussion

Table I shows the main results of the estimated models. Models 1A and 1B, estimated with fixed effects, are composed of a total of 446 observations each. Models 2A and 2B, estimated by 2SLS, have 545 observations. These models had more observations because of the use of institutional variables.

Table I – Main results of the estimated models

	Fixed Effects		2SLS	
	Model 1A	Model 1B	Model 2A	Model 2B
POLENV – Political environment	0.053** (0.02)	—	0.102** (0.03)	—
POLSTA – Political Stability	—	0.025** (0.02)	—	0.111** (0.03)
INFLA – Inflation	- 0.0006 (0.0005)	- 0.0007 (0.0005)	- 0.00009 (0.0001)	- 0.0002 (0.0002)
EXRA – Exchange rate	0.03991 (0.08)	0.047 (0.08)	0.130* (0.05)	0.201** (0.06)
GCF – Gross capital formation	0.243 (0.21)	0.244 (0.21)	0.254*** (0.04)	0.243*** (0.05)
GDPRATE – GDP growth rate	0.248 (0.20)	0.260 (0.20)	0.352*** (0.08)	0.439*** (0.09)
Constant	-5.16238 (5.79)	-3.751 (5.83)	- 9.612*** (2.39)	- 10.714*** (2.77)
Hausman test	21,34 [0.0007]	26,38 [0.0001]	1.93 [0.85]	2.99 [0.56]
Over-identifying restrictions test	—	—	0.507 [0.47]	0.312 [0.57]

Note: Level of significance given by the p-values, where * $p<0.1$; ** $p<0.05$, and *** $p<0.01$. Standard deviation in brackets, below each coefficient. P-values of Hausman test and over-identifying restrictions test.
Source: Elaborated by the authors.

Table I shows that the models with estimated fixed effects, 1A and 1B, produce positive and statistically significant coefficients at 5%, indicating that the higher the quality of these institutional arrangements, the more FDI the country receives. The 2SLS model of estimation was applied to reduce potential biases due to the correlation between the error and the explanatory variable (resulting from the omission of variables relevant to the model, error in variables, or simultaneity). As the instrumental variables used in this study are fixed over time, it is not possible to apply the fixed effects estimator. Therefore, the best-fit is the random effects estimator, which is confirmed by the high P-value of the Hausman test. For these models, the coefficients POLENV and the POLSTA, which measure the institutional arrangement of the political environment, are positive and significant with 95% confidence, which indicates that as the institutions improve, the more FDI a country receives.

The over-identifying restrictions test (Sargan, 1958) was applied to models 2A and 2B to analyze the validity of the instruments used. For both models, the resulting P-value was higher than the significance level of 0.05, accepting the null hypothesis that they are valid instruments, i.e., not correlated with the error term and correctly applied.

Therefore, by analyzing the four models together, there is evidence that the institutional variables of interest have a positive impact on FDI attraction to countries since the coefficients in all models were significant and positive, with 95% confidence.

Therefore, it is possible to infer that institutions play an important role in attracting FDI to countries. The control variables provide stability in all models, and even those that were not significant still corroborated the correlation with FDI, as found in the literature.

5. Final Considerations

The theory about FDI activity suggests several reasons for taking the production to foreign markets, pointing particularly to the search for natural resources, labor, consumer market, productive efficiency, and strategic assets. From the 21st century onwards, multinational companies started to search for the quality of the institutional arrangements of the political environment, observing elements such as government efficiency, property rights, and bureaucracy, seeking to invest in a stable environment with lower political and economic risks.

The quality of institutional arrangements has been crucial in the decision-making processes that determine the FDI inflows. Most of the research addressing the theme reveals the existence of a relationship between institutions and FDI. Some studies point to the role of the political-institutional dimension as having a conditioning element of FDI attraction (Feng, 2001; Jensen, 2003; Büthe & Milner, 2008). Political institutions serve as a reference point for international investors to make decisions since they make it possible to determine if there are conditions conducive to development and attractive to investment. Therefore, a stable political environment is a safety beacon for international investors, signaling the fact that contracts and laws are respected.

The findings demonstrate that institutional variables represented by 'political environment,' (composed of factors that relate political balance, government effectiveness and freedom of the press), and the 'political stability and absence of violence/terrorism,' (which captures perceptions of the likelihood that the government is destabilized by unconstitutional or violent means), confirmed the theoretical hypothesis that the quality of institutional arrangements of the political environment positively impacts FDI attraction. The confirmation of the hypothesis reinforces the importance of improving political institutions to increase FDI inflows in a country.

References

Acemoglu, D.; Johnson, S. & Robinson, A. (2001) "The colonial origins of comparative development: an empirical investigation." *American Economic Review* 91(5): 1367–1401.

Ali, F. A.; Fiess, N. & MacDonald, R. (2010) "Do Institutions Matter for Foreign Direct Investment?" *Open Economies Review* 21: 201–219.

Athukorala, P. and Waglé, S. (2011) "Foreign direct investment in Southeast Asia: Is Malaysia falling behind" *ASEAN Economic Bulletin* 28(2): 15–133.

Barro, R. J. (1996) "Determinants of Economic Growth: A Cross-Country Empirical Study." *NBER* working paper number 5698.

Barro, R. J. & Lee, J. (1994) "Sources of Economic Growth." *Carnegie-Rochester Conference Series on Public Policy* 40: 1–46.

Barro, R. J. & McCleary, R. M. (2003) "Religion and economic growth across countries." *American Sociological Review* 68(5): 760–781.

Busse, M. & Hefeker, C. (2005) "Political Risk, Institutions and Foreign Direct Investment" *Hamburgisches Welt-Wirtschafts-Archiv (HWWA)* Discussion Paper number 315.

Büthe, T. & Milner, H. V. (2008) "The Politics of Foreign Direct Investment into Developing Countries: Increasing FDI through International Trade Agreements?" *American Journal of Political Science* 52(4): 741–762.

Feng, Y. (2001) "Political Freedom, Political Instability, and Policy Uncertainty: A Study of Political Institutions and Private Investment in Developing Countries" *International Studies Quarterly* 45(2): 271–294.

Feng, Y. & Zak, P. J. (1999) "Determinants of Democratic Transitions: Theory and Empirical Evidence" *Journal of Conflict Resolution* 43(2): 162–177.

Gao, T. (2005) "Foreign direct investment in China: How big are the roles of culture and geography?" *Pacific Economic Review* 10(2): 153–166.

Globerman, S. & Shapiro, D. (2002) "National political infrastructure and foreign direct investment" *Industry Canada Research Publications Program* working paper number 37.

Guiso, L.; Sapienza, P. & Zingales, L. (2003) "People's opium? Religion and economic atitudes." *Journal of Monetary Economics* 50(1): 225–282.

Hanson, J. (1999). "Culture Shock and Direct Investment in Poor Countries" *The Journal of Economic History* 59(1): 1–16.

Hial, A. & Hemais, C. A. (2003) "O Porcesso de Internacionalização na Ótica da Escola Nórdica: Evidências Empíricas em Empresas Brasileiras." *Revista de Administração Contemporânea* 7(1): 109–124.

Hofstede, G. (1994) "The Business of International Business is Culture" *International Business Review* 3(1): 1–14.

Huntington, S. P. (1968) *Political Order in Changing Societies*. Yale University Press: New Haven and London.

Jensen, M. N. (2003) "Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct Investment" *International Organization* 57(3): 587–616.

La Porta, R., Lopes-de-Silanes, F., Shleifer, A. & Vishny, R. (1999) "The quality of government" *NBER* working paper number 6727.

Lall, S. (2005) "FDI, AGOA, and Manufactured Exports by a Landlocked, Least Developed African Economy: Lesotho" *Journal of Development Studies* 41(6): 998–1022.

Landes, D. S. (1998) *The wealth and poverty of nations: why some are so rich and some so poor*. W. W. Norton: New York.

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press: Cambridge.

_____. (1994) "Economic Performance through Time" *The American Economic Review* 84(3): 359–368.

O'Donnell, G.; Schmitter , P. C. & Whitehead, L. (1986) *Transitions from Authoritarian Rule*. Johns Hopkins University Press: Baltimore.

Olson, M. (1991) "Autocracy, Democracy, and Prosperity" in *Strategy and Choice*, edited by Rich-ard J. Zeckhauser, Eds., MIT Press: Cambridge, 131–57.

Oneal, J. R. (1994) "The Affinity of Foreign Investors for Authoritarian Regimes" *Political Research Quarterly* 47(3): 565–588.

Przeworski, A.; Alvarez, M. E.; Cheibub, J. A. & Limongi, F. (2000) "Democracy and Development: Political Institutions and Material Well-Being in the World, 1950-1990" Cambridge University Press: Cambridge.

Rovai, R. L.; Campanário, M. A. & Costa, T. R. C.(2011) "Multinacionais brasileiras – evolução e perspectivas teóricas: caracterização de uma tipologia." *Revista Inteligência Competitiva* 1(2): 205–217.

Sargan, J. D. (1958) "The Estimation of Economic Relationships Using Instrumental Variables" *Econometrica* 26(3): 393–415.

Serven, L. & Solimano, A. (1992) "Private Investment and Macroeconomic Adjustment: A Survey." *The World Bank Research Observer* 7(1): 95–114.

Summers, L. (1991) "Research Challenges for Development Economists." *Finance and Development* 28: 2–5.

Williamson, O. E. (2002) "The New Institutional Economics: Taking Stock, Looking Ahead." *Journal of Economic Literature* 38(3): 595–613.

Wint, A. & Willians, D. A. (2002) "Attracting FDI to Developing Countries: A Changing Role for Governance?" *The International Journal of Public Sector Management* 15(5): 361–374.