

DOES THE POLITICAL ENVIRONMENT AFFECT INFLOWS OF FOREIGN DIRECT INVESTMENT? EVIDENCE FROM EMERGING MARKETS

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Abstract

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The main aim of the paper is to identify and quantify the influence of the political environment on the inflows of foreign direct investment in emerging markets. The paper defines emerging markets as Middle Income Countries according to the evaluation of the World Bank. Our sample of countries contains 78 states. The reference period focuses on the period of 1996–2012 due to data availability. The evaluation of the political environment is based on three dimensions: the quality of democracy, political instability and the level of corruption, which are related to three subcomponents of the concept, Governance Matters, provided by the World Bank. The paper distinguishes between two types of political instability omitted in thematic literature, elite and non-elite. The former represents non-violent instability (minority governments, tension related to the holding of elections) while the latter deals with violent forms of instability (civil wars, coups, ethnic and religious riots). The paper uses panel data regression analysis for the purpose of identification and quantification. The research uses fixed effects model with a cluster option. According to the results, the influence of the political environment on FDI is not entirely unequivocal in emerging markets; nevertheless, there is a statistically significant dimension – political instability (both parts). The quality of democracy and the level of corruption are significant only in some cases. The paper combines indicators frequently occurring in empirical literature (the Corruption Perception Index, Freedom in the World, Governance Matters) with alternative proxies (the Herfindahl Index Government, the Political Terror Scale, the State Fragility Index), which seem to be a perspective for a future research.

Keywords: political environment, foreign direct investment, emerging markets, governance matters, quality of democracy, political instability, corruption

INTRODUCTION

Foreign direct investment (FDI) has had an important influence on economic development in the contemporary globalized world, particularly in the case of the emerging markets. In 2012, the influx of foreign capital was circa 11% GDP in the emerging markets. The highest inflow of FDI in a relative expression was in Egypt (500% GDP), Guyana and Mongolia (43%), Mauritania (34%) and the Republic of Congo (20%). On the other hand, there are countries that achieve just less than 1% GDP, for example, Algeria, Djibouti, Guatemala, Iran and Sri Lanka (UNCTAD, 2013; World Bank Group, 2014b).

The impacts of FDI on emerging countries are extensively described in empirical literature, e.g., Aizenman, Jinjarak and Park (2012), Moran, Graham and Blomström (2005) and Sun (2014). The contributions of Curwin and Mahutga (2014), Hanousek, Kočenda and Maurel (2011) and Myant and Drahokoupil (2010) are aimed at the European transition economies, Falla, Olarte and Bejarano (2009) at the Latin American states, Asokan (2014) at Southeast Asian nations, Brahim and Rachdi (2014) at the Middle East and North Africa and Vadra (2012) at African countries. These countries have undergone significant changes over the last thirty years, economic transformation (post-socialist

economies in Europe, Central and Southeast Asia), a relative reduction of political instability (Latin America), political regime changes during the “Colour Revolutions” (Georgia, Lebanon, Kyrgyzstan, Ukraine, Yugoslavia – Serbia) and the “Arab Spring” (Algeria, Egypt, Morocco, Tunisia). Simultaneously in the reference period, there were a large number of armed conflicts (Armenia, Azerbaijan, Georgia, Sudan, Yugoslavia) and on top of that, the other countries are highly unstable (Columbia, Mexico, Nigeria, Pakistan, Philippines, Ukraine). On the whole, we can identify successful (new EU member states – Croatia, Hungary, Latvia, Lithuania; newly industrialized countries – Brazil, China, Russia, Turkey; and the others, e.g., Equatorial Guinea, Uruguay, Trinidad and Tobago) and failed (Cameroon, Djibouti, Kyrgyzstan, Laos, Pakistan, Sudan, Zambia) economies.

The main aim of the paper is to identify and quantify the impact of the political environment on the inflows of foreign direct investment in emerging markets. The first section comprises a survey of the current empirical literature, the method of regression analysis, data sources, used proxies and a sample of observed countries. The main second section includes a panel data regression analysis and discussion about importance of political indicators and economic motives of FDI. The conclusion summarizes the major findings.

MATERIALS AND METHODS

The paper is based on the new political economy, more precisely, the new institutional economy. The issue of the political environment is an important theme of the economic approaches. One can consider the main contributions on the theme, Aisen and Veiga (2013), Alesina, Özler and Roubini (1996), Fosu (1992), Jong-A-Pin (2009), Jutting (2003), Olson (2000), Przeworski and Limogni (1993) and Rode and Coll (2012).¹

According to existing empirical literature, there is no unambiguous relationship between the political environment and the inflow of FDI because the choice of variables, the sample of countries, period or the use of regression methods significantly influence the individual results. The paper distinguishes between three dimensions of the political environment, the quality of democracy, political instability and the level of corruption. The positive effect of the establishment of democratic structures on the influx of international investment is described by Busse (2003), Harms and Ursprung (2002), Jensen (2008), Li and Resnick (2003) and Tintin (2013). All the contributions bear out the fact that investors tend towards countries extending a democratic society. Li and Resnick (2003) argue that the improvement of law enforcement in the

transition from authoritarian regimes to democracy is the main reason. Jensen (2008) adds that democratic regimes reduce political risk and states three arguments. The first, reducing the probability of political changes, the second, foreign investors can use legal forms of lobbying political representation and the third, increasing political transparency. On the other hand, there are empirical studies not validating the relationship between the quality of democracy and FDI, e.g., Noorbakhsh, Paloni and Youssef (2001) and Pournarakis and Varsakelis (2004). Political instability is the second dimension. According to Qian and Baek (2011), government instability, religious and ethnic tensions have a major impact on developing countries. Busse and Hefeker (2007) and Meon and Sekkat (2004) also mention statistical significance. Nevertheless, according to Demirham and Masca (2008), the effect is not significant and in the opinion of Dutta and Roy (2011), there is no unequivocal causality. The ambiguity of empirical results remains even if alternative indicators are used; see Madr and Kouba (2014). If we focus on the impact of corruption, there are contributions bearing out the significant effect (Alemu, 2012; Habib and Zurawicki, 2002), ambiguity (Johnson, 2006; Meon and Sekkat, 2004) and no causality (Busse and Hefeker, 2007; Parletun, 2008; Serin and Cahskan, 2010).

Panel data regression analysis is the main instrument. There are two basic methods in panel data, fixed and random effects. We chose the Hausman test for the determination of a suitable method (random effects are preferred under null hypothesis while preference for fixed effects is an alternative hypothesis). Econometric verification is verified by testing the occurrence of the unit root (Levin-Lin-Chu and Im-Pesaran-Shin test), homoscedasticity (Wald test) and serial autocorrelation (Wooldridge test). Drukker (2003) and Wooldridge (2002) selected the tests. The reference period focused on the period of 1996–2012 due to data availability.

Regression model tests the influence of the individual proxies of the political environment, which comprise four selected economic factors of international investment. As the dependent variable in the following regressions, *FDI* (foreign direct investment net inflows, current \$; UNCTAD, 2013) is employed. According to empirical literature, market seeking is the main factor of inflows of foreign investment. This factor is represented by the variables *GDP* (constant 2005 prices \$; market size) and *Economic growth* (annual percentage growth rate of GDP per capita, constant 2005 prices \$; market potential). The model contains also two additional proxies, *Trade* and *Inflation*. *Trade* (the sum of merchandise exports and imports divided by the value of *GDP*)² shows the integration of

¹ For a definition of the new political economy in more detail, see Kouba (2010).

² Empirical literature also uses term “*Openness of economy*” or “*Trade openness*”.

a country into international trade. One can suppose that a higher participation in international trade leads to lower transaction costs for foreign investors. *Inflation* (the annual change in the consumer price index) is a variable for macroeconomic stability. The model is constructed according to Globerman, Shapiro and Tang (2006), Mottaleb and Kalirajan (2010), Serin and Cahskan (2010) and Wernick, Haar and Singh (2009).³ Also the selected proxies are frequently occurred in the referred empirical literature.⁴ Simultaneously, there are frequent other variables, which are not employed in the regression model, e.g., quality of infrastructure (Alemu, 2012; Demirham and Masca, 2008), education (Alemu, 2012; Meon and Sekkat, 2004; Noorbakhsh, Paloni and Youssef, 2001; Parletun, 2008), labour costs (Demirham and Masca, 2008; Johnson, 2006; Li and Resnick, 2003; Noorbakhsh, Paloni and Youssef, 2001) or exchange rates (Dutta and Roy, 2011; Li and Resnick, 2003).⁵

The database of the World Bank (Worldwide Development Indicators; World Bank, 2014b) is a source for economic factors. One can assume all variables, with the exception of *Inflation*, are positively associated with FDI inflow. The logarithmic form is used for proxies *FDI* and *GDP*.⁶ Political proxies are single added-to benchmark regression in order to avoid the problem of multicollinearity. The regression model is the following:

$$\log FDI_{it} = \alpha + \beta_1 \log GDP_{it} + \beta_2 Growth_{it} + \beta_3 Trade_{it} + \beta_4 Inf_{it} + \beta_5 Political_{it} + \varepsilon_{it}. \quad (1)$$

The paper deals with three components of the political environment, the quality of democracy,

political instability and the level of corruption. The paper distinguishes between two types of political instability omitted in thematic literature, elite (non-violent instability; minority governments, tension related to holding elections) and non-elite (violent forms of instability; civil wars, coups, ethnic and religious riots).⁷ As the basic indicator of the political environment, the paper uses the concept Governance Matters (GM)⁸ of the World Bank because it covers all three researched dimensions and ranks among the most frequently used indicators. The paper chose three subcomponents of the concept, Voice and Accountability (GM1; “captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media”), Political Stability and Absence of Violence (GM2; “measures perception of the likelihood of political instability and/or political motivated violence, including terrorism”) and Control of Corruption (GM6; “captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as ‘capture’ of the state by elites and private interests”).⁹ The concept Freedom in the World (FiW)¹⁰ of Freedom House is the second indicator of the quality of democracy that accesses the level of democracy according to the freedom of political rights and civil liberties.

Two proxies represent elite political instability, Majority (*Maj*; the fraction of seats held by the government in the Lower House, as a percentage) and the Herfindahl Index Government (*HerfG*; the sum of the squared seat shares of all parties in the government, as a percentage), for more detail, Keefer (2013). Non-elite political instability is expressed by two variables, the State Fragility

³ Compared to Globerman, Shapiro and Tang (2006), we substitute the proxy of Market capitalization for the proxy *Inflation* due to the availability of data and preference for macroeconomic stability. The regression model in Serin and Cahskan (2010) contains another proxy for education (literacy rate) and the explored Indexes of Economic Freedom, while Mottaleb and Kalirajan (2010) add indicators of economic development (e.g., availability of telephone lines, internet access or development aid) and other variables (labour force, industrial value added to GDP). Compared to Wernick, Haar and Singh (2009), we replace proxy GDP per capita with variable Economic Growth, because we prefer a variable of market potential to an indicator of economic development.

⁴ The referred empirical literature comprises 19 contributions. The proxy *GDP* is used 13 times, *Growth* 11 times, *Trade* 15 times and *Inflation* 10 times.

⁵ The influence of the individual specific economic indicators is tested in the second part of our regression analysis.

⁶ The logarithmic functional form is used as a consequence of transformation of the highly skewed variables into proxies with approximately normal distribution. The same functional form for *FDI* and *GDP* is employed in papers by Ali, Fiess and MacDonald (2010) and Tintin (2013).

⁷ For more details, see Grochová and Kouba (2011) and Mádr and Kouba (2014).

⁸ The GM concept has been published since 1996 and annually since 2002. It consists of several hundred individual indicators, which are provided by 32 international organizations, and evaluates 215 states and dependencies. There are six parts (Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law and Control of Corruption), which range from -2.5 (the worst quality) to +2.5 (the best) (The World Bank, 2014c).

⁹ The GM concept and also the other institutional indicators suffer from some weaknesses regarding the methods (validity, perceptions versus reality, etc.). For more details see Kaufmann, Kraay and Mastruzzi (2007, 2010).

¹⁰ Freedom in the World comprises two parts, Political Rights (10 indicators) and Civil Liberties (15 indicators). The range is from 1 (the best level) to 7 (the worst level). The resulting score is an arithmetic mean that divides countries into three groups, Free (1 to 3), Partly Free (3.5 to 5) and Not Free (5.5 to 7) (Freedom House, 2014b).

Index (SFI)¹¹ and the Political Terror Scale (PTS)¹². The Corruption Percentage Index (CPI)¹³ of Transparency International concept is a supplement to the proxy GM6 and both indicators evaluate the perceived corruption in the public sector (Transparency International, 2014; World Bank Group, 2014c). Simultaneously we can identify both variables with political corruption, which is defined as "*manipulation of policies, institutions and rules of procedure in the allocation of resources and financing by political decision makers, who abuse their position to sustain their power, status and wealth*" (Transparency International, 2009).

Three modifications of the input data are made for the purposes of a balanced panel data. The first adjustment is related to the logarithmic functional form, which requires a positive value of basic observations; therefore, the values of negative inflow of FDI are replaced with a three-year arithmetic mean.¹⁴ The second modification, values for the years 1997, 1999 and 2001 are added to the concept GM(GM1, GM2, GM6) as the arithmetic mean of neighbouring values. Thirdly, a higher index value of FiW, SFI and PTS means worse quality, therefore, the sign is changed to correspond with the GM concept, thus, an increase in the index is associated with higher quality.

We define emerging markets as Middle Income Countries (MIC) according to the evaluation of the World Bank.¹⁵ MIC is a group of economies having a gross national income per capita from 1045 \$ to 12746 \$. In 2014, MIC contained 105 countries, 50 "Lower MIC" (from 1045 \$ to 4125 \$) and 55 "Upper MIC" (from 4126 \$ to 12746 \$). We added seven economies of "Upper Income, non OECD" (GNI pc from 12747 \$ to 15000 \$) to MIC. 78 economies we chosen according to two requirements, the availability of data and a population higher than 500 thousand inhabitants due to the elimination of small, mainly island countries that have a specific status in the area of international capital flows. A sample of countries consists of five geographical regions, *European and*

Central Asian transition economies (Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Macedonia, Moldova, Romania, Russia, Serbia, Turkmenistan, Ukraine and Uzbekistan), *Latin America* (Argentina, Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay and Venezuela), the *Middle East and North Africa* (Algeria, Djibouti, Egypt, Iran, Jordan, Lebanon, Morocco, Sudan, Tunisia and Turkey), *South and East Asia* (Bhutan, China, India, Laos, Malaysia, Mongolia, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Thailand and Vietnam) and *Sub-Saharan Africa* (Botswana, Cameroon, Cote d'Ivoire, Equatorial Guinea, Ghana, Lesotho, Mauritania, Mauritius, Namibia, Nigeria, the Republic of Congo, Senegal, South Africa, Swaziland and Zambia).

RESULTS AND DISCUSSION

The regression model contains 78 cross-sectional units and 17 time series units, the sum is 1326 observations. First of all, the cointegration of unit roots was verified by the Levin-Lin-Chu test and the Im-Pesaran-Shin test. Fixed effects method is chosen according to the result of the Hausman test¹⁶. The model of fixed effects incorporates heteroskedasticity (Wald test) and serial autocorrelation (Wooldridge test). If cross-sectional units are more than time series units, then a cluster option is a suitable instrument, see Hoechle (2007). The estimated regression coefficients remain the same and heteroskedasticity and serial autocorrelation also persist in the model, but standard errors are calculated to be robust. Then one can consider the estimated regression coefficients for the efficient. The individual cross-sectional units (countries) are used for the cluster option. Regarding the other tests, this paper states the adjusted coefficient of determination (within),

11 The State Fragility Index scores each country on both Effectiveness (from 0 to 13) and Legitimacy (from 0 to 12) in four performance dimensions, Security, Political, Economic, and Social. The resulting score is in a range from 0 (no fragility) to 25 (extreme fragility) (Marshall and Cole, 2014).

12 The Political Terror Scale measures levels of political violence and terror that a country experiences in a particular year based on a 5-level "terror scale", from 0 (rule of law, no political murders or political prisoners) to 5 (terror expended to the whole population – murders, disappearances and torture are a common part of life). The resulting score is the arithmetic mean of outputs from Amnesty International and the US State Department (Wood and Gibney, 2010).

13 The CPI concept has been published since 1995 and currently covers 175 countries (2013). In accordance with the last change of methodology, the paper uses a scale from 0 (highly corrupt) to 100 (highly clean) (Transparency International, 2014).

14 24 from 1 326 observations were substituted (1.8%).

15 The World Bank Atlas Method evaluates countries by gross national income (GNI) in \$ and uses the Atlas conversion factor, which reduces the impact of exchange rate fluctuations in the cross-country comparison. The Atlas conversion factor is the mean of a country's exchange rate for the year and for the two preceding years adjusted to international inflation (the weight mean of the GDP deflators of the euro area, Japan, the UK, and the USA, the amount of each currency in one SDR unit are weights) (The World Bank, 2014a).

16 We reject a null hypothesis about the preference of random effects in favour of an alternative hypothesis about the preference of fixed effects. A Chi-square is 178.82 (p-value 0.00).

I: Results of the regression model (fixed effects, cluster option)

log FDI	Constant	log GDP	Growth	Trade	Inflation	Political	R²
Base	-38.18*** (-5.08)	2.53*** (7.64)	0.01*** (3.25)	0.01* (1.78)	-0.001* (-1.9)	x	0.36
GM1	-38.5*** (-5.26)	2.44*** (7.9)	0.01*** (3.32)	0.01* (1.73)	-0.001* (-1.92)	0.44 (0.38)	0.36
FiW	-36.37*** (-4.78)	2.38*** (7.5)	0.01*** (3.33)	0.01* (1.58)	-0.002* (-1.85)	0.37*** (2.3)	0.38
GM2	-35.5*** (-4.99)	2.5*** (7.56)	0.01*** (3.38)	0.01* (1.93)	-0.001* (-1.93)	0.38** (1.98)	0.36
SFI	-31.09*** (-3.53)	2.17*** (5.98)	0.01*** (3.26)	0.01* (1.48)	-0.001* (-1.85)	0.08** (2.25)	0.36
PTS	-38.19*** (-5.08)	2.44*** (7.68)	0.01*** (3.28)	0.01* (1.73)	-0.001* (-1.9)	0.06 (0.71)	0.36
Maj	-36.44*** (-4.91)	2.35*** (7.49)	0.01*** (3.31)	0.01* (1.27)	-0.001* (-1.96)	0.001*** (4.07)	0.38
HG	-36.8*** (-4.87)	2.37*** (7.36)	0.01*** (3.11)	0.01* (1.68)	-0.001* (-1.98)	0.0002** (2.31)	0.36
GM6	-38.59*** (-5.12)	2.46*** (7.7)	0.01*** (3.2)	0.01* (1.62)	-0.002* (-1.93)	0.67*** (2.65)	0.37
CPI	-38.16*** (-5.08)	2.43*** (7.63)	0.01*** (3.25)	0.01* (1.78)	-0.002* (-1.89)	-0.001 (0.09)	0.35

Source: Author's calculation

Notes: (.) denotes t-statistic, **/*** means a significance level at 10%/5%/1% and R² means an adjusted (within) R-squared

nevertheless, its values have limited information capability in the panel data regression.

In the model all economic variables are statistical significant. The proxy GDP has the main effect. Within the political environment, there are the significant areas – political instability (elite/non-elite) and also sub-components of the quality of democracy (FiW) and the (perceived) level of corruption (GM6). One can interpret the regression coefficients that an increase in the GDP of one per cent leads to an increased inflow of foreign investment of up to 2.5%, whereas in the case of political environment is increase in less than one per cent. On the other hand political instability has the same effect like the other economic indicators.

After identification and quantification of influence of political environment, we aim to compare the importance of the individual motives of the international investments, both in terms of the economic indicators and the political proxies. The selected proxies are chosen according to the empirical literature (Ali, Fiess and MacDonald, 2010; Campos and Kinoshita, 2008; Demirham and Masca, 2008; Mottaleb and Kalirajan, 2010). In addition, one can distinguish three types of factors, market seeking, efficiency seeking and assets seeking. The market seeking, the main motive, is represented by three proxies, *GDP*, *Population* (number of inhabitants) and *Natural resources rents* (the sum of oil rents, natural gas rents, coal rents, mineral rents, and forest rents divided by the value of GDP). Efficiency seeking is expressed by proxy Productivity (*Prod*, GDP per person employed, constant 2005 prices \$) and assets seeking by variable *FDIstocks* (cumulating FDI inflows, 1995

to 2011). The basic motives are supplemented by the other ones: motive of location, integration into international trade (*Trade*), macroeconomic stability (*Inflation* and *REER*, real effective exchange rate against the basket of the 172 trading partners, CPI based), level of economic development (*GNIpc*, gross national income per capita, the Atlas method, the current \$) and the quality of infrastructure (*Tel*, fixed telephone lines per 100 inhabitants; *Urban*, number of population living in urban areas). In accordance with empirical literature, the logarithmic functional form is used for proxies *GDP*, *Population*, *GNIpc* and *Prod*. The regression equation consists of only one explanatory variable, the individual motive. Within the comparison, emerging markets are divided into two groups, Lower and Upper MIC according to evaluation of World Bank (see section Methodology).

One can see again the dominant influence of the market seeking, mainly in Lower MIC, with exception for *Natural Resources rents*. Simultaneously, *Productivity* (efficiency seeking) affects more than *FDIstocks* (assets seeking), (2–4% compare to just under 1%). Regarding the other economic factors, *GNIpc* (economic development) might have a substantial impact (about 1.5%), whereas influence of the macroeconomic stability or international trade is minimal.

Finally, concerning the political environment, the (perceived) level of corruption has not any effect, influence of the (perceived) quality of democracy and non-elite political instability is not unequivocal and impacts of elite political instability are statistical significant, but small.

II: Results of simple regression, economic proxies (fixed effects, cluster option)

log FDI ¹⁷	Emerging markets			Lower MIC			Upper MIC		
	Const.	Proxy	R ²	Const.	Proxy	R ²	Const.	Proxy	R ²
log GDP	-39.22*** (-4.74)	2.5*** (7.2)	0.34	-56.43*** (-8.08)	3.29*** (10.87)	0.46	-28.14** (-2.73)	2.01*** (4.76)	0.35
log Pop	-90.79*** (-7.2)	6.87*** (8.81)	0.21	-103.56*** (-6.18)	7.61*** (7.35)	0.34	-70.81*** (-3.86)	5.67*** (5.0)	0.15
Nat_Res	20.02*** (125.92)	0.03 (1.91)	0.02	19.07*** (74.06)	0.04* (1.73)	0.06	20.91*** (118.56)	0.01 (0.65)	0.01
log Prod	-3.93 (-0.99)	2.84*** (6.1)	0.26	-12.81*** (-3.49)	4.12*** (8.81)	0.34	0.3 (0.07)	2.26*** (4.48)	0.28
FDIstock	3.5*** (3.39)	0.76*** (16.29)	0.04	0.47 (0.32)	0.88*** (12.9)	0.09	5.98*** (8.96)	0.65*** (22.57)	0.07
Trade	19.04*** (45.98)	0.02** (3.12)	0.05	17.75*** (26.79)	0.02** (2.66)	0.08	20.12*** (40.95)	0.01* (1.84)	0.03
Inflation	20.37*** (1503.62)	-0.003** (-2.78)	0.01	19.77*** (186.88)	-0.03** (-2.43)	0.06	21.06*** (2207.97)	-0.002*** (-3.63)	0.02
REER	20.34*** (62.37)	-0.001 (-0.05)	0.01	19.48*** (49.91)	0.001 (0.09)	0.01	21.13*** (34.26)	-0.001 (-0.16)	0.01
log GNIpc	10.12*** (10.65)	1.34*** (10.75)	0.33	7.48*** (7.84)	1.75*** (12.61)	0.45	12.01*** (9.6)	1.1*** (7.21)	0.37
Tel	18.77*** (94.18)	0.12*** (7.84)	0.16	18.36*** (105.37)	0.18*** (6.59)	0.18	19.23*** (54.25)	0.09*** (5.07)	0.16
Urban	9.85*** (6.84)	0.2*** (7.28)	0.17	8.85*** (4.76)	0.23*** (5.74)	0.21	10.97*** (5.67)	0.17*** (5.2)	0.17

Source: Author's calculation

Notes: (.) denotes t-statistic, */**/*** means a significance level at 10%/5%/1% and R² means an adjusted (within) R-squared

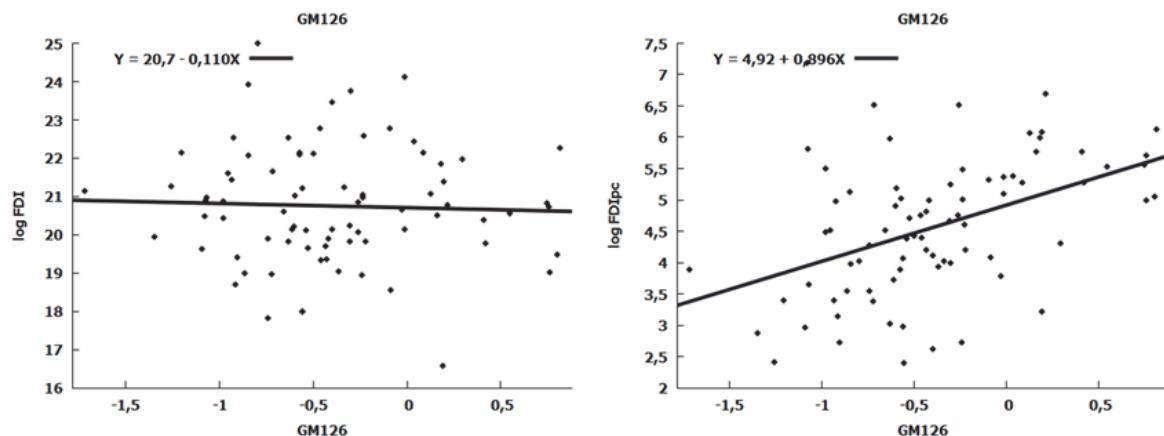
III: Results of simple regression, political proxies (fixed effects, cluster option)

log FDI	Emerging markets			Lower MIC			Upper MIC		
	Const.	Pol.	R ²	Const.	Pol.	R ²	Const.	Pol.	R ²
GM1	20.21*** (145.72)	-0.33 (-0.82)	0.01	19.17*** (59.53)	-0.56 (-1.04)	0.01	21.02*** (312.82)	-0.08 (-0.14)	0.01
FiW	21.95*** (46.73)	0.43*** (3.45)	0.06	21.43*** (22.19)	0.45* (1.98)	0.03	22.43*** (46.42)	0.41** (2.9)	0.05
GM2	20.47*** (217.13)	0.38 (1.49)	0.02	19.74*** (88.59)	0.4 (1.02)	0.01	21.1*** (334.02)	0.35 (1.11)	0.01
SFI	23.57*** (81.65)	0.34*** (11.23)	0.21	24.35*** (45.84)	0.39*** (9.12)	0.21	23.21*** (83.47)	0.03*** (7.86)	0.25
PTS	20.28*** (54.31)	-0.02 (-0.14)	0.01	18.79*** (29.99)	-0.25 (-1.16)	0.01	21.53*** (49.8)	0.2 (1.17)	0.01
Maj	19.85*** (188.02)	0.001*** (4.49)	0.08	18.91*** (166.53)	0.001*** (5.29)	0.01	20.53*** (212.83)	0.001*** (5.17)	0.09
HG	19.68*** (157.51)	0.001*** (5.19)	0.04	18.91*** (63.13)	0.001*** (2.0)	0.07	20.14*** (125.36)	0.001*** (5.52)	0.08
GM6	20.48*** (128.86)	0.35 (0.95)	0.01	19.47*** (57.99)	-0.06 (-0.11)	0.03	21.24*** (155.16)	0.76 (1.54)	0.02
CPI	20.23*** (67.8)	0.003 (0.33)	0.01	20.03*** (41.24)	-0.02 (-1.08)	0.01	20.5*** (56.44)	0.02 (1.46)	0.01

Source: Author's calculation

Notes: (.) denotes t-statistic, */**/*** means a significance level at 10%/5%/1% and R² means an adjusted (within) R-squared

17 Emerging markets: 1326 observations; Lower MIC: 612 observations. Upper MIC: 714 observations.



1: *FDI and dimensions of the political environment (concept GM) 1996–2012.*
Source: Author's calculations

The previous results are supplemented with a graphical analysis showing the relationship between the inflow of FDI and the (perceived) quality of the political environment. The quality is represented by proxy *GM126*, which is an arithmetic mean of three indicators of Governance Matters (*GM1*, *GM2* and *GM6*). Values are the arithmetic mean for 1996 to 2012. FDI has two expressions, general inflow (*FDI*) and the inflow per capita (*FDIpc*). The second expression is used because it allows a better comparison of small and medium-sized economies that predominate in our sample of countries. Proxies of FDI are in logarithmic functional forms owing to the clarity of the graph.

One can see the minimal relation between general inflow of FDI and indicators of the political environment, because there is a dominant influence of the motive of market seeking, which may be

demonstrated by the example of countries with the largest influx of foreign capital (Argentina, Brazil, China, India, Mexico, Russia and Turkey). For these countries, there are typically large markets (population size, GDP or natural resources) and simultaneously these countries have worse quality of the political environment in general. The situation is different in the case of FDI per capita. The paper can unambiguously identify successful (Bulgaria, Costa Rica, Croatia, Hungary, Mongolia, Uruguay and Trinidad and Tobago) and unsuccessful (Algeria, Cameroon, Côte d'Ivoire, Laos, Paraguay, Sudan, Uzbekistan) states both in the case of foreign investment and the (perceived) quality of the political environment. Nevertheless, most of the countries are allocated between these groups and, therefore, the unequivocal causality cannot be determinate.

CONCLUSION

Foreign direct investment has a major impact on the development of emerging markets. For the last 10 years, the inflow of FDI has increased on average elevenfold. The panel data regression analysis was used for the purpose of identification and quantification of the influence of the political environment on FDI. We constructed regression model using the fixed effect method supplemented with the cluster option due to persistence of heteroskedasticity and serial autocorrelation in model. The paper focuses on three dimensions of the political environment, the quality of democracy, political instability and the level of corruption. The paper distinguishes between two types of political instability, elite (non-violent) and non-elite (violent forms). The paper combines indicators frequently occurring in empirical literature (the Corruption Perception Index, Freedom in the World, Governance Matters) with alternative proxies (the Herfindahl Index Government, the Political Terror Scale, the State Fragility Index).

According to the results, one can argue that the political environment acts on foreign investment, but the effect is not unequivocal in emerging countries. The dimension of political instability has the main impact, both types are statistically significant (all variables apart from the Political Terror Scale), while in the other dimensions, there are just some important proxies, FiW (the quality of democracy) and *GM6* (the perceived level of corruption). One can also interpret results that an improvement in the individual indicators leads to a potential increase in the inflow of FDI by up to 1%, whereas in the case of market seeking motive (*GDP*, *Population*) is increase about 2.5% in the first and about 7% in the second. In the case of efficiency seeking motive (*Productivity*) is under 3% and factor of economic development affects about 1.5%.

As a possible extension, we propose the inclusion of the concepts of political science (e.g., classification of totalitarian and authoritarian regimes according to J. J. Linz) with the addition of the other

alternative indicators. Simultaneously, we omit some economic motives, e.g., investment incentives. In general, the impact of the political environment on foreign investment is not unequivocal since the motive of market seeking is dominant. The recommendation for policy-makers focuses on small and medium-sized emerging economies. If the country cannot offer large markets or available natural resources, then an improvement of the political (institutional) environment can support an increase in the attractiveness for international investors.

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