Will Political Stability Factors Influence FDI Inflow?

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In this paper, the authors discuss whether political stability would influence Foreign Direct Investment (FDI) inflow. There is an increasing interest among scholars about FDI since it has been considered as a way to offer abundant foreign capital, high skills, and new jobs throughout developing countries. Foreign companies pay more attention to the institutional properties and time horizon of the government leader. From historical experience, autocratic countries attract more FDI because of their flexibility and powerfulness. Hence, the research assumes that political stability as well as other factors like GDP, OMI, and interest rate probably would increase FDI inflow. Stata and Eviews have been used for regressing the independent variables and dependent variable. Correlation between each individual variable was calculated, and Least Squares method was used for investigating whether the linear correlation is significant. Finally, carefully analysing each indicator and plotting the graphs, things were found that there is no significant correlation between political stability factors of a country and FDI inflow. There are several explanations about the failure of hypothesis. First, the 10-year span is not long enough to prove the relationship. Then, the countries picked are most on the transition from autocracies to democracies. All the factors might influence the result of the correlation. Specific external factors such as economic conditions of investors need to be explored to see if it would probably determine the strong or weak of FDI.

Keywords: independent variables, FDI inflow, linear correlation, Least Squares

Introduction

Political scientists often believe that democratic countries consistently perform better at attracting FDI than that of autocratic counterparts. However, this is not necessarily the case. Under the condition that the economic development of most of developing countries which are autocratical countries depends to a large extent on the possibility to make profits and accumulated investments. Hence, more of autocratical countries are eager to attract FDI to increase investments within the land.
In the paper, “Foreign Direct Investment, Commitment Institutions, and Time Horizon: How Some Autocrats Do Better Than Others”, lecturer Moon (2015) of Australian National University discussed why some autocracies positively attract FDI. He argued that foreign companies care more about the protection of their properties, which is demonstrated through the time horizon of the autocratic leaders and quality of the property rights institutions. Autocratic countries have more checks on the power, which could be able to respond to any requests flexibility and establish institutions easily. The research theorized that a country’s level of political stability would also increase the protection of a foreign company’s institutional properties, which would as a result attracts FDI. Hypothesis in this research is that higher levels of political stability will increase FDI inflow.

**Literature Review**

So if this paper has the credit to prove most of the autocratic countries could increase better to attract FDI? Lots of researches should been done to see the results. However, more investigations from previous scholars offered researchers to catch a glance. Earlier, they pay less attention on the variables in FDI levels across autocrats. What they focus on are the effect of regime type and how cross-regime differences affect the likelihood of attracting FDI (Jensen, 2003; Li & Resnick, 2003). In addition, the research in this paper sees the diversity of policy results among autocrats.

Then, the determinants of FDI are hard to consider. There is abundant FDI literature which examines the political determinants of FDI inflows, but no current study examines variation among autocracies. Early literature tells that MNES are likely to invest in authoritarian regimes (Haggard, 1990; Clague, Keefer, Knack, & Olson, 1994), recent studies support that institutional features better attract FDI inflows (Feng, 2001; Jensen, 2003; Ahlquist, 2006; Choi & Samy, 2008).

Li and Resnick’s (2003) research thought that democratic countries do not always have better results on attracting FDI. For some time, democracies would more favor the economies of their own countries which should prevent the monopolistic positions. It depends on the policy of the country, so the country protecting foreign property would enhance FDI inflows.

As supposed before, the research in this paper believed that autocrats with long time horizon are most likely to develop institutions as they vision long-term benefits from FDI. So, is it that the long term horizon of autocrats makes more commitments in institutions and attracts FDI? Research would be demonstrated further as follows.

**Research Methods**

In this paper, research was done to try to indentify conditions that could explain variations in autocrats’ ability or variables to attract FDI. First, countries were selected for some reasons.

In order to have a wide variety of government types, countries were selected ranging from autocracies (with a polity score from -10 to -6), autocracies (with a polity score from -5 to 5) to democracies (with a polity score from 5 to 10). A country is defined as an autocracy if one of the following conditions holds: the chief executive is not elected; there is no more than one party; and the legislature is not elected.

All the countries selected are considered to be “developing countries”, because they provide a better comparison between the various government types and autocracies generally being less developed than democracies. Developing countries depend largely on the capital investments for economic enhancement. FDI
allows a great opportunity for emerging markets. The countries chosen are Angola, Bahrain, Bangladesh, China, Guatemala, Jordan, Mauritania, and Nigeria (Table 1). To make sure that the finding will be up to date, data were picked from 2005 to 2014, 10-year span.

Linear Regression Method is used for detecting whether there is a clear correlation between a country’s political stability and Foreign Direct Net Inflow. Political stability is used as an independent variable and FDI as a dependent one. Because a nation’s GDP, inflation, and interest rate also impact the FDI inflow. As the dependent variable in the following regressions, GDP per capita allows taking the relative country size into account. Regarding the independent variables of FDI, a common theoretical model was used for the determinants of FDI inflow, integrating political risk indicators and then estimating the effects. And different researchers used different kinds of determinants to get the different results. Various indicators were tried that may explain the differences in FDI inflow across countries and apply those that are the most suitable for the purpose of the research.

Hence 10 other independent variables (Table 2) are employed in regression to see if they account for much possibility for influencing the result of FDI inflow.

Table 1

| Country    | Year       | Political state                      |
|------------|------------|--------------------------------------|
| Angola     | 2005-2014  | Presidential republic                |
| Bahrain    | 2005-2014  | Constitutional monarchy              |
| Bangladesh | 2005-2014  | Parliamentary republic               |
| China      | 2005-2014  | One-party state                      |
| Guatemala  | 2005-2014  | Presidential republic                |
| Jordan     | 2005-2014  | Parliamentary constitutional monarchy |
| Mauritania | 2005-2014  | Presidential republic                |
| Nigeria    | 2005-2014  | Semi-presidential republic           |

Source: International Financial Statistics (Web. 21 July 2016).

Table 2

| Dependent variable | FDI: Foreign Direct Investment Net Inflow (% GDP) |
|--------------------|-----------------------------------------------|
| PSTAB: Political Stability |                                           |
| GDP: Gross Domestic Product per Capita (Log) |                                           |
| GCE: Government Consumption Expenditure (% GDP) |                                           |
| INFL: Annual Inflation Rate (Log) |                                           |
| TNRR: Total Natural resource Rent (% GDP) |                                           |

| Independent variable | HDI: Human Development Index |
|----------------------|-----------------------------|
| GDP: Gross Domestic Product (Log) |                             |
| FSI: Fragile States Index |                             |
| OMI: Openness of Market Index |                             |
| PS: Annual Policy Score |                             |
| RIR: Real Interest Rate |                             |

Source: International Financial Statistics (Web. 21 July 2016).
Research Results

Using Stata to get the correlation between different variables (Table 3), there is a positive relationship between political stability and FDI, and negative relationship between GDP and FDI. Higher values indicate less political risk and better institutions. In general, these indicators are recognized as high-quality measures of political risk and institutions, which would devote to the FDI inflow finally. Obviously, all 11 variables are related to each other by varying degrees, as they all assess political risk and institutions but from a different point of perspective.

Table 3

Correlation Matrix Between Variables

|       | FDI  | PSTAB | PS   | GDPPC | GCE  | INFL | TNRR | RIR  | HDI  | GDP  | FSI  | OMI  |
|-------|------|-------|------|-------|------|------|------|------|------|------|------|------|
| FDI   | 1    |       |      |       |      |      |      |      |      |      |      |      |
| PSTAB | 0.1247 | 1    |      |       |      |      |      |      |      |      |      |      |
| PS    | -0.1676 | -0.4439 | 1    |       |      |      |      |      |      |      |      |      |
| GDPPC | -0.1567 | 0.3929 | -0.4536 | 1    |      |      |      |      |      |      |      |      |
| GCE   | 0.2817 | 0.6415 | -0.4545 | 0.2209 | 1    |      |      |      |      |      |      |      |
| INFL  | -0.1173 | -0.0888 | 0.1865 | -0.1892 | -0.1104 | 1    |      |      |      |      |      |      |
| TNRR  | 0.025 | 0.0996 | -0.177 | 0.0175 | 0.451 | 0.2613 | 1    |      |      |      |      |      |
| RIR   | -0.091 | -0.015 | 0.209 | -0.3913 | 0.1523 | 0.302 | 0.4607 | 1    |      |      |      |      |
| HDI   | 0.0552 | 0.3605 | -0.4806 | 0.7921 | 0.0663 | -0.2896 | -0.4159 | -0.6111 | 1    |      |      |      |
| GDP   | -0.3608 | -0.1402 | -0.1378 | 0.1078 | -0.4123 | -0.0656 | -0.3866 | -0.2828 | 0.1455 | 1    |      |      |
| FSI   | -0.0799 | -0.5224 | 0.5111 | -0.7898 | -0.3026 | 0.2069 | 0.0162 | 0.3481 | -0.8281 | 0.1287 | 1    |      |
| OMI   | 0.3503 | 0.5268 | -0.289 | 0.3383 | 0.745 | 0.0017 | 0.5091 | 0.1538 | 0.1984 | -0.7537 | -0.5229 | 1    |

Source: Stata.

The figures in Table 3 showed that the richer of a country, the more unlikely that FDI inflow would be caused. If political stability decreased by 1%, FDI would increase by 0.12%. However, further studies should be made to judge if the correlation is significant to explain the linear relationship here within.

There are 80 observations from period 2005-2014 in Table 4, 11 independent variables and one dependent variable. Here, a different method was used to test the linear relationship. The coefficient is between the individual independent variables and dependent one. However, the Stata method in Table 3 explains the correlation between different variables. And there exist some disparities because of the confidence interval. There is a range for the correlation under different confidence internal in Table 5.

For the Least Squared Method, R-squared is 0.38 which means independent variables explain 38% of the change of the dependent variable FDI. The correlation is not so obvious.

The P-value in Table 4 demonstrates that the higher the probability, the weaker the coefficient relationship between the individual independent variable and dependent variable. For instance, the P-value of political stability equals 0.7284 which means the relationship between these two variables is not significant; the P-value of OMI equals 0.0239 which is less than PSTAB, thus telling that OMI has a stronger relationship than PSTAB with FDI.

The added independent variable plot illustrates that there is not a significant linear relationship between political stability of a country and FDI net inflow. The trendline is relatively flat and the points are scattered all over Figures 1 and 2.
Table 4
Linear Regression of Foreign Direct Investment Net Inflow Least Squares Method

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|-------|
| PSTAB    | -0.02917    | 0.083643   | -0.348723   | 0.7284 |
| GDPPC    | -4.54104    | 1.427553   | -3.180997   | 0.0023 |
| GCE      | -0.03327    | 0.227125   | -0.146503   | 0.884  |
| INFL     | -0.57417    | 0.732568   | -0.783774   | 0.4361 |
| TNRR     | 0.023064    | 0.075759   | 0.304441    | 0.7618 |
| HDI      | 34.59401    | 16.98796   | 2.036384    | 0.0459 |
| GDP      | 0.276468    | 0.602527   | 0.458847    | 0.6479 |
| FSI      | 0.20996     | 0.088192   | 2.380715    | 0.0203 |
| OMI      | 10.07031    | 4.350677   | 2.314654    | 0.0239 |
| PS       | -0.14302    | 0.178178   | -0.802651   | 0.4251 |
| RIR      | -0.11143    | 0.089856   | -1.240126   | 0.2195 |

R-squared 0.382596
Adjusted R-squared 0.286127
S.E. of regression 5.321494
Sum squared resid 1812.371
Log likelihood -225.854
Durbin-Watson stat 0.988734

Source: Eviews.

Table 5
90%, 95%, and 99% Confidence Interval Range

| Variable | Coefficient | 90% CI | 95% CI | 99% CI |
|----------|-------------|-------|--------|-------|
| PSTAB    | -0.02917    | -0.16877 | 0.110432 | -0.19626 | 0.137927 | -0.25123 | 0.192891 |
| GDPPC    | -4.54104    | -6.92365 | -2.15844 | -7.39291 | -1.68918 | -8.33099 | -0.7511 |
| GCE      | -0.03327    | -0.41235 | 0.345801 | -0.48701 | 0.42046 | -0.63626 | 0.56971 |
| INFL     | -0.57417    | -1.79683 | 0.648497 | -2.03764 | 0.889305 | -2.51903 | 1.370693 |
| TNRR     | 0.023064    | -0.10338 | 0.149507 | -0.12828 | 0.17441 | -0.17807 | 0.224193 |
| HDI      | 34.59401    | 6.240879 | 62.94714 | 0.656653 | 68.53136 | -10.5066 | 79.69457 |
| GDP      | 0.276468    | 0.72916 | 1.282093 | -0.92722 | 1.480154 | -1.32315 | 1.876089 |
| FSI      | 0.20996     | 0.062766 | 0.357154 | 0.033776 | 0.386144 | -0.02418 | 0.444097 |
| OMI      | 10.07031    | 2.808977 | 17.33165 | 1.378837 | 18.76179 | -1.4801 | 21.62073 |
| PS       | -0.14302    | -0.4404 | 0.154367 | -0.49897 | 0.212937 | -0.61605 | 0.330022 |
| RIR      | -0.11143    | -0.26141 | 0.038538 | -0.29094 | 0.068076 | -0.34999 | 0.127122 |

Source: Eviews.
The results show that there is no significant correlation between political stability of a country and FDI net inflow. This non-finding leads to the conclusion that each country has its own individual case, so it is hard to establish why some autocracies or weak democracies attract more foreign investments than others.
Furthermore, the year selection may also affect research results since the duration of year chosen is relatively recent. It is important to take into account that most countries picked are weak democracies or autocracies that are transiting to democracies, so the effect of political stability may not be visible yet since the time span is not long enough to show an effect on the foreign direct investment inflow. The time horizon of a leader who ruled for 30 years would be longer than that of the leader ruled for 10 years. Hence, the time horizon is a difficult task to justify.

Having not seen a clear relationship between political stability of a country and FDI net inflow, researchers suggest a further research that should be done with data over a longer time span and a wider variety of countries. Research could also be done in specific cases, and explore why FDI is weaker or stronger based on external factors and controls including economic conditions of investors. Also, sorting countries into stricter categories based on political systems could allow for more exploration on different government.

**Conclusion**

This is the research to examine variation of FDI inflows in autocracies. Scholars typically suppose that democratic countries are more likely to attract FDI. However, autocratic countries political leaders have longer time horizon to take over the power and maintain the political stability through many factors. Not only political stability but also many other factors such as GDP, inflation rate would influence the FDI inflow.

The research suggests that the correlation between political stability factor and FDI is 0.1247, which implies that the correlation is very tiny. The highest correlation is 0.35 between OMI and FDI, but 0.35 is still not vital enough to prove the stable correlation relationship.

What is the difference of this paper is that the research accounts more weights on other independent variables such as inflation rate, GDP per capita, openness market index, and human development index. After regressing the variables by Eviews, the result still proves that there is no significant correlation between political stability and FDI.

Of course, the research does not imply all the political stability factors. As previous studies suggest, democracies have higher quality institutions. However, scholars focus more on the core logic of FDI inflows. The research should broaden the yearly data and countries selected. Meanwhile, the error correction model (ECM) is appropriate for handling the issue of nonstationary trending series.

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