PLSC 421: Final Data Analysis Report

Autocracies vs. Democracies: Unraveling the Paradox of FDI Inflows in Developing Nations

I. Introduction

This research investigates the impact of political regimes on Foreign Direct Investment (FDI) inflows into developing countries, focusing specifically on the question: Do autocracies attract more FDI than democracies? The significance of this topic lies in its implications for economic development strategies and policy formulations within these nations.

The study posits that while democracies traditionally promote a stable and transparent investment climate, autocracies may attract more FDI due to less stringent regulatory environments and more aggressive fiscal incentives. These factors could potentially offset the institutional benefits typically associated with democracies.

Findings from empirical analysis indicate that autocracies might indeed be more effective in attracting FDI compared to democracies. This is primarily due to their ability to offer fiscal incentives and maintain a conducive regulatory environment, which appear to be significant determinants of FDI, overshadowing democratic advantages.

The arrangement of the article is as follows: We start by summarizing our theoretical approach to understanding how democratic institutions affect FDI inflows. After that, we explain our research design and show the empirical findings. A discussion of the ramifications of our results finishes the article.

II. Literature Summary

This literature review examines the complex relationship between political regimes and foreign direct investment (FDI) inflows in developing countries, a key focus within the international political economy. It synthesizes findings from multiple studies, highlighting how democratic and autocratic regimes differently influence FDI through their respective institutional frameworks and policies.

Nathan M. Jensen's 2003 study provides a cornerstone argument, suggesting that democracies, with their stable and predictable institutions, tend to attract more FDI than autocracies due to reduced political risks. These institutions, characterized by the rule of law, transparency, and accountability, are crucial in assuring foreign investors.[1]

[1] *Jensen, Nathan M. "Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct Investment." International Organization 57, no. 3 (2003): 587-616.*

Contrasting this perspective, Quan Li and Adam Resnick in 2003 highlight the complexities within democratic systems. While they agree that democracies secure property rights, enhancing investor confidence, they also note that democracies may implement stringent regulatory measures. These measures, focusing on labor rights, environmental protection, and market regulations, could potentially raise operational costs and deter FDI.[2]

Adding to the discourse, Quan Li in 2006 and Benhua Yang in 2007 explore how economic incentives and policy consistency play roles in attracting FDI across different political regimes. Li finds that democracies are generally more conservative in offering tax incentives due to higher levels of public scrutiny and accountability, which may limit their appeal compared to autocracies that often provide more lucrative fiscal enticements.[3] Yang challenges the notion that democracies are inherently more attractive for FDI by illustrating how autocracies can offer more consistent policy environments, sometimes making them more appealing to foreign investors despite their less transparent nature.[4]

Finally, Nathan Jensen in 2008 refines the conversation about political risk, noting that while democracies are equipped with institutions that can mitigate such risks, the electoral processes and potential policy reversals inherent to democracies can introduce new uncertainties. These risks must be balanced against the stability that democratic institutions can provide, which varies widely depending on their strength and maturity.[5]

This review emphasizes how intricate and varied the link is between political regimes and foreign direct investment. While certain broad patterns may be seen, such as the beneficial effects of strong democratic institutions on foreign direct investment (FDI), the actual dynamics rely heavily on unique country circumstances and other contributing variables.

III. Theory & Hypothesis

The hypothesis I put out looks at the relationship between political regimes—more especially, autocracies and democracies—and FDI inflows into developing nations. The fundamental idea is that, by its institutional structures and policy settings, a nation's political system affects foreign direct investment (FDI).

Democracy fosters a stable and predictable investment environment that draws in more foreign direct investment (FDI) because of the rule of law, accountability, and transparency. But democratic inclinations to enforce strict labor, environmental, and market laws may offset these

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[2] *Li, Quan and Adam Resnick. "Reversal of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries." International Organization 57, no. 1 (2003): 175-211.*

[3] *Li, Quan. "Democracy, Autocracy, and Tax Incentives to Foreign Direct Investors: A Cross-National Analysis." The Journal of Politics 68, no. 1 (2006): 62-74.*

[4] *Yang, Benhua. "Autocracy, Democracy, and FDI Inflows to the Developing Countries." International Economic Journal 21, no. 3 (2007): 419-439.*

[5] *Jensen, Nathan. "Political Risk, Democratic Institutions, and Foreign Direct Investment." The Journal of Politics 70, no. 4 (2008): 1040-1052.*

benefits, perhaps driving up costs for international investment. Although there are dangers associated with weaker transparency and the potential for rapid policy changes, autocracies may be able to draw foreign direct investment (FDI) due to their less stringent regulations and more aggressive fiscal incentives. These factors, together with their capacity to give short-term stability and policy consistency, may make autocracies appealing to international investors.

Based on the above theoretical underpinnings, the hypothesis formulated is as follows:

Autocracies may attract more FDI than democracies in developing countries due to the significant influence of fiscal incentives and a conducive regulatory environment, which can supersede the institutional benefits typically associated with democratic regimes.

IV. Data Analysis

The empirical analysis covers 134 countries from 2015 to 2018, these nations display both regional and temporal fluctuations in the amount of FDI inflows as well as democratic features, making a discriminating statistical analysis possible.

Research Design

Dependent Variable

Foreign direct investment, net inflows (BoP, current US$): This indicator quantifies the net inflows of foreign direct investment (FDI), encompassing equity capital, reinvestment of earnings, and other capital. FDI is identified by a controlling interest—ownership of 10% or more of the ordinary shares or voting stock—that grants significant influence over a business entity in another economy. The data are reported in billions of current U.S. dollars, sourced from the International Monetary Fund's Balance of Payments database, enhanced by additional data from UNCTAD and national sources. FDI data strictly adhere to the definitions and criteria set out in the IMF's Balance of Payments Manual (BPM6), which only considers investments that result in management control or a significant degree of influence.

Independent Variables

Regime Type (Polity 2 score): By correcting data discontinuities, the original POLITY score was changed to create the Revised Combined Polity Score (POLITY2). This version of the score is intended to be more useful in time-series analysis. This variable normalizes irregular scores like -66, -77, and -88 that indicate special conditions like foreign interruptions, interregnums, and transitions. This modifies the combined annual POLITY score, which measures a country's level of democracy on a scale from -10 (fully autocratic) to +10 (fully democratic). Here we use polity 2 score to measure the level of democracy. The data is retrieved from Polity 5 Project.

Fiscal Incentives (Total tax and contribution rate, % of profit): This indicator measures the total tax rate as the amount of taxes and mandatory contributions payable by businesses after accounting

for allowable deductions and exemptions, expressed as a share of commercial profits. The rate includes government-mandated taxes and contributions at all levels (federal, state, local) that impact the income statements of standardized businesses. Excluded from this measure are taxes withheld or collected and remitted to tax authorities, such as personal income tax, value-added taxes, sales taxes, and goods and service taxes, as these do not directly affect the accounting profits of the businesses. Data are log-transformed to improve analytical robustness and address data skewness. In the context of this study, the Total Tax and Contribution Rate serves as an independent variable to evaluate how fiscal policies, encapsulated by tax rates, influence foreign direct investment flows into a country. Lower total tax rates are hypothesized to act as fiscal incentives, potentially increasing FDI by reducing the operational costs associated with taxation.

Regulatory Impediments (Ease of doing business score): Comparing an economy's ease of doing business against the best and worst regulatory procedures yields this index. On a scale of 0 to 100, the lowest regulatory performance (most regulatory barriers) is represented by a score of 0; the greatest possible regulatory environment, with the fewest obstacles, is represented by a score of 100. The World Development Indicators database is the source of the data. In order to investigate how regulatory environments affect foreign direct investment, this study uses the ease of doing business score as an independent variable. Businesses like to operate in more efficient and less bureaucratically burdensome environments; hence it is hypothesized that greater amounts of FDI would correlate with better ease of doing business scores, which indicate less regulatory barriers.

Controlled Variables

Market Size (GDP, PPP, current international $): This metric, which is reported in current international dollars, calculates the GDP after purchasing power parity (PPP) adjustments. It reflects a nation's actual economic scale by removing price level disparities across nations, which accounts for economic size. The World Bank's International Comparison Program and the World Development Indicators database, in association with the Eurostat-OECD PPP Program, are the sources of the data. GDP figures are log-transformed to improve analytical robustness and address data skewness. This stabilizes variance and increases the accuracy of statistical analysis.

Economic Development (GDP per capita, PPP, current international $): Using purchasing power parity (PPP) adjustment, this metric determines the per capita GDP in current international dollars. In order to provide reliable cross-country comparisons, it measures the economic production per inhabitant after accounting for variations in price levels between nations. To resolve skewness and stabilize variance for more trustworthy statistical analysis, the data—which are derived from the World Bank's International Comparison Program and World Development Indicators—are log-transformed.

Economic Growth (GDP growth annual %): The GDP's yearly percentage growth rate at market prices calculated using constant local currency is indicated by this metric. It uses constant 2015 prices expressed in U.S. dollars to represent the total gross value created by all resident producers

in the economy, adjusted for product taxes minus subsidies. Information is taken from the national accounts statistics of the World Bank.

Exchange Rate (Official exchange rate, LCU per US$, period average): The rate established by national authorities or decided upon in the exchange market that is authorized by law is known as the official rate. It is determined as a yearly average based on monthly averages and is expressed as the quantity of local currency units (LCU) per US dollar. The official price of the local currency in relation to the US dollar is reflected in this metric. Data are log-transformed to improve analytical robustness and address data skewness. The data source is the World Development Indicators database.

Method：Pooled OLS regression

Given the nature of the available data, we will utilize Pooled Ordinary Least Squares (Pooled OLS) regression to analyze the impact of fiscal policies, regulatory frameworks, and political regimes on the influx of foreign direct investment (FDI) into developing nations. This method treats the panel data as a large cross-sectional dataset by combining all time periods and entities, assuming homogeneity across these entities in terms of intercepts and slopes. By employing Pooled OLS, we can efficiently estimate the global effects of the independent variables on FDI, ignoring individual-specific variations that do not change over time. This approach is particularly useful when the focus is on understanding general trends and effects across the entire dataset, rather than the nuances that might be specific to any single entity within the panel.

Model 1: Independent Variables Only

This model assesses the effect of the independent variables alone on FDI inflows, without any control variables. It provides a basic understanding of how the independent variables affect FDI：

$$FDI_{it} = \alpha + \beta_1 * Polity2_{it} + \beta_2 * Fiscal_{it} + \beta_3 * Impediments_{it} + \epsilon_{it}$$

Model 2: Controlled Variables Only

This model includes only the controlled variables, allowing us to understand how economic conditions influence FDI inflows independently of the political and regulatory environment:

$$FDI_{it} = \alpha + \beta_4 * Marketsize_{it} + \beta_5 * Economicdevelopment_{it} + \beta_6 * Economicgrowth_{it} + \beta_7 * Exchangerate_{it} + \epsilon_{it}$$

Model 3: Full Model

The full model incorporates all the independent and controlled variables to explore their combined influence on FDI inflows:

$$FDI_{it} = \alpha + \beta_1 * Polity2_{it} + \beta_2 * Fiscal_{it} + \beta_3 * Impediments_{it} + \beta_4 * Marketsize_{it} + \beta_5 * Economicdevelopment_{it} + \beta_6 * Economicgrowth_{it} + \beta_7 * Exchangerate_{it} + \epsilon_{it}$$

Where:

FDI_{it}: The net FDI inflows in billions of current US dollars to country i in year t.

$Polity2_{it}$: This measures the political regime type using the Polity 2 score to country i in year t.

$Fiscal_{it}$: This represents the log-transformed total tax and contribution rate as a percentage of profit to country i in year t.

$Impediments_{it}$: This is scored from the ease of doing business index to country i in year t.

$Marketsize_{it}$: This represents the log-transformed GDP (PPP) to country i in year t.

$Economicdevelopment_{it}$: This represents the log-transformed GDP per capita (PPP) to country i in year t.

$Economicgrowth_{it}$: This represents the annual GDP growth percentage to country i in year t.

$Exchangerate_{it}$: This represents the log-transformed official exchange rate to country i in year t.

ϵ_{it}: This is the error term.

Findings (Figure 1. in Appendix)

Model 1: This model examines the direct effects of independent variables on FDI without considering controlled variables. All independent variables are statistically significant at a 5% level. The negative coefficient of the Polity 2 score, which indicates a lower FDI attraction in more democratic settings, supports the hypothesis that autocracies may indeed attract more FDI. Additionally, the positive coefficients for Logged Fiscal Incentives and Regulatory Impediments align with the hypothesis, suggesting that fiscal policies and regulatory frameworks are critical in attracting FDI, potentially outweighing democratic advantages.

Model 2: Focusing exclusively on controlled variables, this model shows that while Economic Growth does not significantly impact FDI, the positive coefficient for Logged Market Size confirms that larger markets are attractive to foreign investors. However, the negative coefficients for Logged Exchange Rate and Logged Economic Development imply that stronger currencies and higher levels of development might deter FDI, which could be indicative of the competitive and operational challenges in more developed or economically stable environments.

Model 3: Integrating both independent and controlled variables, the findings reinforce the key insights. The Polity 2 score remains negatively correlated with FDI, reinforcing the notion that

higher levels of democracy might not be as appealing to foreign investors as hypothesized. The positive impact of Logged Fiscal Incentives continues to highlight the importance of fiscal measures in attracting FDI. However, the insignificance of the coefficient for Regulatory Impediments in this comprehensive model suggests that the straightforward effect of regulatory environments might be more complex and dependent on other interacting factors.

Empirical evidence from the model shows that higher democracy levels, as measured by the Polity 2 score, consistently correlated negatively with FDI inflows. This suggests that the regulatory and procedural complexities often associated with democratic governance might deter foreign investors, who favor more predictable and expedient investment environments. Furthermore, the positive impact of fiscal incentives in autocracies underscores the significant role that economic policies play in attracting FDI, often outweighing the institutional advantages offered by democracies. However, the impact of regulatory frameworks may be more intricate and contingent upon additional interrelated elements.

V. Conclusion

This study investigates the relationship between political regimes—autocracies and democracies in particular—and foreign direct investment (FDI) in developing nations. According to the hypothesis, democracies encourage a stable and predictable investment climate through transparent and strong legal frameworks, but their stringent labor, environmental, and market regulations may discourage foreign investors because of higher operating costs. On the other hand, by lowering regulatory barriers and providing more generous fiscal incentives, autocracies may be able to draw in more foreign direct investment. These features, along with their capacity to offer stability and consistency in policy over the short term, may make autocracies more desirable to foreign investors than democracies.

The main findings challenge the conventional wisdom that democracies are inherently more conducive to attracting FDI. Instead, the research reveals that autocracies may be more effective in attracting foreign investments due to their typically less stringent regulatory environments and more aggressive fiscal incentives.

There are a number of limitations to the research that point to areas that need more investigation. First off, the study's reliance on aggregate data may obscure complex relationships—like sector- or region-specific variations—between political regimes and economic variables at finer points. Second, the model ignores temporal dynamics—such as alterations in international trade policy or changes in the state of the global economy—that may have an impact on the link between political regimes and foreign direct investment.

Future studies may fill up these gaps by using longitudinal data to look at how FDI is affected over time by changes in political regimes. Deeper insights may also be obtained by using a more detailed method to examine how political and economic variables affect FDI in certain sectors or

geographical areas. The influence of geopolitics and international relations on the investment climate under various political systems may potentially be investigated in future research.

VI. Bibliography

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VII. Appendix

Figure 1. Regression Results of FDI Inflows Across Models

	Dependent variable:		
	FDI inflows		
	(1)	(2)	(3)
Regime Type	-0.767***		-0.533**
	(0.243)		(0.217)
Fiscal Incentives(log)	14.116***		8.564***
	(2.941)		(2.709)
Regulatory Impediments	0.568***		0.166
	(0.114)		(0.138)
Market Size(log)		7.131***	6.426***
		(0.675)	(0.683)
Economic Development(log)		-2.958**	-2.884*
		(1.419)	(1.697)
Economic Growth		0.308	0.383
		(0.320)	(0.329)
Exchange Rate(log)		-1.337***	-1.478***
		(0.456)	(0.457)
Constant	-75.842***	-142.981***	-164.438***
	(14.646)	(15.963)	(17.655)
Observations	361	361	361
R2	0.112	0.279	0.313
Adjusted R2	0.105	0.271	0.299
Residual Std. Error	22.262 (df = 357)	20.093 (df = 356)	19.693 (df = 353)
F Statistic	15.014*** (df = 3; 357)	34.384*** (df = 4; 356)	22.968*** (df = 7; 353)
Note:			*p<0.1; **p<0.05; ***p<0.01