

THE INFLUENCE OF THE RULE OF LAW ON FOREIGN DIRECT INVESTMENT

Nicholas F. Demes, Esq.
December 2020

Introduction

This paper examines the relationship between foreign direct investment (FDI) and the rule of law. FDI measures investments made by a firm or individual in a foreign country. While FDI is measured in dollars invested¹, its impact is broader. The most obvious benefit of FDI is the additional foreign capital it provides to a given country. Studies further show, however, that FDI often involves the transferring of production technologies and skills as well as management practices which can have spillage into the broader domestic markets. Over time, FDI can therefore impact not only economic conditions, but lead to increase liberalizing of societies and governments. The factors that effect FDI are therefore worthy of analysis.

In the United States, we have Uniform Law Commission which creates and advocates for the passage of uniform laws throughout the states to foster the consistent application of business laws. This reliability is believed to reduce the costs of investing throughout the country – by increasing confidence and decreasing risk of the unknowns. Businesses can invest across state lines with confidence.

From this concept, we turn to the ‘rule of law’. The general idea of a ‘rule of law’ index is to measure the confidence that a country or state will follow its law fairly, and in the case of businesses, respect contractual rights.² In theory, the less reliable courts are, the more risk in a

¹ The statistics on FDI measure the net results of capital transactions' credits less debits between direct investors and their foreign affiliates.

² “Rule of Law captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from

transaction, and therefore the higher costs associated with that transaction. The data should therefore show rule of law as a predictive factor for FDI.

Data

The World Bank maintains data on FDI and a host of other factors which may affect FDI. While there are competing metrics for measuring ‘rule of law’, the World Bank has developed its own rule of law index, in addition to similar indexes for regulatory quality, corruption control, and political stability. While these are not direct substitutes, there would likely be overcontrolling in using all these metrics.

In addition to this information, factors such as tax rates and population should play a role in determining FDI. Useful measurements of population also include male population, education levels, and population under 65. The World Bank provides useful data in all of these areas.³ Below is a summary of the data.

Variable	Obs	Mean	Std. Dev.	Min	Max
Regulatory~y	182	-.0080149	.9691738	-2.396794	2.161377
RuleofLaw	182	-.0524484	.9792311	-2.350358	2.022146
Corruption~l	182	-.053305	.9882111	-1.773724	2.170071
PoliticalS~y	182	-.0881547	.9463491	-2.768294	1.655899
FDI	182	8.67e+09	3.21e+10	-4.66e+10	3.52e+11
Pop65	182	3786067	1.45e+07	4801	1.60e+08
PopFemale	182	2.06e+07	7.26e+07	47518	6.81e+08
PopMale	182	2.09e+07	7.70e+07	46852	7.17e+08
TotalPop	182	4.15e+07	1.50e+08	97118	1.40e+09
Under65	182	3.78e+07	1.36e+08	85438	1.28e+09
TaxonProfits	182	.1608297	.093033	0	.53

Figure 2.1 Summary statistics for Regulatory Quality, Rule of Law, Corruption Control, Political Stability, FDI, Population over 65, Female Population, Male Population, and Population Under

approximately -2.5 to 2.5.” World Bank <https://datacatalog.worldbank.org/rule-law-estimate#:~:text=Rule%20of%20Law%20captures%20perceptions,likelihood%20of%20crime%20and%0violence>.

³ The World Bank provides total population and population over 65. Some basic arithmetic was therefore needed to calculate populations under 65.

65, and Corporate Taxes.

Because the 'Rule of Law' index has a very small range, approximately -2.35 to 2.022, whereas the FDI measurement has a massive range of billions of dollars, a direct scatterplot between the two variables has little value. Using $\ln(\text{FDI})$ however, provides some level of insight. Figure 2.1 demonstrates the positive relationship.

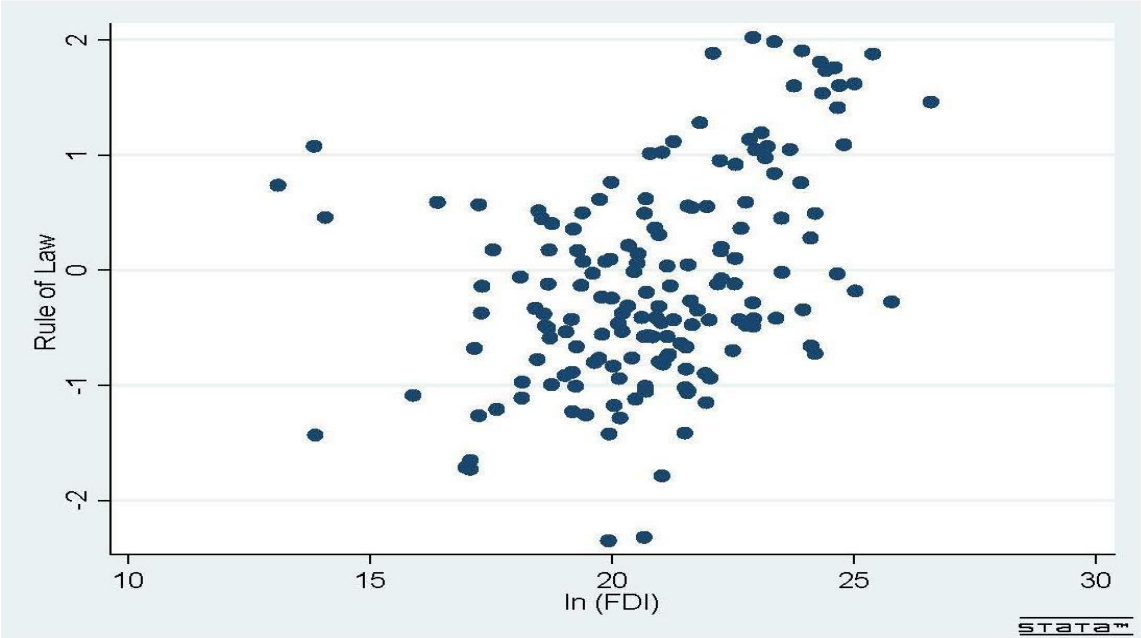


Figure 2.2 Scatterplot of relationship between Rule of Law Index and $\ln(\text{FDI})$.

Methodology

While the direct relationship between the Rule of Law Index and FDI is clearly positive, it does not account of other important factors. Intuition tells us that population and tax rates are likely relevant factors. Data for these factors are therefore included in the regression analysis. Because the study looks at FDI in a broad sense, however, there are important bilateral considerations that might nonetheless cause bias. There are concentrations of wealth in the global economy which exist in specific countries or regions. The public polities of these countries could impact where its citizens invest. By way of example, escalating tensions between the United States and People’s Republic of China (China) would

impact not only FDI between those countries but have spillover effects in other countries and regions. While this type of bias is probably not significant at any given time, when massive economies like the United States and China take antagonistic positions in the long-term, the bias would become more significant and harder to estimate.

Results

Regressing FDI on the Rule of Law Index, Total Population, and Tax Rates on Profits returns the results listed in figure 3.1.

Source	SS	df	MS	Number of obs	=	182
Model	5.1602e+22	3	1.7201e+22	F(3, 178)	=	22.70
Residual	1.3490e+23	178	7.5786e+20	Prob > F	=	0.0000
				R-squared	=	0.2767
				Adj R-squared	=	0.2645
Total	1.8650e+23	181	1.0304e+21	Root MSE	=	2.8e+10

FDI	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
RuleofLaw	8.33e+09	2.11e+09	3.94	0.000	4.16e+09	1.25e+10
TotalPop	100.1481	13.71471	7.30	0.000	73.08375	127.2124
TaxonProfits	1.47e+10	2.23e+10	0.66	0.509	-2.92e+10	5.87e+10
_cons	2.58e+09	4.12e+09	0.63	0.533	-5.55e+09	1.07e+10

Figure 3.1 Regression results of FDI on Rule of Law, Total Population, and Corporate Taxes.

The regression results show that population and rule of law are both important characteristics for attracting FDI.⁴ According to the regression, as the population increases by 1 person, we see a corresponding increase in FDI of \$100. Accordingly, an increase of 1 million people would correspond with an increase of FDI of \$100 million.

In interpreting the impact of a unit increase in the Rule of Law Index, it's important to recall that the range in the index is approximately -2.35 to 2.022. For that reason, a one-unit increase is a large amount (going from -2 to -1 is a jump in the range of 25%). Moreover, over 65% of countries have a score ranging from -1 to 1, and nearly 86% of counties fall between -1.5

⁴ Unfortunately, there isn't enough statistical significance to tell us much about the impact of taxes.

and 1.5. Thus, Considering the data shows a market of nearly \$1.6 trillion in FDI, a one-unit increase would correspond with a \$8.33 billion increase in FDI. This one-unit increase would likely be a significant rise in the relative rankings.

Running the regression using $\ln(\text{FDI})$ and $\ln(\text{Total Population})$ provides additional clarity. Figure 3.2 shows that a one-unit change in the Rule of Law Index corresponds to a 134% increase in the FDI. Separately, a 1% increase in population corresponds to a 0.8% increase in FDI.

Source	SS	df	MS	Number of obs	=	166
Model	569.481624	3	189.827208	F(3, 162)	=	80.92
Residual	380.050231	162	2.34598908	Prob > F	=	0.0000
Total	949.531855	165	5.75473851	R-squared	=	0.5997
				Adj R-squared	=	0.5923
				Root MSE	=	1.5317

lnfdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
RuleofLaw	1.342973	.1343262	10.00	0.000	1.077717 1.608229
lnpop	.8036624	.0614037	13.09	0.000	.6824075 .9249173
TaxonProfits	-1.44158	1.298311	-1.11	0.268	-4.005375 1.122216
_cons	8.453971	1.000335	8.45	0.000	6.478594 10.42935

Figure 3.2 Regression results of $\ln(\text{FDI})$ on Rule of Law, $\ln(\text{Total Population})$, and Corporate Taxes.

Conclusion

Without accounting for geopolitical factors, there is statistical significance to state that the rule of law matters for purposes of attracting FDI. That said, population clearly matters. When considering the amount of FDI in China, population seems to outweigh the need for a high level of confidence in the rule of law. Access to the massive and growing Chinese middle class drives those economic decisions. But apart from places with massive populations, the rule of law plays a critical role. Increasing the reliability of the rule of law via the enforceability of contracts and confidence in judicial systems are essential to attracting business investment-fueling future growth and prosperity.