

THE PENNSYLVANIA STATE UNIVERSITY  
SCHREYER HONORS COLLEGE

DEPARTMENT OF POLITICAL SCIENCE

THE RELATIONSHIP BETWEEN THE INVESTOR-STATE DISPUTE SETTLEMENT  
SYSTEM AND DIFFERENT POLITICAL ECONOMIES

LUIS C. AGUILERA  
SPRING 2020

A thesis  
submitted in partial fulfillment  
of the requirements  
for baccalaureate degrees  
in International Politics and Economics  
with honors in International Politics

Reviewed and approved\* by the following:

*Bumba Mukherjee*  
*Professor of Political Science*  
*Thesis Supervisor*

*Matthew Golder*  
*Professor of Political Science*  
*Honors Adviser*

\* Electronic approvals are on file.

## ABSTRACT

This thesis examines the Investor-State Dispute Settlement System (ISDS) and whether there are different win-ratios between different parties' characteristics in the court system. The ISDS is a union of international courts and tribunals that resolve disputes between multinational firms and states. The governments involved are all who have consented directly to full jurisdiction of the court or have consented indirectly to its jurisdiction under specific bilateral or multilateral treaties. Recently the ISDS system has been criticized by prominent American leaders from both sides of American politics with, at the time candidate, President Donald Trump, and Senator Elizabeth Warren arguing that it is a threat to American self-governance and sovereignty. Despite their critiques, the system is expanding as international trade has been exponentially growing the past three decades and countries and companies view it as a safeguard against the high risk of foreign direct investment. This paper will look at the who, what, where and attempt to explain why some states have better win ratios than others by taking a quantitative approach to the issue with a focus on economic and political variables as the explanation behind different results. By analyzing the trends in the system, this paper will aid in the political conversation over The United States' involvement with the system and shed light on a rumored bias of arbitrators in the courts with a more quantitative discussion.

**TABLE OF CONTENTS**

LIST OF FIGURES .....	iii
LIST OF TABLES .....	iv
ACKNOWLEDGEMENTS .....	v
Chapter 1 Question and Significance.....	1
Chapter 2 Literature Review .....	2
Chapter 3 Theories and Hypotheses .....	9
Chapter 4 Research Design.....	10
Chapter 5 Case Selection .....	14
Chapter 6 From Where are the Data? .....	15
Chapter 7 Justification for Datasets .....	19
Chapter 8 Difficulties.....	22
Chapter 9 Results, Predictions, & Synthesis.....	23
Chapter 10 Conclusion.....	32
BIBLIOGRAPHY.....	34

**LIST OF FIGURES**

Figure 1: Polity Reflection of States.....	27
Figure 2: Investment Freedom Reflection of States.....	27
Figure 3: Investment Freedom Effect on Investor Win Ratio .....	30
Figure 4: State's Economic Growth Effect on Investor Win Ratio.....	31
Figure 5: Investment Freedom Effect on State's Win Ratio.....	31

**LIST OF TABLES**

Table 1: Means of the Variables.....	25
Table 2: Difference of Means Test.....	26
Table 3: Regression Results.....	29

## ACKNOWLEDGEMENTS

I would like to thank my two advisors, Prof. Bumba Mukherjee and Prof. Matthew Golder for all of their suggestions, comments, and insights. I would also like to thank Prof. Michael Nelson for his guidance with the coding aspect of the project and Prof. Gretchen Casper for her advice during the early stages of the work. Without all of your help, this thesis would have never been completed.

## **Chapter 1**

### **Question and Significance**

The research question identified in this paper: What factors influence a party's win ratio at The Investor-State Dispute Settlement System? The importance of my research will be to shed light on a relatively untouched field of international corporate-state politics and legal systems. This field of international law is growing as these commercial court systems are becoming more customary to incorporate into the clauses of bilateral and multilateral treaties. Recently they have received criticism from skeptics across the world for being biased tools of multinational corporations (primarily from developed countries) that take advantage of less developed states. In contrast, The World Trade Organization, The World Bank, and The International Monetary Fund view them as essential extensions of international business law in a globalized world. Creating a model that predicts the likelihood of a party winning a case in the system is not only helpful in providing useful context for the debate, but it can also be of aid for insurance, consulting, and law firms who operate in this practice.

## Chapter 2

### Literature Review

#### Differences in Issues & Topic Selection

The existing literature provides a bounty of different focuses and methodologies and it is critical to understand the broader view to then visualize the missing pieces to the puzzle of the ISDS. Authors' focuses range from incorrect arbitrator decisions, inconsistencies in final rulings, and the overrepresentation of specific states in the system. However, the first theme noticed in the literature is the balance between the methodological approach- a quantitative vs qualitative decision. In the case of Robin Broad, Professor of International Affairs at the American University, she uses a case-study analysis of El-Salvador and a Canadian mining company (2015). In this instance, the author argues that legally, the fact that the case itself was accepted by the ISDS arbitrators demonstrates that the system is biased towards corporations. This could be seen because the government, when institutionalizing measures that were pro-environment, did not have a discriminatory intent specifically toward the Canadian mining company. Instead they were discriminating against all environmentally harmful industries, which the author argues was legal according to the bilateral agreement. Yet, they were still penalized, obligated to compensate, and pressured to not enforce their pro-environment law which has led to domestic dissatisfaction with the government- a cost much greater than any potential legal fees. Evidently, the methodology chosen by Robin Broad is a qualitative approach which is insightful by introducing the world to a potential problem in the system: bias.

Instead of singularly looking at one country, my study will compare the total effects on all countries, including examples such as El-Salvador. Furthermore, my study will not particularly analyze whether an arbitrator is pressured to side in favor of the corporation and



instead focus on the general trends in the system to first see if there is a relationship between political or economic systems with win-ratios. This raises an issue to the validity in my potential independent variables because there might be a statistical bias that has not been accounted for: The ISDS' impartiality. Yet, it could be argued that it should not be significant in the universe of all cases because if true, countries who are on the receiving end of the negative bias would refuse to participate. However, it is still an important theme to acknowledge when addressing the validity of the independent variables.

In another similar article to Robin Broad's, Susan Frank, Professor of Law at The American University, provides essential context to the importance of researching the factors that play a role in outcomes in the ISDS system, which although still qualitative, it is analyzing a different issue: inconsistency. She notes that there are multiple instances in which settlements with similar facts and context finish with conflicting outcomes. The example Frank analyzes is that of a case between a Czech/American investor who had his investment in The Czech Republic ruled illegal without any requital. The investor had to take his case both through The United States and The Netherlands as separate parties due to him using a Dutch investment firm to use his money in The Czech Republic. Two cases in two different courts with the same facts and evidence, yet one sided with the investor and one with the state. Susan Frank's example suggests that there is an inherent inconsistency in the procedure of the ISDS system that is affecting its legitimacy. Frank in this article sets the tone for a necessary analysis into what could have caused the discrepancy in results between the two tribunals- the different political and economic perceptions arbitrators have of the parties involved.

Working in a different direction yet still criticizing the ISDS arbitrators, Becky Jacobs, a professor of Law at The University of Tennessee, who has had extensive experience with

international law firms, discusses in her article the legitimacy of multiple criticisms that The ISDS has received. A significant critique that Jacobs reviews is that of a “diversity deficit.” She reflects on this theory with a neutral conclusion, affirming that although 70% of arbitrators are mostly from Western Europe and North America, this diversity issue is just the result of the ISDS being a new field in international law. She discusses that in fact, there are twelve judges that are the arbitrators of the majority of cases, which makes it difficult for those without experience to compete for those who already have it (2015). This relates to the bias discussed in the El-Salvador case described by Robin Broad, that the majority of arbitrators are Western lawyers at prestigious law-firms. This leads to a cycle of the court acting inevitably in favor of the Western investors because the arbitrators want to look suitable in the prospect of potential clients they network with in their private field: the multinational corporations. This is one of the main factors behind my research topic but instead of analyzing the idiosyncrasies of the ISDS procedure as Jacobs does, my goal is to analyze the overall trends or lack of trends that are apparent in the universe of decisions.

The last different topic that has been analyzed is not related directly to the ISDS system but instead to a similar international court mechanism: The World Bank. The reason for including this system is that although The World Bank’s dispute system does not involve the same relationship between involved parties, in this case state vs. state, it can provide insight in an international law setting while still facing similar criticism the ISDS does today. Specifically, The WTO has been both applauded and criticized for its treatment of developing countries. Roderick Abbott, former Deputy Director General of The World Trade Organization, analyzes, in his journal article, the statistics of developing states’ participation in The WTO. He illustrates that at first glance, a fact advertised by The World Bank itself, a healthy third of all cases come

from developing countries. However, with a deeper look, he finds this fact misleading. In The WTO, multiple parties can be part of a case. For example, if country X begins a case with country A, countries B, C, D, E, and F can all register as plaintiffs along with A in the case without giving any substantive information or effort. Abbot removes the cases in which developing countries were only participatory plaintiffs and creates a function of original plaintiffs. This is where the truth is more accurately depicted; only a handful of developing countries and even developed states make up over 60% of all cases at The WTO. This means that although half of these cases come from developing countries, there are still more than one hundred states who have never participated in being the original plaintiff or defendant.

Abbot notes that, even though the Advisory Centre of World Trade Law (ACWL), a legal system in the WTO created in 2004 to aid developing countries with legal advice and consulting, countries that are less developed face constraints of “law, money, and politics.” Abbot hypothesizes that developing countries do not have the legal resources or political influence to see themselves successful in most international commercial court cases, which deters them from using The WTO as an option. This relates to my research because I would need to be careful when analyzing the origins of my data. If they are all from a handful of states that are the primary actors in the system, then a regression analyzing all states might only be representing the dynamic of the handful.

### **Differences in Analysis & Interpretation**

The following themes in the literature are the foundation for my research in regard to methodology. However, it is the different choice of variable selection and the understanding of results that drives my critique of these works and fuels that need for my own research. The authors of this journal article, from the University of Oslo and the University of Bergen, analyze

if there is a difference between the correlation of economic development and outcome compared with the correlation of quality of governance and outcome at Investment Treaty Arbitrations. This is similar to my topic but still suffers from reoccurring issues in the field. The authors, when choosing what variable to analyze for “economic development,” use Gross National Income per capita. This is not substantially relevant to international investment because it is not a variable that is often considered in a foreign direct investment decision between a potential investor and state. Furthermore, the research also uses the “liberal democracy index” to analyze the quality of government. This independent variable, although more accurate than simply using the binary democracy-non democracy analysis, still fails to accurately represent democracy in the context of international trade. The liberal democracy index is founded on the fortitude of the checks and balances a government has between the executive, legislative, and judicial branch. This is not relevant to The ISDS because there are an incredibly large number of outliers that will skew the data. These hypothetical outliers could be states like the United Arab Emirates, Bahrain, Singapore, and many more investment hotspots with lower rankings in the liberal democracy index. In the end, Professors Behn, Berge, and Langford use two variables that are not essential to the perspectives of ISDS investors nor are theoretically significant in predicting a state’s failure to uphold an investor contract or trade agreement.

In this unique article, authored by Professors Frank and Wylie, from The American University and University of Nebraska respectively, take a different approach when identifying the parties of a case in an ISDS court or tribunal. Instead of analyzing them by state of origin as most of the literature does, these two authors take a different approach and discover that the lawyer’s experience in the court is the most decisive factors in winning a case. Furthermore, they noticed that even though states win more often than investors, if those investors were under The

Financial Times 500, they were more likely to secure a favorable outcome. An interesting note however is that despite all basic data being available in the universe of ISDS cases: parties involved, industry, and outcome, the authors decided to only test a sample instead of all of them. This choice was down to not every case having specific available data available on the “experience” of lawyers as this information might not be disclosed. This choice of variable poses an interesting question: whether the inclusion of the experience of lawyers in any given case is completely random. It is most probably not true that any random case has the same chance in having the names and experience of lawyers included. In theory, some investors, depending on the industry and magnitude of case, might prefer to not disclose who their lawyers were, how much the final settlement was, and other sensitive details. Therefore, the cases used by the authors might not be truly representative of the universe of cases in the field because the chances a case has the details of the lawyer’s experience outlined might not be independent of the merits of case presented. Although their theory does propose an interesting hypothesis, that the experience of the lawyers is the major determinant of outcome, it is currently not possible to prove due to the nature of which cases’ details are disclosed to the public.

In their article, Julian Donaubauer, Professor from the University of Hamburg, and Peter Nunnenkamp, from the Kiel Institute for The World Economy, attempt to address a similar issue to that of Robin Broad: bias. However, the focus is a subsection of cases relating to European Union members. The authors hypothesize that there is a bias towards states with higher levels of GDP per capita and rule of law (2018). The first issue is that although this improves the study by incorporating another variable, which is insightful according to the context of this research, ‘rule of law’ does not fully answer the question. The research question in this study is to see if there is a bias towards more Western countries, but the variable ‘rule of law,’ might not be completely

reflective of the question posed because it assumes that the higher the rule of law ranking a country has, the more Western it is. One of the first lessons in any statistics course is that correlation does not equal causation. This basic lesson can be used to infer that rule of law might not be the reason behind the correlation, but there is a more specific variable that has a more direct influence on both rule of law and percentage of cases won by different countries. Furthermore, in their data, the authors do not differentiate between the investor state of origin or the state being challenged which assumes that there is no potential difference in win-ratios between the two.

The last article that was influential in variable choice was written by Professors Charles Wilson and Joseph Wright of The Pennsylvania State University. Although it is commonly known in the field that there is a positive correlation between democracies and win ratios in national commercial courts, these authors analyze the legislative context of non-democratic regimes and their application to this regression. They note that non-democracies differ vastly, from autocratic states like North Korea to others like Saudi Arabia, so to group these nations together under one label, as previous research has done, is inaccurate. They analyzed the legislative institutions in autocratic states and how they affect the independence of government. Hypothesizing, one would expect a deeper correlation between less independence and a higher rate of state seizure of property and assets, which is confirmed with their data. This journal article is the inspiration to select more specific variables than just “rule of law” which encompasses a large compilation of different variables that are arguably irrelevant to investment perspectives of investors, such as fundamental rights, criminal justice, and open government.

## Chapter 3

### Theories and Hypotheses

The theory of the research question is founded upon how the political economy of each party influences the percent of cases won. This relationship is modeled by the political economic variables being the independents while the win-ratio the dependent. The hypothesis is based on the themes of relevant research that suggests that the more politically and economically free a country is, the higher win ratio it has in the system. This hypothesis leads to conclusions that suggest that it is not the bias of arbitrators that affect the probability of parties winning a case in the system, but the practices of the accused state. However, to measure this hypothesis, it is important to assume and hold that there is no relationship between the independent and dependent variables and then analyze the probability of that being true. If the probability falls below a certain level, such as 10%, we can assume the alternative, there is a relationship. This process can be described below as:

$H_0$ : There is no difference in the political economic freedom for both Investors and States who won or lost.

$H_A$ : There is a difference in political economic freedom for both Investors and States who won or lost.

## **Chapter 4**

### **Research Design**

The first two terms that need to be defined are Investor-State Dispute Settlement systems and what components “political economic freedom” encompasses. Investor-State Dispute Settlement (ISDS) are systems of ad-hoc courts and tribunals that dispute cases between states and private corporations. The second term that needs to be defined is “political economic freedom.” There are several different tools that measure an economy and its political institutions: income per capita, gross domestic product, percent of gross world trade, economic growth, polity, rule of law, and etc... As was discussed previously, many different scholars tend to analyze one variable without analyzing its limitations in the context of the ISDS system. The method I will use to define “political economy” is one that combines economic and political variables into a regression that can accurately summarize a state’s overall economic and political perception that is relevant to ISDS arbitrators, investors, and states.

The choice of these political and economic variables will be driven by hypothesized relationships between an economy and its political characteristics that affect the win ratio. Since there are possibly hundreds of variables that can measure economic and political systems, the method in understanding which variables are influential enough to include in the regression is to run several differences of means tests for potential variables. Every time there are variables of significance, they will be selected for later inclusion in the regression. The final model will include between three to five of the most relevant variables that are not significantly correlated with each other in order to avoid an increase of imperfect multicollinearity and variance. Furthermore, each of these variables will be contextually analyzed as relevant to the ISDS system in order to avoid the same issues as previous literature has before.



The process of creating a representative model can be troublesome because it opens a possible avenue that my research can be critiqued for-how I choose to qualitatively rank these different variables. Hypothetical questions such as ‘why is Income per Capita selected but not GDP?’ are important to answer. However, a possible methodology for this specific part is to analyze the effects each variable will have on specific groups within the universe of parties. For example, trade as a percentage of GDP, should not be valued highly because it will promote small countries to higher scores. This is because smaller states such as islands are more dependent on foreign trade to fulfill domestic demand, which can impact how likely they are to fulfill their contracts. Furthermore, there have been variables that been researched in previous literature such as GDP and GDP per capita so those will be ignored in this research and instead the focus will be on variables more closely linked to foreign direct investment. Another critical note is that the component variables will be coded from the time the case was decided. A case decided in 1986 should not be compared with the economic and political statistics from 2015. As a result of this process, this coded model will be the independent variables in my research project which leads to the topic of what the model will be affecting- the dependent variable.

The y-variable that I will be analyzing is the percentage of cases won by a party, which infers that the unit of analysis are the decided cases in the Investor-State Dispute Settlement courts. A problem that I can foresee is that many states, which have had one or few cases, having extreme results near the absolute marks of 100%- or 0%-win ratios. This would make my research project unreliable for predictions of future cases for specific countries because of the drastic outliers skewing the variance in my data. However, considering I am not analyzing the win-ratio of any particular country but instead the trends in the system, there should not be a major problem.

These variables lead to the in-depth discussion that this research project will be targeting. Since different levels of an economy and political institutions are being targeted to how they affect a win ratio of court cases, this topic can be attributed to a focus of equality and justice, at least according to some scholars. Equality is based on the idea that in idealistic circumstances, the win ratio for any political or economic type of state should be equal to another. This stems from the principals that are routinely emphasized in the literature: that the arbitrators are primarily focused on the legality of the case, not predetermined judgements. This can be applied to different contexts in political science, such as how race affects outcome in a civil court. Likewise, the court would not emphasize equality if race was a predetermining factor in the merits of a case. Equality leads to the other concept: justice, which applies equivalently to the context. If a case in the ISDS system is being influenced by factors not in relation to the case, the political economy of a party, then according to some scholars, justice is not being carried out. This breaks from the Merriam-Webster dictionary definition of justice: “being just, impartial, or fair” (2018). If truly the ISDS courts are carrying out justice at an international law level, according to the literature, then there should be no statistical relationship between different political economies and win ratio in the court cases.

The argument against these principals is that the variables are not necessarily representing a pre-determined judgement but instead the pre-determined quality of case. If democracies win more than autocracies, it might not be due to a bias towards the former but instead that democracies are more likely to respect the rules of a contract, and thus affecting the quality of case that arbitrators have to review. This is where my model will be critical for the literature. By differentiating between general variables such as democracy-non democracy with more

investment related aspects, I should demonstrate that it is not a bias skewing the results, it is simply the quality of case presented affecting differing win-ratios.

## Chapter 5

### Case Selection

An advantage I have in my project is that there are hundreds of cases available to analyze and all are listed by the Investment Policy Hub, an organization funded by The United Nations Conference for Trade and Development. This makes the outcome of these cases easily accessible since it reports all cases since 1987 to 2018, which will be the time period of analysis. Yet even though the total amount of cases is around 1000, several hundred of them are still in procedure, which limits my total quantity. Secondly, the major difficulty in achieving this project is to accurately report “settlements” as an independent variable. Since the main objective of this study is to show ‘who wins more than the other,’ settlements that are kept confidential between a state and corporation cannot be included as the court favoring towards one side. This means that at the present time, it is not possible to know who ‘won more’ in these cases since the outcome is privately disclosed. Furthermore, just like domestic courts, private settlements make a huge proportion of outcomes in cases. This means that I cannot simply ignore the settlement outcome, which approximates to a third of my potential sample of cases to study. The solution to this is to group them in as a “not win” in a dummy variable regression. This would allow me to continue the same theoretical procedure described in previous paragraphs by only analyzing the likelihood of winning.

## Chapter 6

### From Where are the Data?

The World Bank offers a massive dataset composed of a bounty of economic variables from 1960 to 2016. This time period is more than inclusive for the intended research since it dates to before the first case of The Investor State Dispute Settlement System. The reason for The World Bank's existence is that post World War II, The United Nations was tasked by the Bretton Woods Conference to create a system of data and analysis that helps bring economic prosperity to the entire world. Although the "About Us" page does not explicitly mention this intention, it focuses on underlying the struggles that developing countries face with investment and statistics (2018). The World Bank's "Global Goal" is to end the cycle of poor investment caused by the lack of relevant and reliable data in those countries. The "Methodology" page expands on this more, explaining that by coordinating with local researchers in every available country, The World Bank is able to collect economic data from across the world, while improving local statistical infrastructures (2018). This data is particularly useful for two groups, the investors (usually of developed countries) and developing countries as reliable data can convince potential investors to come to their country. However, in the attempt to develop local statistical efforts instead of using foreign researchers, the organization compromises a fraction of validity in its methodology.

The process of using local researchers has positive intentions, however, the accuracy of the data can be compromised because the reporting of local researchers might not always unbiased. For example, non-democratic countries may pressure its citizens, specifically researchers

involved in The World Bank Data Program, to report inaccurate statistics of the state in order to falsely promote investment. Furthermore, there might be gaps in the data as autocratic states might completely prevent the collection of data to be conducted. The World Bank recognizes this dilemma, but they regard it as a tradeoff. The U.N does not have the resources to conduct mass data collection to the same extent without the aid of local partners, which means they must use local researchers to ensure the data is even collected.

The final issue with the data is that variables are collected at different parts of the year, especially in countries where local resources are limited. For example, the economic growth rate of one country might be calculated on January 1st while its poverty level might be calculated January 30th so to assume that they might represent the same economic instance, even if in the same year, is not always valid. This issue can be exaggerated when comparing different countries following a great event such as the start of a major war, global economic recession, etc... This is because the data collection for every variable is not done at a universal time throughout the world. For example, if the unemployment level for one country is collected in August of 2008 but for another in December, the data will not reflect an accurate representation of the difference in unemployment levels of the two countries, since one country's data is collected before the Great Recession while the other's after.

The benefit is that my time span and sample size are so large that minor differences in a few points of the data should not drastically influence the overall validity of the project. I only intend to use one variable from this source, the first: economic growth, which will be interval between 0-100%. The World Bank makes it easily accessible to be downloaded through EXCEL, XML, and CSV so obtaining the data is not a problem. Lastly, The World Bank offers the

inflation rate as a variable in its dataset. Although The World Bank is the leading source of international macroeconomic data, I plan on obtaining a similar unit from a different source.

Following the recommendation of Professor Michael Nelson of The Pennsylvania State University, The Correlates of War dataset will be used to analyze investment freedom and regulation enforcement, and inflation rate. The original goal of this institution is to promote peace and prosperity throughout the world and in this instance, focusing on the balance of trade in the political economy from 1870-2014. The authors of this dataset, Katherine Barbieri, Omar Keshk, and Brain Pollins, cite the lack of valid and reliable data in other scholarship and international institutions in regard to these subjective variables (2009). They note that sources such as the IMF often offer inaccurate results of such variables. This is because states might indirectly or directly falsely report their economic dependency on other states due to political incentives. For example, the authors mention that there are multiple examples in the IMF datasets where two countries whose numerical values for trade balances do not cancel each other out, meaning there are either different processes with how they conduct their research, or they are intentionally manipulating their data. For this reason, I have decided to not use the IMF but instead the COW for several of my independent variables.

The Investment Policy HUB will be the source for the dependent variable: outcome of case. Although the source does not discuss its initial intentions when compiling the dataset, its goal can be assumed to be similar to that of other U.N sponsored institutions. In this case, the assumed goal for this data source is to provide reliable and valid data for scholars looking to conduct research in a new field of international law. This source has information of case names, parties involved, nationality of the investors, arbitrators of the case, the value of damages for

some cases, sector of industry, and many more economic variables that are cited from The World Bank and IMF.

The information collected, as described on the Investment Policy HUB webpage, is credible as it is from all publicly known sources which are preferred to be primary, specifically from the cases themselves; all secondary sources are used as supplemental to primary sources (2018). The publishers of the website note that their dataset is not exhaustive and that there are many missing data points since some components in cases are legally required to be kept private and confidential. The most common missing data element is usually the value in damages an investor demands from a state. This dilemma looks impossible to resolve since the primary sources the Investment Policy HUB uses are not legally allowed to disclose the information, and any other “illegal” or non-approved information from other sources would most likely lack the assurance of its validity. Despite these negative features, this is the only comprehensive source for ISDS results that updates its cases frequently and to such a large extent.

This source does not have all the data available to create an accurate model which is why I have resorted to using other sources for the economic and political components and have strictly used this source for the outcome of the case. The result of the case is ordinal as it has no intrinsic order: decided in favor of investor, decided of state, or settled. This paired with the nationality of the investor and the date of the case will be critical measurements to compare with the political economic regression I will create. The Investment Policy HUB is an organization sponsored by UNCTAD, The United Nations Conference on Trade and Development, which gives the data the legitimacy it needs to assess my hypothesis. Even though the code is not available to download, the information can be freely transcribed into other statistical languages.



### **Justification for Datasets**

To justify my selection of each source, it is important to consider two main themes: reliability and validity. Reliability is the practice of being able to consistently apply the research and get the same result, this can be throughout time, using different data, or replicating the project. In many instances, sources are both reliable and valid, but they are not the same thing. Validity is the concept of measuring exactly the intended variable. The relationship between the two is categorized as necessary and sufficient, where a project that is valid is reliable, but a project that is reliable, is not necessarily valid. In the example of my first data source, The World Bank, the data is considerably reliable. The methodology of how terms are defined changes minutely throughout time and remain relatively consistent. There are a few cases such as Gross National Income being defined differently but it is not relevant to my research. The validity is almost at the highest level possible. The economists at The World Bank, who are charged with defining the calculation for its variables such as economic growth, are described in the “About Us” page as the most respected in their fields. Therefore, I can safely assume that the calculations conducted by The World Bank for GDP and GDP growth, do in fact, depict the economy and its growth accurately. This means that regarding the variables I am using, The World Bank scores highly both in reliability and validity.

Regarding the IMF and other potential datasets such as the correlates of war (COW), I was confronted with a tradeoff between the two in regard to the variables of investment freedom, currency stability, and regulatory enforcement. The IMF was neither reliable nor valid when depicting this variable. This is because the organization depends highly on states to report their statistics accurately, despite the high incentive to alter their scores for political or economic gain.

As discussed in the last section, the specific methodology that the COW datasets use to address this issue does not solve it but offers the best possible solution. Lastly, it is important to analyze the source of my dependent variable, the Investment Policy HUB. The benefit the institution behind the data has is that the data itself is relatively easy to collect. The researchers only have to code the characteristics of the case, which does not require calculations. This means that under the assumption the creator of the datasets took care when transcribing the results of a case, the data scores high in validity. The reliability of the source is still high but not perfect. In ideal circumstances, the researcher(s) would have either themselves or others monitor every case and code the results. However, as previously discussed, the Investment Policy Hub uses primary and secondary sources to collect the data. Looking at the data, it is not mentioned which cases are how many cases were coded from the secondary sources and how valid those sources are. As potential researchers, we have to rely on the assumption that the data was collected properly with no method of guaranteeing its accuracy.

To understand in detail why two sources will be used for the independent variables despite the opportunity of using only one, it is critical to understand the advantages and disadvantages each one has in regard to specific variables. The COW is heavily critical of the IMF data because it does little to address discrepancies in results and collection over time in regard to subjective accounts as well as trade reports. They note that states use different methods in how they value import and exports, with some using the valuation in the importer market, others in the exporter, and others in the U.S market. These differences can often misrepresent dyadic trade relations which is why 73% of dyadic trade reports in the IMF are more than 10% different. This is troublesome considering scholars are unsure of which one to select. Furthermore, 22% of IMF data on trade relations is missing. This makes it difficult for scholars to analyze missing data in

between two points of availability. However, the scholars of the COW dataset take their time to understand the missing pieces. If the trade volume between two countries is growing in the early 90s followed by eight years of missing data, should scholars assume that trade flow was increasing the years the state failed to report? The scholars of the COW dataset make sure to understand the political climate between two countries for every major timespan of missing data. If it is not apparent that any major political change occurred between two states, then the missing data is reported at the increasing or decreasing rate it was last recorded. This methodology and consistent approach across all variables, not just trade, will be incredibly useful for my research because although it does estimate a portion of the data, the process it uses is valid and just.

The World Bank does not analyze dyadic trade but still uses IMF data to create a total percentage of trade in regard to a country's GDP. Although this is different, it is still based on the aggregate trade data collected by the IMF, which can mean it there is a chance it is invalid since it's the combination of many missing data points and unreliable results. However, considering it is highly respected among the literature, it will be used. The differences between The IMF and The World Bank are little and instead both institutions are complementary in their goals. The IMF differs because it is more specific in its area of interest, targeting a goal of stable financial markets, greater international trade, and monetary cooperation. The World Bank specializes in more general macroeconomic data which is why I have chosen them for GDP and thus change in GDP

## Chapter 8

### Difficulties

The major dilemma of the current research process is in the application of its results. By creating a model that differentiates between the image arbitrators, investors, and states have of countries and the merit of a case from a country, then it can be difficult separating the two. However, by selecting the most relevant and accurate variables possible to represent a win ratio in the ISDS I might be differentiating between states that tend to have reoccurring issues with violations of investment laws. For example, the theory is that countries like Venezuela, Zimbabwe, and Argentina in the early 2000s, will be grouped together at the bottom of the spectrum not because the arbitrators are biased against them, but because they consistently violate investment contracts and are or were rightfully being sued by investors repeatedly. This difficulty does not need to be solved perfectly because it is not possible to include the characteristics of the arbitrators in the model as their biographies are not always publicly available. Furthermore, the purpose of the current research is to help add context to the debate and will define what characteristics help predict if a party wins a case, whether it be due to biased preconceptions of it or not.

Despite the dilemma, as discussed previously, the results from previous literature tend to offer different conclusions. Some report that there is a correlation between economic development and outcome, others say that there is not a relationship between income and outcome, and a few say that there is a relationship between democracy and outcome. Overall, there is a need for a defining analysis that, incorporates the tools that the previous literature, offering more relevant variables, while still providing an evident conclusion.

## Chapter 9

### Results, Predictions, & Synthesis

#### Results

The first data collected outlines the variables that are effective in predicting the outcome of a case in the ISDS system. The independent variables affect two separate dependent variables: the investor win ratio, and the state win ratio. A difference of means tests illustrates that there is an inherent difference in the percentage of cases that the investors win and states win. Referring to Table 1, the mean win-rate for investors is 0.33 while states it is 0.41.

Table 1: Means of the Variables

<b>Mean/ Standard Deviation</b>	<b>Investor</b>	<b>State</b>
<b>Economic Growth</b>	2.1% / 3.0%	4.2% / 5.8%
<b>Polity</b>	9.4 / 1.8	7.0 / 2.8
<b>Investment Freedom</b>	71.4 / 16.2	49.5 / 22.25
<b>Case Outcome</b>	32.5% / 46.9%	41.1% / 49.3%

With a p-value below 0.05, it proves that we can reject the null hypothesis that these two means are the same and that in fact, states win more than investors. The next step is to break down the states and investors to see what factors influence this difference.

The next discussion of results refers to the Table 2 which is an analysis of t-scores comparing the difference in means between the parties who won vs those who did not in regards to the main variables of the political economic model: polity, economic growth, investment freedom, regulatory enforcement, and currency stability.

Table 2: Difference of Means Test

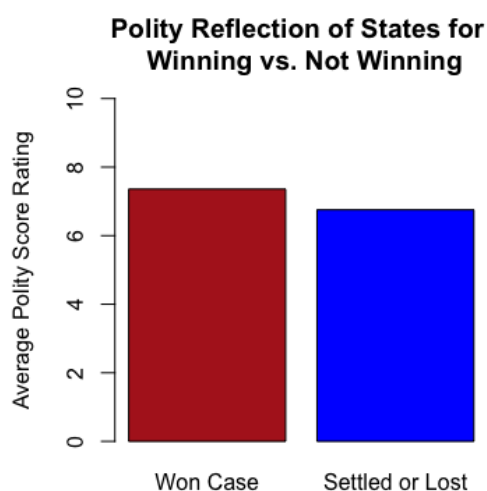
(Investor) (State)	Economic Growth	Polity	Investment Freedom	Regulatory Enforcement	Currency Stability
T score	-0.74 1.06	-0.58 -2.34*	0.87 -4.40*	0.96 -1.91	1.79 -4.12*
Correlation	n/a n/a	n/a 0.11	n/a 0.19	n/a n/a	n/a 0.29

As shown above, the only t-scores that are above the absolute value of 2.00 are those for polity, investment freedom, and currency stability. Furthermore, the only ones of value are those for states, with no t-score for investors statistically significant enough to be of consideration. What this means is that out of the variables above, none are helpful in proving why investors win or lose a significant portion of cases. However, a few variables do demonstrate why states lose or win.

The first variable to discuss is polity, which is measured in a scale from 0-10. As shown, polity has the least clear effect out of the three that do. It has a t-score of -2.34 which has a corresponding p-value smaller than 0.05. This means that we can reject that the mean polity score of states who won and did not win are the same. Furthermore, with a low but positive correlation of 0.11, it means that the more democratic a country it is, the higher chance it has to win a case in the system if it is the defending party.

Figure 1 shows the difference in polity scores. Although the graph does not visually show a significant difference between the states who won and those who did not, this is mostly due to the standard deviation of the population.

Figure 1:



The majority of states have a polity score within 2.8 points of the overall mean of 7.3 which predicted that there would not be a drastic variation between the two scores. However, despite the little visual distinction, the p-value show that they do not match each other means. Yet it is still important to note that this does not show how representative the variable is. There could still

be other variables in play that also affect the win ratio of a state.

The next important variable in defining whether a state wins or not is investment freedom. This variable is calculated in a scale of 0-100 with 100 meaning absolute perfection in regard to economic liberty, which is notably unrealistic. With a t-score of -4.4 and a p-value below 5% it is evident that there is little possibility that these two means are the same. What this means is that the higher the investment freedom rating a country has, the more likely it is to win a case.

Figure 2:

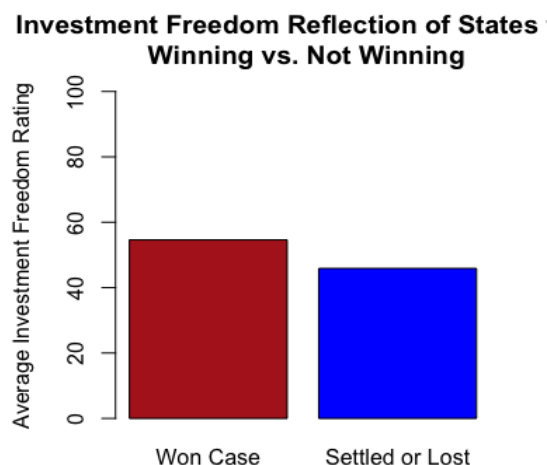


Figure 2 shows a similar issue to that of the polity graph, that visually there seems to be little difference between the two means. However, in this graph that is mostly due to the scaling of the Investment Freedom Index, which is between 0-100. In reality, there is a significant difference between the two, as shown by the first chart. There

is a near ten-point difference between the two means. A correlation test with a result of 0.19 shows that there is a low correlation between the two variables however still one that exists. Once again, it is important to understand that this graph does not show how representative this variable is in the outcome, only that it has an effect.

The last variable to analyze is currency stability. The value of the currency compared to the nominal U.S dollar is a critical value that foreign direct and portfolio investors use in deciding where they should invest their capital. This measurement is reflective of how stable the value of a state's currency is. This is the most interesting variable to analyze because the stability of the currency can be reflective of how a state would give merits for an investor to sue them. If a currency loses its value drastically, then the terms of agreement might not be upheld because the government can no longer afford it. Accordingly, the difference in means test produces a t-score of -4.12 and a p-value below 0.05. Furthermore, the correlation between the two variables is the most significant of the three; 0.29 shows that there is a medium score but positive. This means that as a country has a worse currency score, they are more likely to not win a case.

To conclude the discussion of the difference of means test, there are only three variables of value that have an effect on outcome of a case. In addition, Currency Stability, Investment Freedom, and Polity only have an effect on whether states win their case or not, with none of the variables selected having a significant effect on investors wining. However, these tests are all done in isolation as these variables together could model the likelihood more accurately.

To model the political economy of a state a logarithmic regression is created to incorporate the variables together. However, two of the variables of interest, regulatory enforcement and currency stability, have been removed from the regression tests due to the availability of data. In the case of currency stability, data only began in the mid-2000s which



allows its validity to be tested individually with a t-test. Yet, in a regression with other variables, it cannot be included because there would be too many blank entries in the analysis that would skew the results. Similarly, regulatory enforcement had inconsistent tracking across countries until the late-2000s so it would be difficult to use it to analyze the universe of cases as the data might only be representative of countries who are open and frequently post their figures publicly. To finalize, two different regressions were created because the variables might affect differently the probability of the state winning vs the investor winning. Although in most circumstances it can be assumed that these two aspects are mutually exclusive, thus making the second test redundant, in this circumstance the key difference is that not winning incorporates settlements. The finalized regressions were created in Table 3.

Table 3: Regression Results

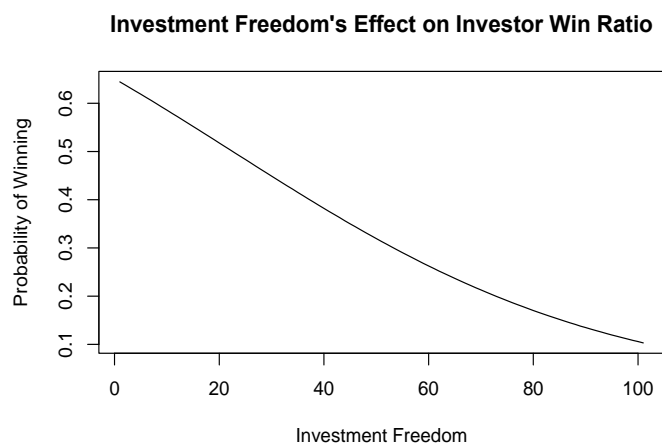
Dependent variable: Investor Win %		Dependent variable: State Win %	
Investor Econ. Growth	0.04 (0.04)	Investor Econ. Growth	-0.0003 (0.04)
Investor Polity	0.13 (0.08)	Investor Polity	0.05 (0.07)
Investor Invest. Freedom	-0.01* (0.01)	Investor Invest. Freedom	-0.001 (0.01)
State Econ. Growth	0.04* (0.02)	State Econ. Growth	-0.01 (0.02)
State Polity	0.05 (0.05)	State Polity	-0.05 (0.05)
State Invest. Freedom	-0.03*** (0.01)	State Invest. Freedom	0.02*** (0.01)
Constant	0.09 (0.76)	Constant	-1.49** (0.70)
Observations	464	Observations	464
Log Likelihood	-277.3	LogLikelihood	-304.5
Akaike Inf. Crit.	568.5	Akaike Inf. Crit.	623
Note: *p<0.1; ***p<0.01		Note: **p<0.05; ***p<0.01	

The two regression tables in Table 3 show the different relationship the selected variables have on whether investors or states win. For investors, the only significant variable below the 0.05 range is State Investment Freedom. However, there are two variables that are worthy of a mention since they break the 0.1 threshold but not the 0.05: Investor Investment Freedom and State Polity. Lastly, for states, the only variable of significance is State Investment Freedom.

### Predictions

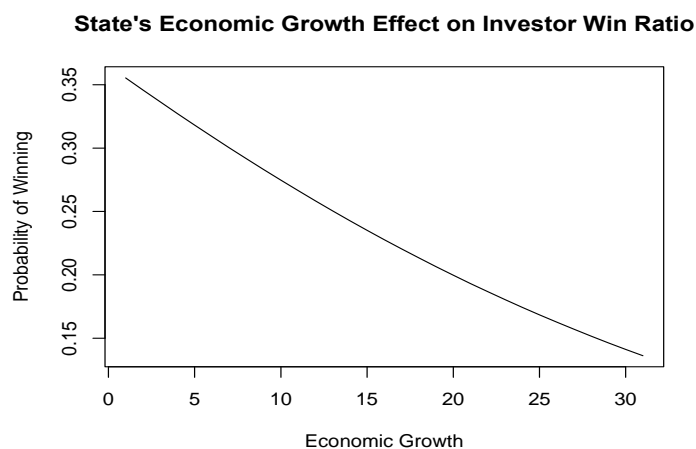
The next step was to use these models to run predictions with each individual variable while taking into account the others. It is important to individually analyze each influential variable while holding all other variables constant to their specific means. The first prediction of the relationship between investor's investment freedom and outcome of case shows a surprising result. As Figure 3 demonstrates, as the rating increases, the investor's chances of winning a case decrease.

Figure 3:



Logically, it is difficult to think of a reason for the domestic rating of an investor inversely affecting their chances. However, since the alpha level is only met at the 0.1 level and not 0.05, it might not be truly substantive and might just be due to random error. The second prediction is of the economic growth of the state and how that affects the investor's chances. The result of Figure 4 illustrates that as the growth level increases, the chances for an investor win decreases.

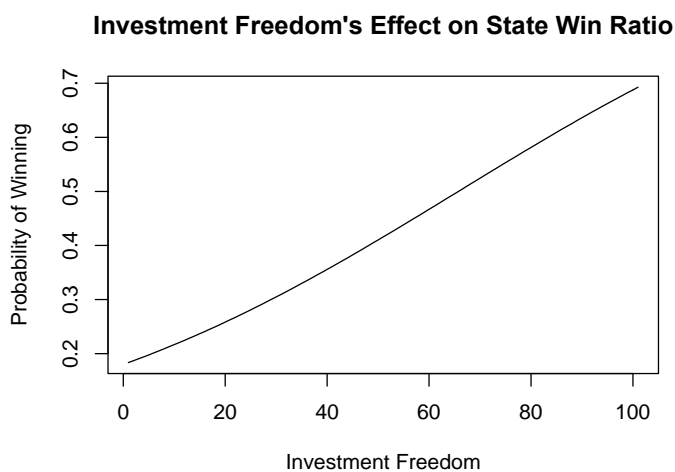
Figure 4:



This figure theoretically coincides with my hypothesis, since economic growth is representative of the economy, it not surprising to see that a state's improving economy negatively affects the investors chance of winning. This is due to the government being less pressured to commit a violation of a contract because they are not in the desperation of a stagnant or hurting economy, which is not the case when economic growth is high. As a result, the merits of the case being presented are more likely not as significant and the state has a high chance of winning.

Next, the illustration of Figure 5 shows that as a state's rating increases, it makes it easier for the state to win.

Figure 5:



This makes intuitive sense because higher scores are representative of being less likely of committing a violation. Thus, a case presented to the ISDS arbitrators should be less likely to have merit if it comes from a country who is not likely to disrespect an agreement.

### **Synthesis**

The only variable that significantly and substantially influences whether both an investor and state wins in the ISDS system is a state's investment freedom score. However, what does this mean in the context of the entire research? To analyze this result, it is critical to refer to the variable's meaning. The variable measures several different aspects of foreign direct investment factors: a slow bureaucracy, restrictions on land ownership, foreign exchange controls, capital control, security problems, a lack of basic investment infrastructure. This variable and its corresponding relationship to the ISDS results demonstrate that the cases tend to be fair and accurate. The reason behind this conclusion is that if a country is freer for investment: having a stable and reliable investment infrastructure, then it is less likely to be a hotspot for FDI abuse and unexpected asset nationalization. Taking this basic understanding, then it would be fair that countries who are less likely to have investment problems (higher investment freedom scores) to win more of their cases. Oppositely, countries who are more likely to commit a fault towards their foreign investors, due to high restrictions of land and capital, should have a lower win rate which is the case with the data.

In regard to the other variables, the fact that no other variable tested is consistently an effective predictor of win-ratios for both states and investors demonstrates that the arbitrators are not influenced by whether a country has a prosperous economy or that it is a democratic regime. The only influence on the regression is instead specifically whether the states are able to hold

their contracts. This is not a bias; it is simply a representation of the quality of case that is presented to the arbitrators.

There are several honorable mentions that should be further tested once the number of cases expand in the next decade: the investor's investment freedom and the state's economic growth rate, and both the state and investors' regulatory enforcement and currency stability. The latter of these variables have proven to be influential with the small available data individually so it would be an interesting analysis of the future ISDS system. As more cases develop, a significant sample size of economic and political eras both globally and individually for countries will be able to better show the influence these variables have on the model. However, the fact that only state investment freedom was significant in both regression tests shows that the arbitrators of a case are influenced by the defendant's actions, not a predetermined bias.

## Chapter 10

### Conclusion

This thesis has analyzed the Investor-State Dispute Settlement System and whether there are different win-ratios between different parties' economic and political systems in the court network. The previous literature illustrates that there have been instances where bias is apparent. The infamous El-Salvador case analyzed by Robin Broad does seem to show that bias has occurred in the past. It is obvious that no country should be forced to compensate a foreign firm when acting a pro-environment law that was not discriminatory towards a specific company. Other literature such as that of Becky Jacobs, shows that this result might be due to a temporary "diversity deficit." This means that overtime these particular instances will be less prominent as representation from less developed states will increase as they become more adjusted to the new global legal system.

For the present time, there is still a debate to whether the bias does exist, with the quantitative side of the question having inconsistencies in their methodologies. These issues arise from the difficulty in the selection of variables and their inability to distinguish the bias of arbitrators and variables that predict the merits of a case. Variables such as the dichotomous selection of Democracy vs. Non-Democracy or GDP per capita do not separate that a correlation with win-ratios is the result of a bias or because these variables are accurate predictions of the quality of a case. This is why there was a need for an analysis with a more specific selection of variables related to multinational trade and investments.

This paper, with a deep analysis into foreign direct investment factors such as currency stability, regulatory enforcement, and investment freedom, is able to shed light on the debate of bias. Demonstrating that polity and economic growth are not reliable indicators on the

probability of winning, but instead the quality of case that is presented to the arbitrators, this paper suggests that there is not grandiose favoritism towards Western democracies or the firms that come from them. This is because these variables are drastically more specific than the general variables such as GDP that arbitrators are generally aware of. By separating out variables that are most likely predictors of merits of a case and demonstrating that it is these variables, such as investment freedom, and not the general ones the previous literature has used, such as GDP, that have a relationship with win-ratio, we can confirm there is not a significant bias.

Yet, despite the suggestions this thesis has made, it is still not possible to prove definitely that there is not any minute bias and it is important for future literature to continue this trend of analyzing more detailed variables. By branching out and selecting more FDI related variables as they become more available overtime, it will be possible to represent more accurately the universe of cases with a model. Furthermore, once data on the quality of lawyers and biographical information of arbitrators becomes undisclosed on previous or on a significant proportion of randomly selected future cases, it can be used to definitely prove or disprove the existence of a bias. However, for now, critics of the ISDS system such as President Donald Trump and Senator Elizabeth Warren should have no complaints with system at least in regard to impartiality as the data seems to suggest it is mostly fair and just.

**BIBLIOGRAPHY**

1. Abbot, R. (2007). Are developing countries deterred from using the WTO dispute settlement system?. *European Centre for International Political Economy*, Working Paper No. 1.
2. Barbieri K., Omar K., & Brian P. (2009). Trading Data: Evaluating our assumptions & coding rules. *Conflict Management and Peace Science*, 26(5), 471-491.
3. Behn D., Berge T., Langford M. (2018). Poor states or poor governance? Explaining outcomes in investment treaty arbitration. *Northwestern Journal of International Law and Business*, 38(3), 333-382.
4. Broad, R. (2015). Corporate bias in the World Bank group's international centre for settlement of investment disputes: A case study of a global mining corporation suing El Salvador. *University of Pennsylvania Journal of International Law*, 36(4), 851-874.
5. Donaubauer J., & Nunnenkamp P. (2018). EU investors versus EU states: International arbitration of investment disputes. *JCMS: Journal of Common Market Studies*, 56(6), 1376-1393.
6. Franck, S. (2005). The nature and enforcement of investor rights under investment treaties: Do investment treaties have a bright future, *12 U.C. Davis: Journal of International Law & Policy*. 47, 48
7. Franck, S. & Wylie, L. (2015). Predicting outcomes in investment treaty arbitration. *Duke Law Journal* 459-526, 65.
8. International Monetary Fund. (2017). IMF Data. [online] Available at: <http://www.imf.org/external/data.htm#global>
9. Investment Policy Hub. (2018). Investment Dispute Settlement [online]. Geneva: UNCTAD.



10. Jacobs, B. (2015). A perplexing paradox: 'De-statification' of 'investor-state' dispute settlement?. *30 Emory International Law Review*, University of Tennessee Legal Studies Research Paper No. 280.
11. Justice. (2011). In *Merriam-Webster.com*. Retrieved September 26, 2018, from <https://www.merriam-webster.com/dictionary/justice>
12. United States of America. Executive Office of the President. 2015. Fact Sheet: Investor-State Dispute Settlement (ISDS). *Office of United States Trade Representative*.
13. Wilson C. & Wright J. (2015) Autocratic legislatures and expropriation risk. *Pennsylvania State University*, 1-17. 10.1017/S0007123415000149.
14. The World Bank Group. (2018) World Bank Open Data [online] Available at <https://data.worldbank.org>

## **ACADEMIC VITA**

*Luis C. Aguilera*

---

### **EDUCATION**

**The Pennsylvania State University**

**Graduation: Spring 2020**

### **DEGREES**

Bachelor of Science in Economics

Bachelor of Arts and Honors in International Politics

### **AWARDS AND RECOGNITION**

Schreyer's Honors Program

Dean's List (All Semesters)

President's Sparks Medal Recipient

Thomas R. and Joan G. Dye Scholarship in Political Science