Femicide in Latin America: An Empirical Investigation into the Causes of Variation in Femicide.

University of California San Diego
Political Science Department
Bachelor's Honors Thesis
By Walter Gonzalez Valdez
Under the direction of Dr. Claire Adida

Abstract

How can we explain the variation of femicide rates in Latin America? A region plagued with high rates of gender inequality and violence has created an environment that allows men to kill women due to their gender with no consequences. In this thesis, I present an analysis with a new dataset for thirteen Latin American countries over fifteen years to explain the correlation between the identified causes of femicides and their effects on the phenomenon. My results are primarily inconclusive; research suggests that possible bias in the measurement of femicide, an issue prevalent in any sensible study, may hinder a complete analysis.
Acknowledgments

First, I would like to thank the UCSD Political Science Department for allowing me to research an important topic for myself. I especially want to thank our TA, Alexandra Lange, for her support in the process of composing this thesis.

Secondly, this thesis would not have been possible without the support of Professor Adida. I am deeply thankful for your willingness to meet with me weekly and answer all my questions, even when they were trivial. I am incredibly grateful for your support in guiding me through the thesis's analytical portion, where I had more challenges than I would like to admit. Your support has helped me become a better student and better prepare me for my future academic endeavors.

I also want to thank my mother and father, who have always supported my academic ambitions and pushed me to excel. Without your sacrifices, I would have never attended college, less likely completed this thesis. I am forever grateful for your continued reassurance of my personhood and academic capabilities. I am forever indebted to you both. I also want to thank both of my cats Monte and Charcoal, for providing me emotional support when this thesis got the better of me (which was often).
# Table of contents

Abstract 1

Acknowledgments 2

1. Introduction 4

2. Literature Review of femicide 8
   2.1 Impunity by the Judicial System 8
   2.2 Impunity by the police 9
   2.3 High levels of gender inequality (Machismo) 11
   2.4 Civil War and Dictatorships 12
   2.5 The National Government and their failures to enforce legislation 13

3. Theory and Hypothesis 15
   3.1 Impunity by government officials 15
   3.2 Gender Inequality 16
      3.2.1 Education 16
      3.2.2 Employment 17

4. Quantitative Methodology 18
   4.1 Data Set 18
   4.2 Measurements 19
      4.2.1 Dependent Variable: Femicide 19
      4.2.2 Independent Variables 19
      4.2.3 Control Variables 21
   4.3 Models 22

5. Results and Discussion 23
   5.1 Hypothesis I: Impunity and Femicides 23
   5.2 Hypothesis II: Male Education and Femicide 24
   5.3 Hypothesis III: Female Education and Femicide 25
   5.4 Hypothesis IV: Male Unemployment and Femicide 26
   5.5 Hypothesis V: Female Unemployment and Femicide 27
   5.6 Full Model 29
   5.7 Control Variables 30

6. Case Study: El Salvador 31
   6.1 History of income inequality in El Salvador 33
   6.2 Femicide in El Salvador 33
   6.3 Income inequality in 2005 - 2008 and its effects on femicide 35

7. Conclusion 38

8. Bibliography 42

9. Appendix 46
1

Introduction

Femicide is defined as the violent killing of women due to their gender\(^1\). Victims of femicide suffer varying degrees of violence before their death, such as mutilation and rape. Scholars have identified gender as the basis of these crimes\(^2\). There are two distinct forms of femicide, inter-family and stranger committed. Inter-family femicide is perpetrated by a partner, a previous partner, or a male relative, while in stranger-committed femicides, the victim does not know her killer. Both types of femicides occur across Latin America, where violence against women remains widespread\(^3\). Figure 1 shows femicide rates in El Salvador, Peru, and Mexico. These countries share similar colonial history and levels of development and history of violence, yet femicide rates vary; why?

![Figure 1. Femicide rates in El Salvador, Peru, and Mexico from 2005 to 2019.](image)

---

1 Wilson, Tamar Diana. “Violence against Women in Latin America.” P.8
3 Wilson, Tamar Diana. “Violence against Women in Latin America.” P.3
Femicide is an ever-growing problem in Latin America, which ranks second among the world's regions for the highest femicide rates. In 2019, Honduras had the highest rate at 6.2 femicides per 100,000 women, while Chile had the lowest rate at 0.48. The high levels of violence against women in Latin America have garnered attention and criticism from the international community, especially for the governments' inability to quash the violence and ensure women's protection. In response, Latin American governments have enacted legislation to deter femicides within their borders. Some countries like Mexico have adapted longer jail sentences for femicide perpetrators, while others like Guatemala have created special courts with the exclusive mandate to adjudicate femicides. However, their attempts to curb femicide rates have not been successful. Femicide rates have not decreased since the enactment of legislation across most Latin American countries. So how effective is the system currently in place?

The most recent literature has isolated two significant enablers of femicide in Latin America: impunity and high levels of gender inequality. Impunity within government is found throughout national governments, police departments, and the courts. A government's unwillingness to protect women in gender-based violence (GBV) cases increases the probability of femicides. If GBV and femicides are not punished, individuals will be emboldened to commit acts of violence since there are no repercussions for those who do. Femicide scholars like Wilson (2014) have suggested that high levels of gender inequality (machismo) affect the frequency of femicides in each country. Higher rates of gender inequality lead to a diminishing

---

5 Measuring femicide: challenges and efforts to bolster the process in Latin America and the Caribbean
6 Joseph, Janice. “Victims of Femicide in Latin America: Legal and Criminal Justice Responses.” 11
9 Wilson, Tamar Diana. “Violence against Women in Latin America” P. 4
value placed on women's lives. Hence, members of society are more willing to harm them, and government officials, who constitute a dominant class in Latin American society, are less inclined to protect them. The array of femicide rates in the area allows us to see how proposed causes of femicide may affect each country individually, further understanding the environments that create breeding grounds for femicides. More importantly, identify the means to reduce them.

This thesis is an empirical investigation into the causes of variation in femicides across Latin America. As noted, current scholarship has identified impunity by government and gender inequality (machismo) as the leading causes of femicide. However, there is very little empirical evidence to support the claims. This thesis will attempt to close the research gap by providing a nominal analysis of the identified causes and how they may influence femicide rates: we have examined the experience of thirteen Latin American countries from 2005 to 2019. The results for my hypothesis are mostly inconclusive. Only female unemployment had a significant relationship with femicide; increased female unemployment led to higher femicide rates. However, these findings are discredited in the full model that finds the opposite effect. Evidence suggests that the lack of data may serve as a hindrance to an adequate analysis. Governments with high femicide rates have an incentive to hide data to avoid international and domestic condemnation.

The rest of this paper will go as follows: Chapter two will analyze existing literature and the reasoning behind scholars' hypotheses on the causation of femicides in Latin America. Chapter three will further explain each hypothesis and its underpinnings. Chapter four will dive into the thesis' methodology, which includes a breakdown of the data sources and an explanation of the independent, dependent, and control variables and potential implications the variables may pose for the analysis. Chapter five will focus on the results of the experiment and discuss its
findings. In chapter six, this thesis will delve into a case study of El Salvador, where I will apply the study's findings and further analyze how explanatory variables affect femicides in El Salvador. Chapter seven will summarize the overall paper's key points, provide a short and detailed summary of the study's findings, and identify future research venues.
2

Literature Review

2.1 Impunity by the Judicial System

Machismo occupies all corners of Latin American society, and the courts are no exception. The judicial system continually fails to indict Femicide perpetrators across Latin America. Judges and prosecutors often believe that the victims are not worthy of protection; they are often portrayed as undesirables, conflating them with prostitutes and gangbangers. Once women abandon the roles society has imposed on them, the state is even less responsive to their needs. It is important to emphasize that most Femicide victims are not "undesirables" and are labeled to excuse their murders. The judicial system normalizes violence against women by granting criminals impunity, making it more likely for the violence to continue as perpetrators can assume they will not be held accountable.

Most Latin American governments have enacted legislation to curb Femicides. They may grant the courts the ability to try individuals differently and enforce special punishments against the perpetrators. However, there is a significant barrier to implementing these laws across the courts: there is no consensus within the international community or individual countries on what constitutes femicide. States' definitions often vary; some provide strict standards, while others grant prosecutors considerable leeway in defining a Femicide. In Mexico, homicides must be committed by a relative or spouse, and the murder victim must have been raped to be labeled

12 Carey, David, and M. Gabriela Torres. “PRECURSORS TO FEMICIDE: Guatemalan Women in a Vortex of Violence.” P.51
13 Joseph, Janice. “Victims of Femicide in Latin America: Legal and Criminal Justice Responses” P.12
14 Toledo, Patsili. “Femicidio.” Sistema Penal & Violência, p.83
as femicide. Legislation in Argentina offers more latitude in the classification of femicides; however, Toledo (2016) argues that judges often still choose to focus primarily on inter-family femicides because they are easier to prosecute, which grants judges and prosecutors gate-keeping powers on who can access the protections of the law. These restrictive definitions, among other shortcomings, fail to grant adequate justice to victims who do not know their killer. This poses a pressing problem; as organized violence continues to grow in the area, victims may not receive justice because their killer is unknown to them.

Members of the judicial system may also resist harsher punishments for perpetrators of femicide. They believe that these enhanced punishments are sexist by over-valuing women's lives compared to men, who do not have access to an analogous version of aggravated circumstances. This is a flawed argument, as men do not endure homicides based on their gender. Such a claim highlights a determinant factor behind the high level of impunity in femicide cases: the judicial system simply does not acknowledge its failure to protect women.

### 2.2 Impunity by the police

As the judicial system, Latin American police departments are no strangers to the substandard treatment of women. Police officers often hold the same machismo views embedded in society and continue to reinforce them by failing to protect victims and investigate femicides. Scholars tend to agree that gender-based violence and femicides are tightly interlinked, with femicide representing the most extreme example of gender-based violence. Therefore, police

---

17 Toledo, Patsili. “Femicidio.” Sistema Penal & Violência, P.87
18 Toledo, Patsili. “Femicidio.” Sistema Penal & Violência, P.82
19 Marina Prieto-Carrón, Marilyn Thomson & Mandy Macdonald (2007). Pg.225
attitude toward gender-based violence victims is fundamental to combatting femicides across the Americas. Unfortunately, most evidence suggests that police departments usually fail these victims. When women report violence committed by a family member or partner, they are often ignored and told to go home.  

There is a strong consensus in Latin America that domestic violence is a family issue and that the state should not interfere in domestic disputes.  

Therefore, women are less likely to report their abusers because they know the authorities will not act. The police send women home to fend for themselves; many become Femicide victims.

When femicides occur, police departments fail to enforce the law. Like the judicial system, they vilify the victims to excuse their murderers' actions. Police departments are frequently spread thin, and officers lack adequate resources to investigate most crimes properly. Technology is often outdated or unavailable. Essential investigative tools like rape kits are inaccessible to most departments. Many perpetrators go free because the police cannot identify them. In short, they lack the tools to enforce the law.

Wilson (2014) argues that corruption within the police departments also facilitates impunity. Latin American cops are susceptible to bribery, so perpetrators often pay officials to look the other way. The high impunity rates granted to femicides by the police gravely threaten the safety of Latin American women. Studies on criminal activity show that when perpetrators

---

21 Menjívar, C and Walsh, S D. The Architecture of Feminicide: The State, Inequalities, and Everyday Gender Violence in Honduras. Pg. 225
22 Obinna Denise, Seeking Sanctuary: Violence Against Women in El Salvador, Honduras, and Guatemala, p. 14,
26 Menjívar, C and Walsh, S D. The Architecture of Feminicide: The State, Inequalities, and Everyday Gender Violence in Honduras. Pg. 231
27 Wilson, Tamar Diana. “Violence against Women in Latin America. Pg.9
28 Menjívar, C and Walsh, S D. The Architecture of Feminicide: The State, Inequalities, and Everyday Gender Violence in Honduras. Pg. 222
are left unpunished, they are incentivized to commit more crimes. As the police departments yield to the criminals, they further endanger the lives of women.

2.3 High levels of gender inequality (Machismo)

Current literature suggests that machismo is a primary enabler of the rising number of femicide cases in Latin America. Wilson (2014) defines machismo as "the belief that women should be subordinate to the needs and desires of their partners." Machismo underpins perpetrators' crimes and may explain why the government grants impunity to those committing femicide. Machismo is a social construct wherein the man is the center of the family and society and strips women of their independence. Women's reliance on male guardians to provide and protect them makes them second-class citizens; rather than individuals, they are viewed as their male guardians' property by society and the state.

Women's subordinate status enables men to violate their personhood without repercussions. Victims of rape, domestic violence, and murder are often blamed for the crimes committed against them. In the eyes of the state, women are not worthy of protection. Men kill women because they can and because the impunity system perpetuates the patriarchal system that benefits them. As women obtain new forms of social and economic mobility, femicide becomes a method for men to protect their dominant position in society. Working women directly challenge the gender norms enforced by a machista society, as paid employment loosens

---

30 Wilson, Tamar Diana. “Violence against Women in Latin America.” P.4
33 Wilson, Tamar Diana. “Violence against Women in Latin America.” P.4
34 Hernández, Daniella, "Femicide in the Americas" (2018). P.56
the dependency that binds them to the man and the home. In reaction, men reassert their place through violence, broadly tolerated by Latin America's patriarchal system.

2.4 Civil War and Dictatorships

States living under dictatorships and suffering civil wars are more prone to violence. The state's use of violence to maintain control has normalized and engrained the spread of brutality in society. During Guatemala's long and bloody civil war (1960-1996), the military dictatorship frequently used violence against women to discourage uprisings. By violating the most vulnerable members of society, the state aimed to dismantle opposition. Soldiers often raped, tortured, and killed women; they displayed their victims' bodies in public to instill fear throughout the population. Dictators in Southern Cone nations like Argentina and Bolivia used similar tactics. By violating women's bodies, the state sought to humiliate the men who protected them, showing how powerless they were against the state.

Violence against women by the government is still a common occurrence in some Latin American countries. In 2009, Honduras' government was ousted by a right-wing military coup that decimated most protections granted to women by the previous regime. The new militant government has used violence against high-profile women to silence their calls for a leadership

36 Carey, David, and M. Gabriela Torres. “PRECURSORS TO FEMICIDE: Guatemalan Women in a Vortex of Violence.” P. 154
37 Carey, David, and M. Gabriela Torres. “PRECURSORS TO FEMICIDE: Guatemalan Women in a Vortex of Violence.” 154
38 Wilson Tamar Diana, Violence against Women in Latin America, p.13
39 Carey, David, and M. Gabriela Torres. “PRECURSORS TO FEMICIDE: Guatemalan Women in a Vortex of Violence.” 160
40 Wilson, Tamar Diana. “Violence against Women in Latin America.” Latin American Perspectives. Pg. 9
41 Menjívar, C and Walsh, S D. The Architecture of Feminicide: The State, Inequalities, and Everyday Gender Violence in Honduras. P. 221
change. The use of violence by governments, past, and present, is a testament to the disregard for the value of women's lives in Latin America. Other para-state groups, including gangs, adopt the state's control methods and employ similar tactics to retain their turf control. The government's repeated violation of human rights has increased Latin America's widespread violence and, consequently, violence against women. It is important to note that not all Latin American countries have faced recent civil rule interruptions; therefore, the effects of civil conflict are not present in all countries. However, civil conflict may explain why countries like El Salvador and Guatemala, which have experienced particularly persistent and bloody civil wars, have higher femicide rates than other countries in the region.

2.5 The National Government and their failures to enforce legislation

Latin American countries have enacted legislation to curb the rising number of femicide cases. (See the appendix for a breakdown of the enactment of femicide legislation and punishment in Latin America) In 2007, Costa Rica, Mexico and Venezuela became the first countries to criminalize femicide. In 2019, eighteen Latin American countries enacted some form of legislation that condemns this crime. Legislation across the region varies. Guatemala offers the most comprehensive femicide legislation. It mandates special consideration for femicides by offering specific legal frameworks for trying femicides and calls for creating special units that deal exclusively with gender-based violence (GBV). Other countries'
legislation simply typifies femicide as distinct from homicide and offers special punishments (prison sentences) that differ from those given to regular homicides.

There are two significant issues with femicide legislation. One is the state's failure to define femicide inclusively to encompass all gender-based killings of women. Often countries require that the victim must have been related to the perpetrator, while others require evidence of sexual assault to label the crime as femicide. The second problem is the governments' unwillingness to create a mechanism that compels lower officials to enforce the law. Some states like Honduras and Guatemala fail to push femicides because officials often do not accept femicides as real. Femicide legislation is a paper tiger, which may prove more problematic than when the legislation did not exist. The government is unwilling to protect individuals even after acknowledging the problem. Femicide perpetrators will continue to kill women because the state has effectively provided them a license to do so with impunity.

---

47 Further issues with legislation have been discussed extensively above in the judicial section.
49 Musalo, Karen, and Blaine Bookey. “Crimes without Punishment: An Update on Violence against Women and Impunity in Guatemala, 108
3
Theory and Hypotheses

3.1 Impunity by government officials

Femicide scholars identify impunity by government officials as a hindrance to decreasing femicide across Latin America. Impunity is found across national governments, the judicial system, and police departments. Government officials' failure to investigate, prosecute and punish femicides incentivizes perpetrators to commit them, knowing they will not face the consequences. Criminal theory suggests that indifference to criminal activity by the government enables an increase in crime since perpetrators expect that they will not be held accountable for their actions. Therefore, countries with high levels of impunity should have higher femicide rates.

H1: Countries with high levels of impunity should have higher femicides.
HNull: There is no significant relationship between impunity and femicides.

3.2 Gender inequality measured through a socio-economic perspective

High levels of gender inequality across Latin America have created a culture that diminishes women's lives' value. Gender inequality is consistently traced to a multitude of factors present across Latin America. Carey, Musalo and Menjivar, have identified high levels of gender inequality as a root of the extreme gender violence that leads to femicides. The absence of legal and physical protections for women in Latin American society creates an environment where women become targets for atrocious violence.

This thesis is interested in measuring gender inequality from a socio-economic perspective. Socio-economic variables are a good indicator of the quality of life of the

---

inhabitants of a state or region; its income and education measures have a longstanding impact on those measured. Socio-economic variables can capture inequality between the genders. If women make less money than men or are less educated, they are most likely to be unequal in other societal aspects.

3.2.1 Femicide and Education

Education has a substantial impact on the lives of individuals. Higher levels of education often lead to better-paying jobs and opportunities for self-improvement. Research in the United States and Europe has found preliminary evidence that there is a negative correlation between violence and women's schooling. Women who have higher levels of education are less likely to be victims of gender-based violence. Therefore we expect that higher levels of education for women should lead to a decrease in femicides. Researchers have also found evidence for a similar relationship between higher rates of male schooling and violence. Men who attend school for more extended periods are less likely to commit violent crimes. Therefore, we expect that higher educational attainment levels for men should lead to a decrease in femicides.

H2: Higher rates of educational attainment for men should lead to a decrease in femicides. HNull: There is no significant relationship between educational attainment for men and femicides.

H3: Higher rates of educational attainment for women should lead to a decrease in femicides. HNull: There is no significant relationship between educational attainment for women and femicides.

---

3.2.2 Femicide and Unemployment

Employment is another critical measurement of the socio-economic well-being of a population. Individuals who are employed tend to be happier on average and more invested in their communities' success, creating a more responsible citizenry.\textsuperscript{54} Recent studies on gender-based violence have found evidence that an increase in women's unemployment positively correlates with their likelihood of experiencing violence.\textsuperscript{55} The same study found that increased male unemployment positively correlates with increased men committing a violent crime.\textsuperscript{56} Therefore we estimate that high rates of both female and male unemployment will increase in femicides.

H5: High rates of female unemployment should lead to an increase in femicides.
H\textsubscript{Null}: There is no significant relationship between female unemployment and femicides.

H6: High rates of male unemployment should lead to an increase in femicides.
H\textsubscript{Null}: There is no significant relationship between male unemployment and femicides.

4

Quantitative Methodology

4.1 Data Set

This thesis analyzes identified correlations to femicide in Latin America by measuring thirteen Latin American countries from 2005 to 2019. Although femicides have been a global phenomenon for centuries, Latin American countries recently began to keep track of them. Femicide scholars identify the absence of data as a hindrance to reducing femicide in the region, which is why several countries have been left out of this analysis. Countries like Cuba do not distinguish femicides from homicides, and others like Brazil and Colombia have recently begun collecting data.

2005 was the first year that a large enough subset of the countries under review provided sufficient data on femicides to make analysis possible. The femicide rates used for this thesis come from many sources to maximize the data set’s completion. Most femicide data comes from official government sources, while others are collected from women's rights organizations. The multitude of sources for my femicide variable introduces limitations to my analysis: states concerned with their international standing have incentives to report lower figures. Gathering data for a single variable from multiple sources could make the analysis less precise. We must consider these limitations and their potential influence on the analysis.

For this thesis's purposes, I developed an original dataset, the first to ever bring together data on femicide rates in thirteen Latin American countries over 15 years. Each variable used in the regression was acquired from a multitude of sources. Both impunity and corruption variables

---

57 See Appendix for a full breakdown of all sources
come from the Worldwide Governance Indicators of the World Bank, which considers factors that hinge on government efficiency. The measurement for lower secondary enrollment for men and women is found in UNESCO's education section in their data on Sustainable Development Goals. The following variables come from The United Nations Commission for Latin America and the Caribbean: male and female unemployment rates, GINI, GDP per capita, and population. In addition, the internal conflict variable comes from the PRS groups’ International Country Risk Guide. (Please see the appendix for a visual representation of the sources used to compile this thesis's data set).

4.2 Measurements

4.2.1 Dependent Variable:

I will use femicide rates as the dependent variable. Femicide rates vary from 0 to 100; the lower the rate, the less femicide the country experienced in a specific year. Femicide rates are compiled as follows: the total number of homicides of women due to gender, divided by the female population and multiplied by 100,000. It is important to note that data on femicides across Latin America is scarce. There are several restrictions placed by the state's legislatures on what is considered a Femicide. Therefore, it is safe to assume that these rates may be lower than the actual number of femicides. Therefore, this study’s observations should be discussed in a context that acknowledges this as a barrier to drawing definitive conclusions.

4.2.2 Independent Variables

This thesis uses several independent variables to statistically measure the effect of the proposed causes of femicides in Latin America and how they correlate with the phenomenon. It
is evident that we need to measure impunity as a source of femicide in Latin America. Unfortunately, there are no variables that measure impunity exclusively. Therefore, we will use the Worldwide Governance Indicators Rule of Law measurement as a proxy. The Rule of Law variable measures "the quality of contract enforcement, property rights, the police, and the courts...".\(^{58}\) It accounts for the people's trust that officials will act according to the law by considering a government's relative unwillingness to enforce the law if they are not held accountable for failing to do so. The variable is measured as a percentile rank, 0 being the lowest rank and 100 the highest.

The effects of education are increasingly important in the lives of individuals. Therefore, measuring its effects on femicide is essential to understanding the phenomenon, especially as higher education rates have been suggested as a possible solution to decreasing acts of femicide. Latin American countries tend to fall behind on education enrollment compared to the developed world, and scholars have identified this as a problem for the region's economic and social modernization.\(^ {59}\) Latin American countries have begun to invest heavily in their population's education; we are interested in seeing its effects on femicides across the region. Femicide scholars like Saccomano have measured the effects of education on femicides by examining whether tertiary enrollment has any effects on femicides. However, Latin America's low educational attainment levels and wealth make the prospect of widespread access to college education unrealistic. Instead, I will measure enrollment in lower secondary education for men and women. Lower secondary education (middle school in U.S. standards) is compulsory in all Latin American countries measured in this study, meaning that all children have access to it for

---

\(^{58}\) Worldwide Governance Indicators: Rule of Law

free and is required by law. 60 Unemployment rates for both men and women capture those who are economically frustrated in finding employment. 61 If inequality persists in the economic realm, we can infer that it persists in society at large.

4.2.3 Control Variables

My control variables’ reasoning is to account for variables that can affect both femicide rates and the independent variables. I will be using both country fixed effects and year fixed effects to ensure that variance across countries is accounted for. I will also control GDP per capita and population since they vary across years and affect the independent variables over time. Civil conflict has been identified as an enabler of femicides across the region, especially in countries like El Salvador and Guatemala plagued with violent civil wars in the not-so-distant past and now deal with high levels of gang violence. To ensure that these thesis findings are exclusive to gender-based violence, I have controlled for internal conflict that arises from civil threats, political violence, and civil disorder. I will also control for corruption's impacts on femicides across Latin America. Fortunately, corruption variables are plentiful; I will also use the Worldwide Governance Indicator's control of corruption. The corruption measurement is a percentile rank, 0 being the lowest rank and 100 is the highest. 62

61 “Social Indicators and Statistics: Unemployment Rate by Sex.” UNESCO UN.
62 Correlation Matrix can be found in the appendix.
4.3 Model

This thesis will use a single model to find the correlation between identified causes of femicide and its impacts on the phenomenon. I estimate the correlates of femicide using the following ordinary-least squares specification.

\[ Y_{ij} = \alpha_{ij} + \beta_1 x_{1ij} + \beta_2 x_{2ij} + \ldots + \beta X_{ij} + \eta_i + \mu_j + \epsilon_{ij} \]

\(Y_{ij}\) is the outcome variable, \(Y\) represents femicide rates; the total number of homicides of women due to gender, divided by the female population and multiplied by 100,000. The letter \(i\) represents the country and \(j\) represents the year. The \(\alpha_{ij}\) accounts for the constant; \(\beta_1\) is the coefficient on the variable \(x_1\), \(\beta_2\) is the coefficient on the variable \(x_2\). \(\beta X_{ij}\) is a vector of coefficients on a vector of control variables, including Gini, GDP per capita, internal conflict, population, and corruption. \(\eta_i\) represents year fixed effects; \(\mu_j\) captures country fixed effects, and \(\epsilon_{ij}\) measures the error term.

My model will run a pooled OLS regression to find the correlation of femicide rates over time and across countries concurrently. This model includes the dependent and independent variables, as well as control variables, to ensure that the analysis takes into consideration alternative hypotheses. This model will also include country and year fixed effects to ensure that the analysis accounts for the differences between countries and years. This will allow me to ensure that other possible but unmeasurable variables across time and space (countries) are considered.
5

Results and Discussion

5.1 Hypothesis I: Impunity and femicide

Femicide literature has focused on impunity as one of femicide's most prominent driving forces. Table 5 shows the results of the OLS regression that found no significant relationship between impunity and femicide. The R2 suggests that this model can explain about 10.6% of the variance in the data. The model is not very good at finding any relationship in the data. These findings are inconsistent with femicide literature. A possible explanation may be that rule of law may not capture impunity's effects on femicide. The World Bank's Rule of Law variable is made up of several determinants, not just impunity. A variable that focuses specifically on impunity may better reveal more conclusive evidence of its effects on femicides. For example, UDLAP's Global Impunity Index may work better since it exclusively measures impunity. Unfortunately, UDLAP only began to track impunity in 2015, so there is not enough data to test. Future research on impunity and femicide may focus on using UDLAP's index to find more definitive results. 63

Table 1. Impunity and femicide.

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>se</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule of Law</td>
<td>-0.028</td>
<td>0.04</td>
</tr>
<tr>
<td>Gini</td>
<td>0.174</td>
<td>0.09</td>
</tr>
<tr>
<td>GDP per Capita</td>
<td>0.000</td>
<td>0.00</td>
</tr>
<tr>
<td>Internal Conflict</td>
<td>0.416</td>
<td>0.47</td>
</tr>
<tr>
<td>Population</td>
<td>0.000**</td>
<td>0.00</td>
</tr>
<tr>
<td>Corruption</td>
<td>0.080*</td>
<td>0.03</td>
</tr>
<tr>
<td>constant</td>
<td>-18.062*</td>
<td>8.08</td>
</tr>
<tr>
<td>R-sqr</td>
<td>0.106</td>
<td></td>
</tr>
<tr>
<td>dfres</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>BIC</td>
<td>509.7</td>
<td></td>
</tr>
</tbody>
</table>

* p<0.05, ** p<0.01, *** p<0.001

---

63 “Conoce Al CESIJ, Centro De Estudios Sobre Impunidad y Justicia - UDLAP,” Universidad De Las Américas Puebla (UDLAP)
5.2 Hypothesis II: Male Education and femicide

Table 2 shows the impact that male secondary school enrollment has on femicides.

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>se</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Education</td>
<td>0.008</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Gini</td>
<td>0.376***</td>
<td>(0.10)</td>
</tr>
<tr>
<td>GDP per Capita</td>
<td>0.000</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Internal Conflict</td>
<td>0.308</td>
<td>(0.46)</td>
</tr>
<tr>
<td>Population</td>
<td>0.000***</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Corruption</td>
<td>0.085*</td>
<td>(0.04)</td>
</tr>
<tr>
<td>constant</td>
<td>-31.799***</td>
<td>(8.42)</td>
</tr>
</tbody>
</table>

R-sqr: 0.367
dfres: 54
BIC: 249.7

* p<0.05, ** p<0.01, *** p<0.001

**Table 2. Male education and femicide.**

The R2 suggests this model can explain 36.7% of the variance in the data. The model found no statistically significant evidence that male education correlates with femicide rates.

I chose to measure lower secondary enrollment for education because most Latin American states offer it for free and is compulsory in every country measured. Lower secondary education is required of the entire population, yet it seems to have no impact on decreasing femicides. Higher levels of education may have a more significant impact on the occurrence of femicides in Latin America.

Saccamano's 2015 thesis measured women's tertiary education and found inconclusive evidence of its effects on femicide. It is possible that given the short scope of this study, measuring 2005-2019 did not provide sufficient data to conclude. Latin American states struggle with collecting complete data sets on most variables, especially with data on educational achievement. Countries like Costa Rica and Honduras have not disclosed more than five years' worth of education data, which hurt's the model's ability to draw significant conclusions.

Equally important may be the choice of enrollment as a measurement for education. Simply because students are enrolled in school does not mean they are actively learning; a better

---

64 Saccomano, Celeste. “The Causes of Femicide in Latin America”. 
education measurement could be graduation rates. Graduation rates assure that the student has been successful, or at least consistent, in their education. Measuring success in education is essential because it likely leads to better jobs and better economic security. Enrollment does not allow us to account for this factor since it measures all students' attendance but not the actual achievement.

5.3 Hypothesis III: Female Education and femicide

Table 2 shows the impact female education has on femicide rates. The R² suggests that this model can explain about 37.2% of the variance in the data. The model did not find any significant evidence that supported my hypothesis that higher levels of female education lead to lower femicide rates. These findings are surprising since GBV theory advocates increasing education as a solution to decreasing GBV, including femicides. Alternate explanations for these results are like those explained above for male education.
5.4 Hypothesis IV: Male Unemployment and femicide

Table 3 shows the impact male unemployment has on femicide. The R2 suggests that this model can explain 10.8% of the variance in the data. The model did not find any statistical significance between male unemployment and femicide rates. A possible explanation for this may be that the unemployment rate may not be an ideal measurement for economic well-being.

Many Latin American citizens are subsistence farmers. Unemployment rates only account for jobs in the formal sector, so these individuals are not accounted for.

It is also possible that the effects of income on femicide may vary between countries, making a regional analysis more difficult. When looking at the data, you can note a variation between countries with high rates of femicide yet low unemployment rates and vice versa.

Argentina consistently has high rates of unemployment, yet femicide rates were well below 1.4 in the analysis. On the other hand, Guatemala's unemployment rates have not gone above 3.2 since 2010, yet femicide rates remain relatively high, peaking at 9.4 in 2013 when male unemployment was at 2.7. Similar observations can be made across other countries. Future studies should gather complete economic data that considers the issues mentioned above and observe their individual countries' effects.

Table 4. Male unemployment and femicide.

<table>
<thead>
<tr>
<th></th>
<th>Male Unemp-t</th>
<th>b/se</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment Men</td>
<td>-0.160</td>
<td>(0.19)</td>
</tr>
<tr>
<td>Gini</td>
<td>0.182*</td>
<td>(0.09)</td>
</tr>
<tr>
<td>GDP per Capita</td>
<td>0.000</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Internal Conflict</td>
<td>0.374</td>
<td>(0.47)</td>
</tr>
<tr>
<td>Population</td>
<td>0.000**</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Corruption</td>
<td>0.081*</td>
<td>(0.03)</td>
</tr>
<tr>
<td>constant</td>
<td>-18.485*</td>
<td>(8.28)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>R-sqr</th>
<th>dfres</th>
<th>BIC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.108</td>
<td>107</td>
<td>506.6</td>
</tr>
</tbody>
</table>

* p<0.05, ** p<0.01, *** p<0.001
5.5 Hypothesis V: Female Unemployment and femicide

Table four shows the relationship between female unemployment and femicide rates. The R2 suggests that this model can explain about 13.6% of the variance in the data. The model found a significant relationship between femicide rates and female unemployment. A one-unit increase in female unemployment decreases femicide rates by .247.

This is an important finding, as it poses a potential solution to eradicating femicide. In countries where women are more economically secure, they are less likely to be forced into situations where they rely on a man to survive. This helps secure their livelihoods as they can leave home if situations turn violent in their household, reducing their likelihood of becoming femicide victims.

Although the variable showed a significant correlation, measuring economic well-being through unemployment rates may not paint an accurate picture of its effects on femicide. First, women are often discouraged by their male relatives or partners from seeking employment. The economically disadvantaged, yet uncounted in unemployment rates because they are not allowed to look for work. Those women who do work often find themselves participating in the informal market, which is not accounted for in unemployment rates. In Latin America, UN Women estimates that around 59% of women participate in the informal market. Some examples of their
employment include street vendors, farmers, domestic workers, etc. Since unemployment does not account for women looking for employment in the informal market, the analysis falls short. A possible avenue of research may be to compare the percentage of women involved in the informal market in each country and see the effects on femicides. The informal market poses several dangers to women since they are not protected by labor laws, earn less on average, and often have little to no access to health care. These women are already at higher risk than those employed in the formal sector, so they may be more at risk of becoming victims of femicide.

The relation of femicide rates and female unemployment is significant, and its outcome suggests that GBV theory is correct that economic well-being correlates with femicide. However, it is essential to account for the women who are not measured in the analysis, especially if they make up over 59% of the employed female population.

---

65 “Women in Informal Economy.” UN Women, United Nations
5.7 Full model

The final full model measures all independent variables and all control variables, including country and year fixed effects. The R2 suggests that this model can explain about 50.3% of the variance in the data.

In this model, we see a statistical significance for both male and female unemployment. A one-unit increase in male unemployment leads to an increase of .682 in femicide rates. This is expected, more male economic insecurity, a more violent male population. The more interesting result is women's unemployment, as a one-unit increase in female unemployment reduces femicide rates by .622. This contradicts the initial finding that women unemployment reduces femicides in Table 5. This may suggest that male economic insecurity may be at fault for femicides in Latin America. If women are unemployed, men feel more confident and are less likely to kill women. When male unemployment is high, men will turn to violence. Their economic security may be a factor in why some countries have higher femicide rates than others. This evidence is more suggestive than conclusive. However, it does offer another possible avenue of research.
5.6 Control Variables

Given the lack of statistical support for most of my hypotheses, there must be other explanations within my model for why femicides persist in Latin America. Looking at the control variables, income inequality shows some promise, given the GINI coefficient's statistical significance in four out of my six regressions. These regressions found that, at minimum, a one-unit increase in inequality (GINI) leads to a .182 increase in femicide rates. This is relatively large, given that some countries like Ecuador had a femicide rate of .8 in 2019. High levels of income inequality coupled with low GDP per capita in the region may encourage individuals to harm the community's vulnerable members. Men may turn to assault women to vent their economic frustrations. Since unemployment rates were unable to provide statistically significant evidence, it is possible that the hypothesized effects of economic well-being on GBV do not arise from not having a job but rather from not having an adequately paying job. This is especially true for the less developed regions, where individuals often face extreme poverty.

Another important finding by my model is corruption since it retained statistical significance in all regressions. All regressions find that a one-unit increase of corruption at a minimum increases femicide rates by a .073. Latin America is infamous for its high levels of corruption, often described as the leading cause of crime in the region. So, although the finding may be significant, its relationship to violence is not unique to femicides. Latin American nations need to revisit their state institutions and ensure that they are responsive to the people.
6

A case study in El Salvador: Income Inequality and femicide

Given the quantitative analysis's mostly inconclusiveness nature, I now turn to an in-depth case study of El Salvador. This country has seen its femicide rate decrease from 12.3 in 2005 to 6.8 in 2018. Concurrently, the country's GINI coefficient dropped from 48.5 to 38.6. This chapter will shed light on how income inequality, as captured by the GINI coefficient, can shed light on femicide rates. I chose to analyze this case study through an inequality perspective because the GINI retained significance in four out of six models. First, I will provide a literary review of the history of income inequality in El Salvador. Secondly, a short literature review of what scholars have identified as the causes of femicides in the country. Lastly, I will analyze El Salvador's income inequality in 2005 and 2018 and its effects on femicides.

6.1 History of income inequality and its effects on El Salvador

Scholars have identified income inequality as the leading cause of violence in El Salvador 66. Income inequality can be traced back to Spanish colonization in the 16th century when the native population was first enslaved to work in Spanish landowners' farms. The conquistadors used violence as a method of gaining control of the population. They often raped and killed indigenous peoples to show their dominance over the population. The Spanish model of control continued to be enforced by the Salvadoran government long after the colonialist period. Income inequality continued to ravage the population. The right-wing governments in power displaced the poor to appease the rich and deflect any push toward reform.

66 Musalo, Karen. "El Salvador - A Peace Worse than War: Violence, Gender and a Failed Legal Response." Pg. 25
From the 1900s onward, the situation did not change, and in 1979, the people's dissent triggered a civil war. The poor mobilized against their government and demanded policy changes that benefited them. Demonstrations, initially peaceful, turned violent once the government deployed the military to suppress them, resulting in massive casualties among the demonstrators. The war was greatly influenced by the cold war policies of the United States and its interest in keeping Latin America under its sway. The Salvadoran government was financially and militarily supported by the United States, which was interested in keeping the militant regime in power to offset any possibilities of a communist takeover of the country or threats to American corporate interests in the region.  

The demonstrators mobilized into guerilla groups under the banner of the FMLN (Farabundo Martí National Liberation Front) to defend themselves and clashed with government forces across the nation. The government used rape and assassinations as methods of control in disputed regions. Ultimately, the United States, due to international pressure, forced both sides into a settlement, which resulted in a new government. Unfortunately, the peace accords had two significant failures; they did not punish the culprits who participated in the violence and failed to address the war's root cause, economic inequality. The state normalized its use as a control method by failing to punish the officials who instigated the violence. The failure to address economic inequality meant the issue was not resolved, and violence would continue.

The combined failures of the peace accords are directly responsible for the violence experienced in El Salvador today. Failure to reform the economy fostered an environment that birthed violent gangs in the country. Individuals who were unable to provide for themselves

67 Musalo, Karen. "El Salvador - A Peace Worse than War: Violence, Gender and a Failed Legal Response." Pg.5
68 Musalo, Karen. "El Salvador - A Peace Worse than War: Violence, Gender and a Failed Legal Response." Pg. 16
turned to gangs as a means of economic security. The most powerful gangs, Mara Salvatrucha (MS13) and La Calle 18, use tactics like those deployed by the government during the civil war to expand their control over territories.\textsuperscript{70} The extent of gang power in El Salvador is so vast that the gangs often have more control of regions than the government. Gang rivalry creates such violent environments that many Salvadorians view the post-Civil War period as even more dangerous.

6.2 Femicide in El Salvador

Walsh and Menjivar (2016) argue that the high levels of gender-based violence against women in El Salvador are caused by the high rates of multisided gender inequality imposed on Salvadoran women.\textsuperscript{71} The state's failure to address economic, political, and symbolic inequality creates a societal system that believes that women's lives and rights are expendable.\textsuperscript{72} This leads to the normalization of gender-based violence women are viewed as subordinate in all other aspects of society. Like most Latin American countries, El Salvador faces high levels of gender inequality, fostering a culture of indifference towards violence against women. These differences are often shared by government officials, leading to weak enforcement of state laws that purportedly protect victims of GBV and punish aggressors. Legislation passed to tackle GBV has fallen far short of expectations because of the enforcement's failure on the officials assigned to it. Walsh and Menjivar (2016) argue that this is because the legislation is not a domestic initiative. However, outside pressure: the country's domestic factions are loathing to adapt to norms that

\textsuperscript{70} Musalo, Karen. "El Salvador - A Peace Worse than War: Violence, Gender and a Failed Legal Response." Pg. 16
they believe to be imposed by foreigners.\textsuperscript{73} So neither government officials nor the public take them seriously.

In 2012, the Catholic church and state brokered a ceasefire between the two major gangs, which resulted in a reduction in violence, including femicides \textsuperscript{74}. In 2012, El Salvador's femicide rate stood at 10. In 2014 the femicide rate was reduced to 3.7, suggesting that many femicides can be attributed to gang violence.\textsuperscript{75} Since femicide rates did not disappear altogether, we can infer that femicides are also a product of other types of violence. After the ceasefire, femicide rates once again rose. Figure 2 outlines El Salvador's femicide rates from 2005 to 2019; although there was a significant increase in femicides after the end of the ceasefire, the rates have not returned to their prior peaks.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{femicide_rates.png}
\caption{Femicide rates in EL Salvador from 2005-2019.}
\end{figure}

\textsuperscript{73} Walsh, Shannon Drysdale, and Cecilia Menjivar. "Impunity and Multisided Violence in the Lives of Latin American Women: El Salvador in Comparative Perspective." 2016. Pg. 587

\textsuperscript{74} Musalo, Karen. "El Salvador - A Peace Worse than War: Violence, Gender and a Failed Legal Response." Pg.16

\textsuperscript{75} Source: my data
Income inequality in 2005 and 2008 and its effects on femicides

Income inequality measured by the GINI coefficient has been drastically reduced in El Salvador over the last 15 years. In 2005, income inequality measured by the GINI coefficient was 48.5, reduced to 38.6 by 2018. The reduction of income inequality has led to a reduction of femicide rates. This section attempts to explain this relationship.

Scholars have identified the following reasons for reducing economic inequality in El Salvador: record-high remittances and higher wages for educated populations, but more importantly, the FMLN's government takeover in 2009. The FMLN party has its roots in El Salvador's bloody civil war, which advocated for income equality. Since 2009, the FMLN party has been committed to increasing government spending on social protection systems. Some of these government-sponsored programs include wealth transfers like cash payments; school supplies; "the creation of the SPSU (2009); the Five-Year National Development Plan (2010-2014) … the Global Anti-Crisis Plan (2009); the reform of the health sector initiated in 2010… and the adoption of the Development and Social Protection Act (2014)." These programs have used social welfare spending to redistribute wealth, which has positively affected Salvadorian society.

The success rate of these programs varies according to the individual's economic status. Since 2005, there has been a reduction of wealth owned by the top 20% of the population. In 2005, the top 20% controlled 53.20% of all wealth; by 2017, this had dropped to 44.7%. The

76 Source: my data set
78 Durán-Valverde, Fabio, and José Francisco Ortiz Vindas. “Reducing Inequality through Universal Social Protection El Salvador.” 2015
80 El Salvador - Income Distribution.
redistribution of wealth has better served the middle class; the bottom 20% of the population has only increased their wealth percentage by 3.2% from 2005 to 2017. The government is not targeting their welfare programs to the neediest populations, which may dampen its success, as those with the most need continue to be left out. Studies that measure the success of these redistribution programs find little support for its effects on inequality.

Looking at the changes in income inequality through government-backed redistribution programs helps us better understand its effects on femicides. A population that has more money to spend is less likely to turn to crime. However, research like Benke et al. (2017) found that these programs have not been extensive enough to create any real impact. Economic experts argue that El Salvador's economy's improvement is attributed to the government's liberalization efforts immediately after the end of the civil war. Trade liberalization reforms, like making the USD the official currency and responsible monetary policy management, have led to an increase in foreign trade that has benefited the population. The FMLN's redistribution policies, although welcome, may not have the effects the government had intended; evidence shows that trade and the liberalization of the Salvadoran market have contributed more towards reducing inequality in the long run.

The reduction of income inequality and its impact on femicide rates may not be exclusively due to a reduction in inequality but a renewed governmental focus on increasing social welfare. The FMLN's agenda is to create a social safety net for the disadvantaged, including women, which has led to creating new programs and legislation to improve women's overall well-being. In 2011 the government opened a women's facility called Ciudad Mujer

---

81 El Salvador - Income Distribution.
(Women's City), expanding to five centers in 2013. These centers provide women with services like health care, re-education programs, childcare, support for victims of GBV by providing access to healthcare, lawyers, therapy, and more. Ciudad Mujer provides women with the necessary tools for making themselves independent. The Center boasts gathering the services of 15 governmental agencies under one roof, which is essential to its success, as women no longer deal with the machismo they faced in governmental agencies; those employed in these centers have been trained to address their concerns. The international community has praised Ciudad Mujer, and other Latin American countries have created similar centers to tackle gender inequality. The program is a step in the right direction and shows that if the government is willing, it can reduce gender-based violence.

It is evident that increasing wealth and reducing income inequality is essential to decreasing femicide. El Salvador has taken essential steps to reduce inequality by enacting several programs under the FMLN to reduce inequality. The effects of these policies are contested, so although they may influence femicides, it is hard to draw definitive conclusions. However, this analysis has found one possible explanation for the GINI’s relation to femicide rates, the government's agenda. Given the FMLN'S focus on improving all individuals' welfare, their interest in reducing gender-based violence has had a real impact on femicides. The creation of women's centers and the enactment of women's rights legislation like the femicide legislation of 2010 have created a credible commitment by the government to reduce GBV. The government's public acknowledgment of GBV and its effects on Salvadoran women increases

---

86 Vega, Gabriela. “Ciudad Mujer En El Salvador: Una Experiencia Transformadora.” IADB
the saliency of the issue and can influence men to renounce these atrocities. Further studies on femicide should focus on the government's willingness to act as a determinant of femicide.
Conclusion

This thesis aimed to confirm through an empirical approach femicide's identified causes as factual. Scholars have identified high levels of gender inequality and impunity as the leading causes of femicide in Latin America. High levels of gender inequality in the region have created an environment where men freely murder women due to their gender, which is amplified by the impunity granted by government officials to gender-based-crimes. The national government's failure to uphold its femicide legislation further endangers women as they grant men a license to kill women. As the judicial system and police constantly fail to protect women from GBV, the national government fails to hold the departments accountable.

I created a new data set for thirteen Latin American countries from 2005 to 2019. I measured the potential relationship by performing a pooled OLS regression that included country and year fixed effects to ensure a robust analysis. The results for this thesis were mainly inconclusive. The only result that showed a significant relationship, female unemployment, was contested by the full model's output. It is possible that the variables used to measure the identified causes fail to capture them accurately. Gender inequality can be measured in numerous ways that are not socio-economically inclined so that other variables may offer more conclusive results.

Another major problem is the lack of data on femicides by Latin American countries, which hinders this thesis's analytical aspect. Latin American states plagued with femicides have an incentive to under-report their data, which creates self-reporting bias in the analysis. Some countries may under-report by mislabeling femicides as homicides; others by creating strict definitions on what constitutes femicide. Such as the victim's relation to the offender, others by the gruesomeness of the crime. Countries like Women whom strangers kill are not accounted for
by the government's official sources. Others like Cuba do not consider femicides as separate from homicides. Without data, we will fail to understand the phenomenon fully and, more importantly, identify solutions to such gruesome crimes.

A possible solution to this may be to turn exclusively to women's rights organization's collection of femicide rates. Women's rights organizations do not have any incentives to under-report these crimes. They are incentivized to report the actual killings of women as advocates for their safety. Figure 3 shows the discrepancy between official and women's rights organizations' femicide rates. The Guatemalan government began to report femicide rates in 2013, the Grupo Guatemalteco de Mujeres' rates predate the official rates by nine years and offer opposing data. This is a clear example of how self-reporting bias affects our analysis, especially when the rates used for this thesis are a mixture of both official and non-official (women's rights) rates.

![Guatemala’s unofficial and official femicide rates from 2005 to 2019.](image)

This thesis may not accurately portray the reality women face in Latin America because of this issue. To actively work to improve women's security in Latin America, it is evident that
states need to focus on collecting and reporting accurate data to ensure that scholars have the tools to create solutions. This recommendation is not exclusive to femicide data, but all for all data, as significant gaps of information were missing for most variables.

This thesis successfully identified other possible correlations that help us understand femicides, significantly the effects of economic instability on femicide. Countries with higher levels of income inequality as defined by the GINI coefficient have higher rates of femicide. Economic frustration by the male population and high levels of gender inequality endanger women's well-being as men are more likely to release their frustrations. The complete model that accounted for all independent variables suggests a similar story. Men are less likely to turn to violence if they are economically fulfilled. High rates of male unemployment led to higher femicide rates, while higher female unemployment rates reduced femicide rates. These findings suggest other possible research avenues to fully understand how a population's economic well-being correlates to femicides.

The study of femicide is relatively new compared to other forms of gender-based violence. The study of this phenomenon is essential to increase the saliency of the issue. New venues for research should focus on finding more concrete variables to retest this thesis in the future. Latin American states are now doing a better job of collecting data across the board, facilitating these types of studies in the future, and providing us with a more conclusive analysis. Especially when a large number of nations were left out of this analysis due to its lack of data, importantly, it may be beneficial to analyze countries individually rather than as a region, as there may be variables that may affect one country, but not the other, which may hurt the robustness of the analysis.
Revisiting the economic and education aspect of this thesis should be a priority for further research on femicide. The inconclusiveness of this thesis's findings should not discredit scholars' theory that education attainment correlates with femicide rates. Possibly measuring for graduation rates or higher levels of schooling may produce more conclusive results. Importantly, scholars should measure gender inequality through a non-socio-economic perspective. There is a wide variety of variables that measure gender relations in individual countries that tackle gender inequality better than socio-economic variables. Further studies could use the Gender Inequality Index by the UN to produce a more concrete analysis of its effects on femicide.
Bibliography


6. "Unemployment, Female (% of Female Labor Force)." Index Mundi, www.indexmundi.com/facts/indicators/SL.UEM.TOTL.FE.ZS.


25. Measuring femicide: challenges and efforts to bolster the process in Latin America and the Caribbean


29. Obinna Denise, Seeking Sanctuary: Violence Against Women in El Salvador, Honduras, and Guatemala, p. 14, Menjivar and Walsh 225


NOTE: Data Sources are found in the appendix.
Appendix

1. Correlation matrix for control variables

The correlation matrix below allows me to see what correlation is across all my control variables. I created this to avoid putting in two highly correlated variables that would generate a multicollinearity problem that would render the coefficients useless.

<table>
<thead>
<tr>
<th></th>
<th>Gini</th>
<th>GDPpC</th>
<th>IntCon-t</th>
<th>Pop-n</th>
<th>Corrup-n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gini</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDPpC</td>
<td>-0.3895</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IntConflict</td>
<td>-0.0108</td>
<td>0.2896</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>-0.1074</td>
<td>0.2393</td>
<td>-0.2227</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>Corruption</td>
<td>-0.3780</td>
<td>0.7261</td>
<td>0.4497</td>
<td>-0.1141</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Figure 4. Correlation matrix for control variables
## 2. Femicide Rates 2005-2019 in Latin America

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>1.01</td>
<td>1.11</td>
<td>1.24</td>
<td>1.33</td>
<td>1.19</td>
<td>1.36</td>
<td>1.0</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Bolivia</td>
<td>1.96</td>
<td>1.78</td>
<td>1.89</td>
<td>1.92</td>
<td>2.1</td>
<td>1.75</td>
<td>1.8</td>
<td>1.9</td>
<td>2.0</td>
<td>2.3</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Chile</td>
<td>0.7</td>
<td>0.7</td>
<td>0.6</td>
<td>0.75</td>
<td>0.54</td>
<td>0.51</td>
<td>0.63</td>
<td>0.64</td>
<td>0.49</td>
<td>0.36</td>
<td>0.46</td>
<td>0.44</td>
<td>0.48</td>
<td>0.48</td>
<td>0.48</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1.3</td>
<td>0.7</td>
<td>1.0</td>
<td>1.5</td>
<td>1.7</td>
<td>1.4</td>
<td>1.8</td>
<td>1.1</td>
<td>0.8</td>
<td>1.0</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Ecuador</td>
<td>1.7</td>
<td>1.6</td>
<td>2.3</td>
<td>1.7</td>
<td>0.3</td>
<td>0.7</td>
<td>0.8</td>
<td>1.2</td>
<td>0.7</td>
<td>0.6</td>
<td>0.7</td>
<td>0.7</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>El Salvador</td>
<td>12.3</td>
<td>13.73</td>
<td>10.84</td>
<td>10.8</td>
<td>18.28</td>
<td>17.81</td>
<td>19.23</td>
<td>10.0</td>
<td>3.7</td>
<td>8.4</td>
<td>7.6</td>
<td>8.0</td>
<td>6.8</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Guatemala</td>
<td>9.3</td>
<td>9.4</td>
<td>8.4</td>
<td>11.7</td>
<td>10.7</td>
<td>9.3</td>
<td>8.7</td>
<td>8.6</td>
<td>9.4</td>
<td>8.7</td>
<td>8.5</td>
<td>8.4</td>
<td>8.5</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Honduras</td>
<td>2.7</td>
<td>5.7</td>
<td>7.7</td>
<td>8.0</td>
<td>9.4</td>
<td>9.4</td>
<td>8.8</td>
<td>8.2</td>
<td>10.4</td>
<td>7.3</td>
<td>7.7</td>
<td>5.8</td>
<td>5.1</td>
<td>4.6</td>
<td>6.2</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.4</td>
<td>2.4</td>
<td>2.0</td>
<td>2.6</td>
<td>3.4</td>
<td>4.2</td>
<td>4.6</td>
<td>4.6</td>
<td>4.3</td>
<td>3.9</td>
<td>3.8</td>
<td>4.5</td>
<td>5.3</td>
<td>5.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Panama</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paraguay</td>
<td>1.1</td>
<td>0.9</td>
<td>0.5</td>
<td>1.0</td>
<td>0.9</td>
<td>1.0</td>
<td>1.1</td>
<td>0.8</td>
<td>1.0</td>
<td>0.6</td>
<td>1.2</td>
<td>1.6</td>
<td>1.7</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Peru</td>
<td>0.66</td>
<td>1.01</td>
<td>0.64</td>
<td>0.63</td>
<td>1.1</td>
<td>0.9</td>
<td>0.8</td>
<td>0.8</td>
<td>0.7</td>
<td>0.6</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>Uruguay</td>
<td>1.4</td>
<td>1.5</td>
<td>2.0</td>
<td>1.5</td>
<td>1.5</td>
<td>1.3</td>
<td>1.0</td>
<td>1.5</td>
<td>1.2</td>
<td>1.5</td>
<td>1.7</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Sources available below
### 3. Control Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>GINI</td>
<td>World Bank</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>ECLAC - CEPALSTAT</td>
</tr>
<tr>
<td>Internal conflict</td>
<td>International Country Risk Guide</td>
</tr>
<tr>
<td>Population</td>
<td>ECLAC - CEPALSTAT</td>
</tr>
<tr>
<td>Corruption</td>
<td>World Bank Governance Indicators</td>
</tr>
</tbody>
</table>

### 4. Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female lower secondary education</td>
<td>UNESCO</td>
</tr>
<tr>
<td>Male lower secondary education</td>
<td>UNESCO</td>
</tr>
<tr>
<td>Female unemployment</td>
<td>ECLAC - CEPALSTAT</td>
</tr>
<tr>
<td>Male unemployment</td>
<td>ECLAC - CEPALSTAT</td>
</tr>
<tr>
<td>Rule of Law</td>
<td>World Bank Governance Indicators</td>
</tr>
</tbody>
</table>
5. Femicide Legislation enactment, and maximum punishment by country.

<table>
<thead>
<tr>
<th>Country</th>
<th>Year of Enactment</th>
<th>Maximum Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>2012</td>
<td>Life</td>
</tr>
<tr>
<td>Bolivia</td>
<td>2013</td>
<td>30 years in prison.</td>
</tr>
<tr>
<td>Chile</td>
<td>2010</td>
<td>Life</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2007</td>
<td>50 years in prison.</td>
</tr>
<tr>
<td>Ecuador</td>
<td>2013</td>
<td>28 years in prison.</td>
</tr>
<tr>
<td>El Salvador</td>
<td>2012</td>
<td>50 years in prison.</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2008</td>
<td>50 years in prison</td>
</tr>
<tr>
<td>Honduras</td>
<td>2013</td>
<td>40 years in prison.</td>
</tr>
<tr>
<td>Mexico</td>
<td>2007</td>
<td>60 years in prison.</td>
</tr>
<tr>
<td>Panama</td>
<td>2013</td>
<td>30 years in prison.</td>
</tr>
<tr>
<td>Paraguay</td>
<td>2017</td>
<td>30 years in prison.</td>
</tr>
<tr>
<td>Peru</td>
<td>2011</td>
<td>15 years in prison.</td>
</tr>
<tr>
<td>Uruguay</td>
<td>2017</td>
<td>30 years in prison.</td>
</tr>
</tbody>
</table>

5. Femicide Rates Sources

<table>
<thead>
<tr>
<th>Country</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Years: 08-13: La Casa del Encuentro</td>
</tr>
<tr>
<td></td>
<td>● <a href="http://www.lacasadelencuentro.org/femicidios03.html">http://www.lacasadelencuentro.org/femicidios03.html</a></td>
</tr>
<tr>
<td></td>
<td>Years: 13-19: OCESAP</td>
</tr>
<tr>
<td></td>
<td>● <a href="https://cepalstat-prod.cepal.org/cephstat/tabulador/ConsultaIntegrada.asp?idIndicador=2812&amp;idioma=i">https://cepalstat-prod.cepal.org/cephstat/tabulador/ConsultaIntegrada.asp?idIndicador=2812&amp;idioma=i</a></td>
</tr>
<tr>
<td>Bolivia</td>
<td>Years: 9-14: Cordinadora de la mujer</td>
</tr>
<tr>
<td></td>
<td>● <a href="http://www.coordinadoradelamujer.org.bo/observatorio/index.php/tematica/2/infografia/2">http://www.coordinadoradelamujer.org.bo/observatorio/index.php/tematica/2/infografia/2</a></td>
</tr>
<tr>
<td></td>
<td>Years: 15-19: OCESAP</td>
</tr>
<tr>
<td></td>
<td>● <a href="https://cepalstat-prod.cepal.org/cephstat/tabulador/ConsultaIntegrada.asp?idIndicador=2812&amp;idioma=i">https://cepalstat-prod.cepal.org/cephstat/tabulador/ConsultaIntegrada.asp?idIndicador=2812&amp;idioma=i</a></td>
</tr>
<tr>
<td>Chile</td>
<td>Years: 7-14: Princeton, p.172</td>
</tr>
<tr>
<td></td>
<td>● <a href="https://lae.princeton.edu/catalog/f1be959b-8fab-4e90-aeea-c0ad64fb4ee7?locale=es">https://lae.princeton.edu/catalog/f1be959b-8fab-4e90-aeea-c0ad64fb4ee7?locale=es</a></td>
</tr>
<tr>
<td></td>
<td>Years: 15-19: Ciper Chile</td>
</tr>
<tr>
<td></td>
<td>● <a href="https://www.ciperchile.cl/2020/03/07/femicidios-y-violencia-intrafamiliar-contra-la-mujer/#:~:text=En%20la%20Tabla%201%20se,en%202017%20(44%20muertes)">https://www.ciperchile.cl/2020/03/07/femicidios-y-violencia-intrafamiliar-contra-la-mujer/#:~:text=En%20la%20Tabla%201%20se,en%202017%20(44%20muertes)</a>.</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Years: 05-19: OCESAP</td>
</tr>
<tr>
<td></td>
<td>● <a href="https://cepalstat-prod.cepal.org/cephstat/tabulador/ConsultaIntegrada.asp?idIndicador=2812&amp;idioma=i">https://cepalstat-prod.cepal.org/cephstat/tabulador/ConsultaIntegrada.asp?idIndicador=2812&amp;idioma=i</a></td>
</tr>
<tr>
<td>Ecuador</td>
<td>Years: 9-12: Biblioteca Promocion, p.115</td>
</tr>
<tr>
<td></td>
<td>Years: 14-19: OCESAP</td>
</tr>
<tr>
<td></td>
<td>● <a href="https://cepalstat-prod.cepal.org/cephstat/tabulador/ConsultaIntegrada.asp?idIndicador=2812&amp;idioma=i">https://cepalstat-prod.cepal.org/cephstat/tabulador/ConsultaIntegrada.asp?idIndicador=2812&amp;idioma=i</a></td>
</tr>
<tr>
<td>El Salvador</td>
<td>Years: 5-12: Observacion de violencia</td>
</tr>
<tr>
<td></td>
<td>● <a href="https://observatoriodeviolenciaormusa.org/violencia-feminicida/">https://observatoriodeviolenciaormusa.org/violencia-feminicida/</a></td>
</tr>
<tr>
<td></td>
<td>Years: 14-19: OCESAP</td>
</tr>
<tr>
<td></td>
<td>● Years: <a href="https://cepalstat-prod.cepal.org/cephstat/tabulador/ConsultaIntegrada.asp?idIndicador=2812&amp;idioma=i">https://cepalstat-prod.cepal.org/cephstat/tabulador/ConsultaIntegrada.asp?idIndicador=2812&amp;idioma=i</a></td>
</tr>
<tr>
<td>Guatemala</td>
<td>Years: 5-18: Grupo Guatemalteco Mujeres</td>
</tr>
<tr>
<td></td>
<td>● <a href="http://ggm.org.gt/publicaciones/">http://ggm.org.gt/publicaciones/</a></td>
</tr>
<tr>
<td>Honduras</td>
<td>Years: 5-10: Universidad Autonoma de Honduras</td>
</tr>
<tr>
<td></td>
<td>● <a href="https://tzibalnah.unah.edu.hn/handle/123456789/4767">https://tzibalnah.unah.edu.hn/handle/123456789/4767</a></td>
</tr>
<tr>
<td></td>
<td>Years: 11-19: OCESAP</td>
</tr>
<tr>
<td></td>
<td>● <a href="https://cepalstat-prod.cepal.org/cephstat/tabulador/ConsultaIntegrada.asp?idIndicador=2812&amp;idioma=i">https://cepalstat-prod.cepal.org/cephstat/tabulador/ConsultaIntegrada.asp?idIndicador=2812&amp;idioma=i</a></td>
</tr>
<tr>
<td>Country</td>
<td>Period</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>Mexico</td>
<td>5-19: Mexico UN Women</td>
</tr>
<tr>
<td>Panama</td>
<td>Years: 14-19: OCESAP</td>
</tr>
<tr>
<td>Peru</td>
<td>5-8: Problemas de construccion ....</td>
</tr>
<tr>
<td>Uruguay</td>
<td>Years: 8-19: OCESAP</td>
</tr>
</tbody>
</table>