### Daniel Jaramillo Calderon

https://djaramilloc.github.io jaramillocalderondc@gmail.com | +1 (604) 753-8817 THE UNIVERSITY OF BRITISH COLUMBIA Vancouver School of Economics

## Research Statement

I am an Applied Microeconomist with research interests in Public Economics, Development Economics, and Political Economy. My current research agenda focuses on understanding the causes and consequences of crime and conflict in developing countries. I am working on multiple projects investigating these issues in Latin America and Africa. In these projects, I use economic theory, empirical methods, and machine learning techniques to provide rigorous answers to causal questions. In what follows, I give a broad overview of these projects and outline the future course of my research agenda.

### On the economics of crime

In my job market paper, titled *The Spillover Effects of Prisoner Reentry*, I study how released offenders influence the criminal behavior of individuals in their neighborhoods. In this project, I created a unique dataset with individual-level information on arrests, prison releases, and places of residence for the entire male population of Ecuador. Using an event-study design focused on a mass pardon that occurred in 2022, I compared the probability of arrest for individuals in neighborhoods that received a released offender with those in neighborhoods that did not. The main finding is that released offenders increase the likelihood of arrest among their neighbors. My main contribution is to our understanding of criminal peer effects by documenting the transmission of criminal behavior from former offenders to individuals without criminal experience. This effect accounts for 40% of the overall increase in the likelihood of arrest.

I identified two mechanisms behind this effect. First, there is a direct contagion of criminal skills from released offenders to their peers within the neighborhood. People in treated neighborhoods are more likely to form criminal partnerships with released offenders than those in non-treated areas. Additionally, I found that criminal behavior spreads through family networks, particularly for individuals with no prior criminal history.

Second, the conditions during incarceration can affect non-incarcerated individuals through their interactions with released offenders. I found that in this setting incarceration has criminogenic effects. The spillover effects are larger in neighborhoods where the released offender served longer sentences because of the pardon than those who received an inmate with a shorter time served. Conversely, I found suggestive evidence of the mitigating role of rehabilitation programs. Released offenders from prisons with higher participation in job training programs do not generate criminal spillovers in their returning neighborhoods.

In the second chapter of my dissertation titled *Gangs*, *Truce*, and *Their Impact on Firms*, Phillip Keefer and I study the effects of the 2016 non-aggression pact between El Salvador's gangs on firm behavior. Before the truce, gang-related violence had made El Salvador the most dangerous country in the world, with a homicide rate exceeding 120 per 100,000 people. The primary driver of this violence was gang competition for territorial control, which allowed gangs to extort firms operating in those areas. Extortion was the primary source of income for gangs, amounting to roughly 3% of the country's GDP in 2014. Within a month of the truce, the number of

# DANIEL JARAMILLO CALDERON

https://djaramilloc.github.io jaramillocalderondc@gmail.com | +1 (604) 753-8817 THE UNIVERSITY OF BRITISH COLUMBIA Vancouver School of Economics

homicides was reduced by 60%. Despite the immediate reduction in violence, its impact on firms was uncertain. On the one hand, peace reduces the operational cost of gangs, which might lead to lower extortion rates. On the other hand, free from conflict, gangs might redirect their efforts from fighting to broader rent extraction.

We used administrative data on all legally registered firms in El Salvador to assess the effect of the truce on firms. We employed a difference-in-difference model to compare firms located in municipalities previously contested by gangs with those in regions without gang competition. We defined gang competition based on the share of gang-related homicides before the truce. We found that firms in areas with higher gang competition before the truce reduced their workforce by 2%, despite experiencing the largest reduction in violence. To explain this finding, we developed a model that factors in extortion and firm decisions. The model predicts that the truce led to an increase in the expected extortion costs faced by firms, outweighing the benefits from reduced violence. Our own victimization survey supports the model's predictions, showing an increase in both the frequency and intensity of extortion towards firms in areas with higher pre-truce gang competition.

#### Future Work

My research agenda within the economics of crime splits between understanding the effects of prisoner reentry and the dynamics of prosecutors and judges in criminal courts. Regarding prisoner reentry, I am interested in understanding its effects on families. Previous research shows that released offenders often commit economically motivated crimes within days of their release. However, little is known about how the reintegration of these individuals impacts their immediate connections, particularly family members.

I am working on two projects with Pedro Rodriguez-Martinez to address this gap. The first project examines how prisoner reentry affects violence against women. A major challenge in studying gendered violence is its underreporting by victims. We address this by using emergency calls, the first reporting line for many women. Drawing on data from over two million 911 calls and using an event study design, we analyze how reports of intimate partner violence (IPV) change in families receiving a released offender compared to families with an incarcerated member who has not yet been released. In a separate project, we study the effects of released offenders on children's educational outcomes. We match the entire population of children attending public schools in Ecuador's largest city with records of parental incarceration. Using a staggered exit of offenders from prison in a matched event study design, we seek to document how the return of negative influences affects children.

In the field of criminal justice, I am exploring the influence of prosecutors on sentencing outcomes. Previous studies have focused on how judges' discretion can lead to varying sentencing results for similar cases. However, most cases in criminal courts are resolved through dismissals or plea deals negotiated by prosecutors, rather than going to trial. This project aims to differentiate the impact of judges and prosecutors on sentencing outcomes, using an AKM analysis. I am

### Daniel Jaramillo Calderon

https://djaramilloc.github.io jaramillocalderondc@gmail.com | +1 (604) 753-8817 THE UNIVERSITY OF BRITISH COLUMBIA Vancouver School of Economics

conducting this research in Ecuador, where the random assignment of prosecutors and judges in cases of flagrant arrests provides a natural experiment for analysis.

## On the Causes and Consequences of Conflict

My second area of research focuses on understanding the causes and consequences of political violence in Africa. In a working paper titled *Climate Change and Female Targeted Conflict*, co-authored with Siwan Anderson, we study whether climate change exacerbates gender-based violence by armed political actors. While previous research on climate change and female-targeted conflict has primarily focused on intimate partner violence, our work investigates politically motivated violence directly at women by male perpetrators. Additionally, we provide suggestive evidence for the mechanism linking climate fluctuations to conflict.

To causally identify these effects, we use a geo-located panel dataset that includes direct killings, forced kidnappings, torture, and sexual violence against women in Africa between 1997 and 2019. Our findings indicate that negative climate shocks intensify these forms of female-targeted civilian conflict. Contrary to an opportunity cost explanation for violence among male perpetrators, our results align with the idea that negative climate shocks induce aggressive behaviors toward women. Interestingly, we also find that higher levels of female empowerment in society can help mitigate this type of gender-based violence, supporting the notion that gender-biased norms contribute to such violence in vulnerable contexts.

#### **Future Work**

My future projects within this area are at the intersection of religion and political violence. In an ongoing project with Siwan Anderson and Sara Benetti, we examine the differences between religious and non-religious conflicts. Religion plays an important role in conflict in Africa. Estimates suggest that between 60% and 80% of civil conflicts in the continent have at least one religious dimension: either a religiously affiliated actor or a religious motive. In the first project, we conduct a descriptive analysis to determine whether the factors driving non-religious conflict—such as resource access and ethnic fractionalization—have a similar impact on religious violence. To this end, we created a novel dataset that maps religiosity to political violence in Africa between 1997 and 2023, manually coding all events and actors involved.

In a second project, we aim to explore whether religious conflict contributes to an increase in gender-based violence. One of the consequences of conflict is that it often leads to increased levels of violence against women, including arbitrary killings, torture, sexual violence, and forced marriage. On one hand, religion can mitigate its negative effects. Studies point out religious organizations as mediators in peace-making processes and promote messages of peace. However, monotheistic religions hold traditional gender-biased norms. When religion is introduced into a conflict, these norms can become more prominent, increasing the likelihood of women being targeted. We are studying this phenomenon in North Africa following jihadist attacks. Currently, we are collecting data on gender violence and gender norms.

# DANIEL JARAMILLO CALDERON

https://djaramilloc.github.io jaramillocalderondc@gmail.com | +1 (604) 753-8817 THE UNIVERSITY OF BRITISH COLUMBIA Vancouver School of Economics

In a related project with Siwan Anderson, we study the historical origins of religious conflict in Africa, focusing on how early 20th-century missionary activity influenced modern-day conflict. While much of the existing literature explains African conflicts through resource competition or ethnic divisions, we propose an alternative explanation: the introduction of Christianity. Using geocoded data on early mission locations and controlling for the observable factors influencing their placement, we find a positive correlation between mission presence and contemporary political demonstrations and protests. We argue that missions introduced a polarization between traditional customs and new religious beliefs, fueling violence. To test this hypothesis further, we focus on Ghana, where a spatial discontinuity offers plausibly exogenous exposure to missionary activity, and we find similar results. Currently, we are matching the religious violence dataset to this project.

I am eager to progress with this broad research agenda. I believe that the abilities I have cultivated through my involvement in the projects mentioned earlier, along with the institutional insights I have acquired on these topics, provide me with a solid basis for future studies in Public, Political, and Development Economics.