

# Presidential Approval, Crime Victimization, and Feelings of Insecurity in Latin America

Aprobación presidencial, victimización por delitos y sentimientos de inseguridad en América Latina

DOI: 10.4067/S0718-090X2022005000126

VOLUMEN 42 / N° 3 / 2022 / 645-670

ISSN: 0718-090X

Revista de Ciencia Política

cienciapolítica.u.c.l



### LUCIANA FERNANDES VEIGA 🗅

Federal University of the State of Rio de Janeiro, Brazil

### EDNALDO APARECIDO RIBEIRO D

State University of Maringa, Brazil

## **JULIAN BORBA**

Federal University of Santa Catarina, Brazil

## GABRIELA RIBEIRO CARDOSO (10)

Federal University of Santa Catarina, Brazil

#### ABSTRACT

This article tests the thesis of clarity of responsibility, present in the theory of economic voting, through an analysis of public security. It seeks to measure how presidential approval in Latin America is affected by perceptions of insecurity and experiences of crime victimization. Using multilevel models, we also consider the different institutional arrangements for public security based on the constitutional assignment of responsibility. Our hypothesis is that this institutional variable affects presidential approval. We used data from the 2016/2017 and 2018/2019 rounds of the AmericasBarometer. The results confirm the relevance of the two metrics of security in presidential approval in Latin America. We also note that when the responsibility for this area of public policy is exclusive to the national government, the effect that feelings of insecurity and crime victimization have on presidential approval tends to increase.

**Keywords:** presidential approval, crime victimization, feelings of insecurity, public security.

### RESUMEN

Este artículo pone a prueba la tesis de la claridad de la responsabilidad presente en la teoría del voto económico, a través de un análisis de la seguridad pública. Se busca medir el impacto de la percepción de inseguridad y de la victimización en la evaluación presidencial



en América Latina. A través del uso de modelado multinivel, consideramos también las diferentes configuraciones institucionales de la gestión de la seguridad, de acuerdo con la atribución constitucional de la responsabilidad. Nuestra hipótesis de trabajo afirma que esta variable institucional afecta el juicio del desempeño del presidente. Los datos provienen de las olas 2016/2017 y 2018/2019 del Barómetro de las Américas. Los hallazgos confirman la relevancia de las dos medidas de seguridad sobre la evaluación presidencial en América Latina. Constatamos también que cuando la responsabilidad por esa área de política pública es exclusiva del gobierno nacional, los efectos del sentimiento de inseguridad y de la victimización en la evaluación presidencial tienden a ser potenciados.

**Palabras claves:** Evaluación presidencial, victimización, sentimiento de inseguridad, seguridad pública.

### I. INTRODUCTION

This paper discusses economic voting from a broad, multidimensional perspective, which considers other areas of performance aside from the economy in presidential approval, as is the traditional approach. Our focus here is on public security in its relationship with the themes of electoral accountability and clarity of responsibility (Silva and Whitten 2017), which are part of this theory.

The first reason for expanding the scope of economic voting relates to Latin America's current scenario. The 2018 Latinobarómetro reported widespread pessimism in the region. Dissatisfaction with democracy grew from 51 percent in 2008 to 71 per cent in 2018, and the reasons are widely known. For 35 percent of Latin Americans, the economy is the main issue, especially unemployment and low wages, and for 19 percent, crime is something to consider. The study concluded that a decrease in income, job instability, violence, and corruption are the main issues that draw the attention of the Latin American population (Latinobarómetro 2018).

It is no mere coincidence that the three main countries of the region – Colombia, Mexico, and Brazil – elected the respective new heads of state in 2018: Iván Duque, Andrés Manuel López Obrador, and Jair Bolsonaro. They all share the following attributes: a) an anti-establishment attitude, b) anti-corruption rhetoric, and c) public security as priority number one or two.

Given the importance of security in the public opinion (Carreras 2013) and the recent elections in Latin America (Perez 2015), analysis of their impact on presidential approval is urgent.

The second reason refers to the limited number of studies relating public security and voter behavior. There are hundreds of studies on the economy's impact on presidential elections; meanwhile, research on public security's impact on government approval is restricted. Political science in Latin America should foment this debate along with discussions on retrospective voting.

This article aims to analyze the impact that feelings of insecurity and experiences of crime victimization have on presidential approval in Latin America. The first dimension focuses on voter subjectivity and considers their feelings of insecurity in their daily life (subjective dimension). The second dimension examines the concrete experience of crime victimization (objective dimension).

Using a multilevel model, we considered the different institutional arrangements for public security administration and their relation to presidential approval. We refer to the constitutional assignment of responsibility, which can be exclusive to the national government or shared. This subject is also tied to an important discussion within the scope of economic voting theory regarding clarity of responsibility (Powell and Whitten 1993; Anderson 2000; Ratto 2013; Silva and Whitten 2017). Our research hypotheses propose that this institutional variable affects both clarity of responsibility and presidential approval and controls or maximizes the effects that feelings of insecurity and crime victimization have on presidential approval.

To answer our research question, we analyzed AmericasBarometer data from 2016/2017 (LAPOP 2017) and 2018/2019 (LAPOP 2019), which include specific questions regarding security and government approval.

The results confirmed the relevance of the two metrics of security in presidential approval in Latin America, wherein feelings of insecurity had a more significant effect. Citizens who feel unsafe, as well as those who claimed that they had been a victim of a crime in recent months, tend to evaluate the government more negatively. As for the relationship between context and the individual dimension of public security, we observed that when the responsibility for this area of public policy is exclusive to the national government, the effect of feelings of insecurity and crime victimization on presidential approval tends to increase.

This paper is divided into four parts aside from this introduction. In the next section, we present a theoretical review to support our variables and hypotheses for testing. We explain our hypotheses and how we processed the variables in the subsequent section. Finally, we disclose and discuss our results and conclusions.

# II. ECONOMIC VOTING THEORY: RATINGS AND RESPONSIBILITY

# Economic Voting: Retrospective voting, electoral accountability and clarity of responsibility

Studies on economic voting tend to treat adherence to the administration as a dependent variable, which may be indicated by a positive approval rate in the public opinion, also referred to as the VP-function (Lewis-Beck and Stegmaier 2008; Stegmaier, Lewis-Beck and Park 2017), or by the number of votes (or vote

intention) that their party receives in an election (Lewis-Beck and Stegmaier 2008). In this study, we treat a positive approval rate of Latin American presidents as a dependent variable.

There are two dimensions to the mechanism of economic voting, according to the literature. First, voters rate the economic situation, and then they assign the responsibility for public security to the incumbent party and either reward or punish them with their vote (Lewis-Beck and Stegmaier 2008).

When it comes to economic voting, defining the time frame for the economic rating is essential: past or future, that is, either retrospective or prospective voting (Lewis-Beck and Stegmaier 2008; Duche and Stevenson 2010). Ever since Kiewiet (1983) introduced the hypothesis for retrospective economic voting, it has been widely adopted for elections.

Secondly, the scope of the economic condition needs to be defined: individual or national, that is, pocketbook or sociotropic voting (Lewis-Beck and Stegmaier 2008; Lewis-Beck and Stegmaier 2013). In the former, the voter rates the economic situation based on their perception of their individual and family economic conditions and decides whether or not they will adhere to the administration. In the latter, the voter rates the administration based on their perception of the country's economy and decides whether or not to adhere (Lewis-Beck and Stegmaier 2008).

In general, sociotropic, retrospective economic voting has been more effective in explaining administration approval (Duche and Stevenson 2010; Lewis-Beck and Stegmaier 2013). It is believed that voters respond to economic goals traditionally measured by the total number of jobs, price stability, and economic growth. This study considers both sociotropic and pocketbook retrospective economic voting.

The most recent literature on economic voting has adopted a multidimensional approach to the concept by making references to ratings of the administration's performance in the economy as well as in different areas and to the influence of political institutional arrangements (Sniderman and Levendusky 2008; Stegmaier, Lewis-Beck and Park 2017) and of political and economic contexts (Duch and Stevenson 2010).

We also examine the concept of retrospective voting from a multidimensional perspective and focus on feelings of insecurity and experiences of crime victimization, both of which relate to public security.

# Public Security Issue: Salience, ideology, and affectivity

Much has been produced recently on the impact of experiences with public security on political behavior. Literature on this relation in Mexico is particularly noteworthy (Trelles and Carreras 2012; Blanco 2013; Romero, Magaloni

and Díaz-Cayeros 2016; Ley 2017; Altamirano and Ley 2020). Romero et al. (2016) even said Mexico resembles a lab for the field, as the country has been immersed in the conflict between government and criminal organizations and the secondary conflict between the criminal organizations themselves. He remarks that between 2007 and 2014 over a hundred thousand people died violently in incidents related to organized crime. In fact, this is the reality of many Latin American countries. Transnational studies on Latin America have also been produced (Fernandez and Kuenzi 2010; Berens and Dallendörfer 2019; Visconti 2020).

Works about public security and political behavior have mainly focused on the impact of experiences with crime on adherence to democracy (Pérez 2003; Booth and Seligson 2009; Fernandez and Kuenzi 2010; Dammert 2012; Carreras 2013; Malone 2012; Silva and Ribeiro 2016) and on voter turnout (Marcus and Mackuen 1993; Blattman 2009; Booth and Seligson 2009; Malone 2012; Bateson 2012; Trelles and Carreras 2012; Brooks 2014; Ley 2017; Valente and Vacchiano. 2020). There are also studies on the association between experiences of violence and adherence to more forceful crime-fighting measures (Holland 2013; Visconti 2020). More generally, studies focus on how crime and violence can affect the quality of democracy by reducing turnout or even by increasing the likelihood of accepting the loss of basic rights in favor of state repression to reduce delinquency. Ley (2017) suggests that high-crime environments tend to lower turnout, as people worry more about physical survival than about their responsibility as voters.

From published literature it is possible to identify that crime interferes in electoral behavior in the following ways: 1) by influencing the decision to participate or abstain; 2) high levels of crime, victimization and insecurity can fuel right-wing platforms that advocate hard-liner policies (penal populism); 3) victimization and insecurity can affect support for the incumbent (Perez 2015).

The goal of this study is to identify exactly how victimization and feelings of insecurity influence adherence to the current mandate.

Adherence to the incumbent may happen during the mandate in the form of presidential approval, and can also take place at the election through votes for the incumbent. Some authors have already produced important results regarding both possibilities.

Romero et al. (2016) studied the relation between presidential approval and policy intervention by Mexican president Felipe Calderón in 2006. Their goal was to measure the impact of matters of public security on presidential approval in a landscape of high salience for the issue. The study argues that when public security is highly salient, the president's responsibility increases in the eyes of the public. In this scenario, a daring political intervention, regardless of content and actual results, signals that the executive branch is "doing something" about public security, spurring a significant number of citizens to endorse the

president. From the three dimensions of security analyzed, support for political intervention was the most closely aligned with presidential approval. Sociotropic evaluations of public security and the economy were also considered and having personally been a victim of crime had little import on the assessment of presidential performance, especially in comparison with support for intervention and evaluation of economic performance.

Still concerning Mexico, Altamirano and Ley (2020) sought to identify the influence, on presidential campaigns, of three aspects that marked president Peña Nieto's mandate: limited economic growth, increased violence, and multiple corruption scandals. The findings confirmed the impact of the economy and public security on votes.

Mendez (2018) presents a study on the effect of violence on presidential approval, also in Mexico. By using a multilevel analysis, the author confirms the hypothesis that violence has a negative impact on presidential approval, while its effect is moderated by the economic state and geographical distribution of crime. When unemployment and inflation are low, violence becomes more relevant for presidential approval. In places with more crimes, the issue also tends to have a greater effect. Beside these ones, other studies had already established that evaluation of the president's performance in public security influenced presidential approval and voting on the incumbent in Mexico (Romero 2010; Ley 2017).

Still on Mexico, Ley (2017) discusses attribution of responsibility for urban violence and organized crime, which tends to be dispersed among various actors, possibly involving local and national entities. She seeks to understand whether voters blame governments for violence and if security concerns influence voting decisions. The research refers to municipal and presidential elections in the second half of president Felipe Calderón's term (2009-12). Evidence shows that voters who face increasing insecurity in regions where the local government is run by the same party as the president are more likely to incorporate evaluations of insecurity in their voting decisions.

Leaving aside Mexico as a specific case to look over all of Latin America, Berens and Dallendörfer (2019) compare voter behavior between people who have been victims of violent crime, who have been victimized by non-violent crime, and those who have not been victimized, in relation to adherence to the incumbent in presidential elections, also considering the latter's ideology. They concluded that victimization lessens the possibility of voting for a centrist incumbent in comparison with voting for the opposition, economic assessments being the same. This effect is weaker when the president is left-wing and is not significant when the incumbent is right-wing. By differentiating the effect of distinct degrees of violence, they find that non-violent victimization diminishes voting intention on centrist incumbents, an insignificant outcome in the case of violent crimes.

Pérez (2015) identifies that perceptions of insecurity are negatively related to voting for the incumbent in Latin America, even when economic performance variables are included. However, crime victimization did not affect support for the incumbent president or for hi their party in any of the eighteen countries analyzed in 2012. The author (2015) considers it possible that the effect of victimization on the incumbent's support is indirect and occurs through influence on turnout.

This article is a study on the impact of violence on presidential approval, like others concerning Mexico (; Romero et al. 2016; Ley 2017Doyle and García 2021; Altamirano and Ley 2020). It also addresses clarity of responsibility, just as Ley (2017) did, also in regard to Mexico. However, it involves not only one country but all Latin American countries, and in this it resembles Berens and Dallendörfer's (2019) work. Thus, we believe the article contributes to the academic field by helping to consolidate transnational studies on the effects of violence on presidential approval, and by aggregating discussion on clarity of responsibility, which is still seldom explored, using a multilevel analysis to do so, measuring the effect of institutions – on a macro level – on individual behavior among different countries.

We refer to the theoretical and methodological discussion presented by Loo and Grimes (2004). The authors pose that the elite – represented by the media, government leaders, and research institutes – intensified feelings of fear in the 1960s in the United States and claim that public opinion surveys did not correspond to reality. Loo and Grimes used the concept of moral panic, defined as a situation wherein the population's concern for a social problem is disproportional to its actual severity due to actions fomented by the state and the media.

The literature has resorted to both objective and subjective metrics of social security to address the discussion over reality and/or moral panic built by interested parties of the elite.

These two questions coincide with the dimensions that are normally analyzed in research on crime victimization, which aims to quantify the occurrence of criminal phenomena within a specific period of time by accounting for both reported and unreported incidents. These studies also include questions about general perceptions of violence, fear of crime, the criminal justice system, and the victims' sociodemographic characteristics (United Nations 2010).

Belief in the justice system and in the state's capacity to provide security is negatively affected by fear of crime, which creates public demand for more severe "Law and Order" policies, private security, and self-protection (McLaughlin 2019). Research on the fear of crime suggests that the relationship between the risk of victimization and fear of crime is not direct. Therefore, the evidence demonstrates that fear is not always directly related to objective crime rates, but mainly to broader issues tied to social and political structures (Hale 1996).

Consequently, fear of crime may be caused by direct experience, the secondary experiences of family and friends, pressure campaigns by representative groups of crime victims, politicians and police authorities using Law and Order rhetoric, news media heavily focused on certain types of crime, and alarmist campaigns against certain types of criminals (McLaughlin 2019).

This study examines both feelings of insecurity and crime victimization as explanatory variables.

## Clarity of Responsibility

Before we finish this theoretical review of elements to support our choice of variables and our hypotheses, we must present another aspect of economic voting: clarity of responsibility. This debate emerges from Paldam's (1991) findings that the economy's impact on voting (or government approval) is not consistent at different times and in different nations, which suggests that this inconsistency could result from institutional and political differences between countries. Powell and Whitten (1993) were the first to test the hypothesis that structural features act as a barrier to voters placing blame on the administration for their acts. Initially, clarity of responsibility is perceived as the political and institutional context in which the voter can identify who is responsible for economic performance. This concept arose from discussions on economic voting.

Scenarios where more political actors are responsible for elaborating and implementing public policies can decrease transparency in the political environment and cloud clarity of the president's responsibility (Powell and Whitten 1993; Anderson 2000; Ratto 2013; Silva and Whitten 2017). Conversely, there is more clarity of responsibility when there are fewer political actors involved in policy management (Silva and Whitten 2017).

Carlin, Love and Martinez-Gallardo (2015) relate this discussion to the issue of national security and argue that limitations in the use of clarity of responsibility in traditional approaches to economic voting assume that citizens believe that different actors share the responsibility over policies, which is not always the case. The authors exemplify situations when responsibility over a policy is centered on the national executive office, like national security, and they assume that the effect of the institutions on the assignment of responsibility is different in these cases. Even if the administration is shared between parties, the transfer of blame from the president to other political actors is less effective in this context.

As a way to measure clarity of responsibility, Carlin, Love, and Martinez-Gallardo (2015) use a metric proposed by Henisz (2010), which takes into account the size of the opposition party in congress, its ideological distance from that in the executive office, and the level of party fragmentation.

Their results demonstrate that when policies are centralized and government is shared (an indicator of low clarity of responsibility), it is harder for the government to blame the opposition for policy failure, and voters are more likely to punish the incumbent candidate through negative approval ratings or by voting in the opposition. Conversely, in the case of unified governments (high clarity of responsibility), the executive branch has greater control over the narrative and can blame the opposition for failure, which interferes with electoral accountability.

We believe that the greatest contribution of the afore mentioned study is its reflection on the relationship between the type of public policy, clarity of responsibility, and government approval. However, its operationalization of clarity of responsibility presents a limitation, as it seems to express the executive branch's power, rather than its responsibility over public policies and the level of transparency in the political environment.

We believe a more effective metric of clarity of responsibility acknowledges different public policies and should relate to the respective institutional arrangements established by the administration. Our analysis refers to the organization of *public security or crime-fighting* policies. We considered only Latin American countries (our focus of analysis), where constitutional assignment of responsibility for public security policies may be exclusive to the national government or shared. Accordingly, clarity of responsibility is highest when responsibility over public security is assigned solely to the national government, as it is a scenario that involves fewer political actors. When public security is shared with state governments and departments or with provinces and municipalities, clarity of responsibility is lower, as it is not possible to identify which sphere of power is responsible for the result.

Again, we apply the concept of clarity of responsibility only to the issue of public security in this paper, which is our contribution to the academic discussion. Thus, we do not intend to discuss clarity of responsibility with regard to the economy, which has already been established in the literature.

According to a survey of the institutional architecture of public security in Latin American countries conducted by the United Nations Development Programme (UNDP) and Brazil's National Secretariat of Public Security (SENASP) (2016), most countries in the region are unitary states, so a higher concentration of the responsibility over public security falls on the national state. In this case, the institutional organization of the police force is exclusive to national guards. However, there are two exceptions: Bolivia and Ecuador. Although they are unitary states, they also have municipal and provincial police. The federal states, Brazil, Argentina, Mexico and Venezuela, share public security responsibilities with state governments that have state police. Brazil, Venezuela and Mexico also have municipal or provincial police. Our construction of the clarity of responsibility variable focuses on the concentration of the constitu-

tionally assigned responsibility for public security, and also accounts for the police force's institutional organization.

Based on the review presented above, we aim to test the following hypotheses:

H1: Intense feelings of insecurity (subjective) and experiences of crime victimization (objective) have a negative impact on presidential approval.

H2: Based on findings by Perez (2018), feelings of insecurity are a stronger predictor of presidential approval than crime victimization.

H3: A higher clarity of responsibility over security policies magnifies the effects that crime victimization and feelings of insecurity have on presidential approval.

## III. DATA, METHODOLOGY, AND RESEARCH HYPOTHESES

To find the answers to our research questions, we used data from the 2016/2017 and 2018/2019 rounds of the Americas Barometer (LAPOP, 2017; LAPOP 2019), as they included specific questions about public security and government approval.

In Latin America, aggregated data on victimization and fear of crime are provided by opinion surveys such as Latinobarómetro and Americas Barometer (LAPOP). However, Lapop and Latinobarómetro feature different methodologies, as well as distinct ways of asking about fear of crime and victimization, which makes a general comparative analysis more difficult (Dammert and Tobar 2018). Despite the limitations of LAPOP in questions regarding fear of crime, it is still the most complete and broadly used survey among researchers, with time series and questions specifically tailored for the most violent countries, allowing for more depth in the analysis of violence and political aspects in Latin American nations.

As previously mentioned, our dependent variable is presidential approval, as measured by the following question in the LAPOP survey: "Speaking in general terms about the current administration, how would you rate the performance of President [name]? Very good, good, neither good nor bad, bad, very bad?" Due to the technical difficulties involved in adapting multilevel models to categorical dependent variables with multiple responses, we chose to dichotomize this variable, grouping the alternatives "very good" and "good" as "approve" and the others as "disapprove".

For the independent variables, we used both individual and national metrics. Among individuals, our main interest is related to security. As stated above, one of the main criticisms when studies along this line of research began to emerge in the United States was the lack of correspondence between actual crime rates and the feelings of insecurity demonstrated in opinion polls. As a way to subvert this criticism in reference to moral panic, we analyze the sub-

jective dimension (feelings of insecurity) as well as the objective experiences of those who had effectively been victims of a crime (crime victimization). We have also adopted a contextual variable to represent homicide rates in each country, as we shall later observe. In this study, feelings of insecurity are measured by the question: "Considering the place or neighborhood where you live and the possibility of falling victim to assault or robbery, do you feel very safe, safe, unsafe, or very unsafe?" We used a 4-point scale and recoded it as a dichotomous scale by joining the two first points as "Safe" and the other two as "Unsafe". Crime victimization is measured by the question: "Have you been a victim of any type of crime in the past 12 months? That is, have you been a victim of robbery, theft, assault, fraud, blackmail, extortion, violent threats, or any other type of crime in the past 12 months?" As the original metric already has a binomial distribution, we did not need to recode it.

For the contextual variables (level 2 = country), our main interest was to assess the effect of clarity of responsibility on government approval. In this sense, we searched for data on the institutional organization of public security in the countries under analysis.

The debate on clarity of responsibility is less common in the area of public security, which to a certain extent can be explained by the diversity of public actors involved in this field, the legacy of dictatorships and the impasses in these institutions during the transition between political regimes<sup>1</sup>, as well as by the influence of penal populism and the structural factors involved in the increase of violence.

To deal with the issue of clarity of responsibility, we considered it relevant to approach the institutional organization of police in Latin American countries, seeing as how police work relates to people's daily assessments of their safety. Citizen perception of justice in institutional procedures, in turn, could foster and increase trust in and legitimacy of police forces among citizens (Zanetic 2017).

In the Latin American context, lack of trust in police and in the criminal justice system would not be related only to their ineffectiveness, but also to the perception of arbitrariness and selectiveness in their operations (Dammert 2012).

Although the article is not dedicated to further understanding the policing models adopted by the countries or even how police work is evaluated in each one, we believe that discussing clarity of responsibility from the perspective of institutional organization and constitutional design<sup>2</sup> can contribute to deep-

In the Latin American context, Pinheiro (2000) noted that in spite of countries going through transitions, their governments' authoritarian practices remained, and "under democracy an authoritarian system prevails, especially embedded in state apparatuses for the control of violence and crime" (Pinheiro 2000).

The 1988 Brazilian Constitution contributed to an understanding of public security as distinct from national security. However, the systems of policing established in the constitution did not innovate in relation to what was done during the military dictatorship (Sapori et al, 2018).

ening connections between public security and political aspects, presidential approval in particular.

Therefore, using data taken from the National Constitution of each country and based on studies by the PNUD and SENASP (2016), we developed a metric that divides the countries between those that assign responsibility for public security exclusively to the national executive branch and those that share the responsibility with other government entities. We assume here that the countries with exclusive responsibility have higher clarity of responsibility in this area; therefore, it is easier for voters to rate the administration's performance. Finally, as a second metric for the context, we used homicide rates for the country. This can help measure the salience of the issue of public security in each country, and it allows us to observe crime in objective terms while keeping in mind criticisms of moral panic and penal populism. Mendez (2018) also used an objective metric at a macro level, the geographical distribution of crime, in his study about Mexico, finding statistically significant results.

Even though our main interest is specifically in these predictors, we cannot ignore other recurring variables in the literature about economic voting, especially those related to economic ratings. For this reason, we posed a question related to sociotropic retrospective voting: "Do you think the country's economic situation is better than, the same as, or worse than it was 12 months ago?" We recoded the original question so that "0" represents "worse" and "2" represents "better." We also included a similar metric at the individual level, which we obtained from the following question in LAPOP: "Do you think your economic situation is better than, the same as, or worse than it was 12 months ago?" We applied the same recodification.

As previously seen, studies show that political variables such as ideological identity and political party affinity can affect a voter's rating of the government's performance in the economy (Veiga and Ross 2016) and public security (Berens and Dallendörfer 2019). Therefore, they are the control variables. We also use sociodemographic information such as sex, age, education level, race, and residential region as control variables. We do not provide a detailed description of each of these control variables, but we have provided a complete list of them below (Table 1) with details on the recoding procedures.

Table 1. List of variables.

	Туре	Level	Codification
Presidential Approval	Dependent	Micro	Binary (1=Approve)
Sociotropic Retrospective Economic Voting	Independent	Micro	3-point scale (0-2)
Pocketbook Retrospective Economic Voting	Independent	Micro	3-point scale (0-2)
Feelings of insecurity	Independent	Micro	Binary (1=Unsafe)

	Туре	Level	Codification
Crime Victimization	Independent	Micro	Binary (1=Victim)
Sex	Control	Micro	Binary (1=Female)
Age Range	Control	Micro	5-point scale (1-5)
Education Level	Control	Micro	Binary (1=Higher education)
Ethnic Group	Control	Micro	Binary (1=White)
Residential region	Control	Micro	Binary (1=Urban)
Ideological Self-	Control	Micro	10-point scale (1=Left/10=Right)
positioning			
Responsibility	Independent	Macro	Binary (1= Exclusive National Respon-
			sibility)
Homicides	Independent	Macro	Homicide rate per 100,000 inhabitants

The appropriate statistical model for this data structure is the multilevel model for binary response variable, which determines the direct effects of individual and contextual explanatory variables. It also allows us to evaluate explanatory variables at a macro level as moderators of individual relations and observe whether there is variability in the impact of a predictor of interest in comparison to the others (Hox 2010).

This method is applied to hierarchical data structures, and it is useful in research involving the relationship between individuals and their collectives, assuming that people interact and are influenced by the groups or social contexts they belong to. This forms a hierarchical system (Raudenbush and Bryk 2002). A multilevel analysis approaches this system and clarifies the underlying effects within a certain group (or cluster) and among different groups (Hox 2010; Sommet and Morselli 2017).

For this purpose, the models are built so that the response variable is at the lowest level. In other words, we assume that a set of data exists with one single result or response variable that is measured at the first level and that it has explanatory variables at all other levels.

### IV. RESULTS AND DISCUSSION

Before we present the results of our hypotheses, we think it is important to disclose the descriptive information for the more directly relevant dependent variables and predictors at the individual and national level.<sup>3</sup>

To begin with the dependent variable, we noticed a low percentage of presidential approval, with an overall average of 34%, considering all the countries and years involved in the analysis.

The data for the two independent variables at the individual level indicate a very alarming scenario in the region considering that half of the citizens in

Details on the descriptive statistics presented over the next few paragraphs can be found in Table A of the Appendix.

Latin America (47.06 percent) stated that they feel unsafe, and approximately a quarter (24.85 percent) claimed they had been the victim of a crime in the past 12 months. The variation is also considerable: from 37.7 per cent (Honduras) to 62.7 per cent (Dominican Republic) in the first metric and from 17.7 per cent (Nicaragua) to 35.8 per cent (Peru) in the second. Although correspondence is not perfect, there is a strong connection between the relative positions of the countries in these two metrics. However, the relation is less clear when we include the homicide rate in this scenario. For example, we highlight the coherence of Chile's case, which has the lowest rate per 100,000 inhabitants (3.5) and is among the countries with lower percentages of insecurity (38.7) and a percentage of victimization that is below the overall percentage for the region. We see the opposite in the case of Honduras, which has the lowest percentage of insecurity and the second highest homicide rate.

Finally, the variable that distinguishes countries based on constitutional responsibility presents a prevalence of federal leadership, as only five cases (Argentina, Bolivia, Brazil, Ecuador, and Mexico) have shared responsibility. Since N constitutes two rounds per country, the final value is 10.

To assess whether multilevel modeling is feasible, we estimate a two-level null model, which is an equation with only one intercept and group effect that allows us to estimate the president's approval probabilities, without including the predictors. The fixed intercept is a general constant term, and is shared by all countries included in the sample, while the random effect is country-specific. The results in Table 2 indicate that the odds ratio of approval in an "average" country is .57. The odds ratio variance between countries is 1.77, and to find out if this difference is statistically significant, we conducted an odds ratio test to rule out the hypothesis that this variability is equal to 0. In this procedure, the null model is compared with its individual level equivalent, that is, without the random effects of the countries, whose result of the "log-lik" line presented the value of -2769.85, much higher than what would indicate the nonexistence of variability. The bottom of the table, which compares adjustments of the model with and without variation among the national units, also reinforces this position as it shows a significant difference at a very demanding level (0.000).

Table 2. Null Model for Presidential Approval, Latin America, 2016-2018.

	Variance (standard deviation)				
Country(B)	0.5706 (0.7554)				
Exp(B)	1.77				
	ANOVA				
	AIC	Ratio logLik	Rho		
Simple Model	68336				
Model with variation in countries	62798	-2769.847	0.000		
N		53206			
Countries		34			

Source: LAPOP, 2016-2018.

In the Caterpillar chart below, composed of the residuals and with bars representing the respective confidence intervals around each estimate, we note that there is considerable variation, since the effects are mostly below or above the confidence interval. In a model like the one used here, it is assumed that there is a hierarchical dataset, with an outcome or response variable that is measured at the lowest level, and explanatory variables at all existing levels (Hox 2010). Thus, after observing the existence of this effect at the country level, we sought to test the micro-level predictors, that is, we sought to identify individual-level factors linked to presidential approval.

As we confirmed the relevance of multilevel modeling, we present the results of six different models in Table 3 and Figures 1 and 2. We decided to split the two main independent metrics at the individual level<sup>4</sup>, so the first model (Mod.1) includes the metric of crime victimization, the two economic rating variables, and the control variables as predictors.<sup>5</sup> The second model (Mod.2) replaces victimization with the subjective metric of feelings of insecurity, while the other predictors remain the same. The following two models (Mod.3 and Mod.4) follow the same logic but include two national-level variables. Finally, the last two models (Mod.5 and Mod.6) present cross-level interactions between the two main individual variables and the assignment of responsibility metric.<sup>6</sup> For all models in each row, the B coefficients are presented, followed by their respective values exponentiated between braces.<sup>7</sup>

<sup>&</sup>lt;sup>4</sup> Alternative models with both predictors can be found in Table B of the Appendix, and the effects change minimally with reciprocal control.

The income variable was not included due to the high number of missing data and its correlation with education, the latter being kept as a control.

To investigate the occurrence of multicollinearity among the individual-level predictors, we estimated a linear model with the original 5-point scale of the dependent measure. The results indicates that there is no serious problem between the predictors. The smallest tolerance involves the two evaluations of the economy, as expected, but even so, 80% of the variability of the sociotropic one and 78% of the egotropic one do not depend on the other predictors included in the model. This is reflected in the much lower condition index (14.37) than what the literature points out as a critical value (30.0). Details can be found in Table C of the Appendix.

Alternative linear models, having presidential approval as the dependent variable on its original 5-point scale, can be consulted in Table D of the Appendix. The results are compatible with the logistic models.

Figure 1. Variation of conditional modes for presidential approval, Latin America, 2016-2018.

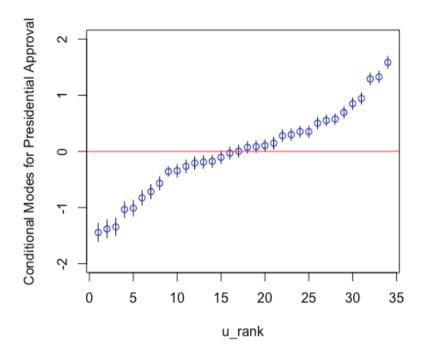


Table 3. Model with individual and national variables and interactions, Latin America, 2018

Predictors	Mod.1	Mod.2	Mod.3	Mod.4	Mod. 5	Mod.6	
		B[Exp(B)] (Std.Error)					
Intercept	-1.82[,16]*** (.13)	-1.72[.18]*** (.13)	-1.80[.16]*** (.25)	-1.69[.18]*** (.25)	-1.81[.16]*** (.25)	-1.75[17]*** (.25)	
Crime Victimization	14[.87]*** (.03)	-	-0.12[.87]** (.04)	-	08[.93] (.05)	-	
Feelings of Insecurity	-	27[.76]*** (.03)	-	27[.76]*** (.03)	-	16[.85]*** (.04)	
Sociotropic Economic Voting	.8[2.22]*** (.02)	.79[2.21]*** (.02)	.8[2.22]*** (.02)	.79[2.21]*** (.02)	.8[2.22]*** (.02)	.79[2.21]*** (.02)	
Pocketbook Economic Voting	.25[1.29]*** (.02)	.24[1.28]*** (.02)	.25[1.29]*** (.02)	.24[1.28]*** (.02)	.25[1.29]*** (.02)	.24[1.28]*** (.02)	
Sex (Woman)	.06[1.06]* (.02)	.08[1.09]*** (.02)	.06[1.06]* (.02)	.08[1.09]*** (.02)	.05[1.06]*** (.02)	.08[1.09]*** (.02)	
Age Range	.16[1.17]*** (.01)	.17[1.18]*** (.01)	.16[1.17]*** (.01)	.17[1.18]*** (.01)	.16[1.17]*** (.01)	.17[1.18]*** (.01)	
Education Level (Higher)	10[.9]** (.03)	-0.13[.88]*** (.03)	-0.1[.9]*** (.03)	-0.13[.88]*** (.03)	10[.9]** (.03)	-0.13[.88]*** (.03)	

- ·						
Predictors	Mod.1	Mod.2	Mod.3	Mod.4	Mod. 5	Mod.6
Ethnic Group	.1[1.1]**	.11[1.11]**	.11[1.1]***	.11[1.11]**	.1[1.1]**	.11[1.11]**
(White)	(.03)	(.03)	(.03)	(.03)	(.03)	(.03)
Residential region (Urban)	16[.85]*** (.03)	-0.16[.85]*** (0.03)	-0.16[.85]*** (.03)	-0.16[.85]*** (0.01)	16[.85]*** (.03)	-0.16[.85]*** (.03)
Ideological	.04[1.04]***	0.04[1.04]***	.04[1.04]***	.04[1.04]***	.04[1.04]***	.04[1.04]***
Self-	(.00)	(0.00)	(.00)	(.00)	(.00)	(0.00)
positioning	(.00)	(0.00)	(.00)	(.00)	(.00)	(0.00)
Homicide			.00[1]	.00[1.0]	.00[1]	0.00[1]
Rate	-	-	(.01)	(.01)	(.01)	(.01)
			1[.9]	1[.89]	08[.92]	04[.96]
Responsibility	-	-	(.27)	(.27)	(.27)	(.27)
Crime			( )	()	(****)	()
Victimization:	_	_	_	_	09[.91]	_
Responsibility	_	_	_	_	(.06)	_
1 ,						17[05]**
Insecurity:	-	-	-	-	-	16[.85]**
Responsibility						(.05)
N countries			3	4		
Observations	42243	41898	42243	41898	42243	41898
AIC	45870.2	45328.8	45873.9	45332.5	45873.3	45325.4
BIC	45965.4	45423.9	45986.4	45444.9	45994.5	45446.4

<sup>•</sup> p<0.1 \* p<0.05 \*\* p<0.01 \*\*\* p<0.001

Source: LAPOP, 2018.

The first two models evidence the relevance of this dimension of public policies in presidential approval in the Latin American context, thus confirming our first hypothesis. They also indicate that feelings of insecurity are slightly more important, reducing the probability of the president's approval by 24%, versus a 13% reduction caused by victimization, which confirms our second hypothesis. Figures 2 and 3 present the predicted values for points 0 and 1 of these two predictors, displaying on the y-axis the percentage increase in approval probability. While an individual who feels insecure has a 28% chance of approving the president, another who feels secure has approximately a 34% chance, this being controlled for the effects of all other model predictors. Victim status, in turn, generates a probability of 29%, against 32% predicted for a non-victimized individual. Therefore, the results reinforce previous findings on the relevance of violence in the declining trust in political institutions in general, considering its effects on presidential approval. Accordingly, the results reinforce the abovementioned reports that public security affects presidential approval (Mendez 2018; Perez 2018) and that feelings of insecurity have a greater impact on presidential approval than crime victimization.

Figure 2. Predicted probabilities of presidential approval by feelings of insecurity, Latin America, 2016-2018.

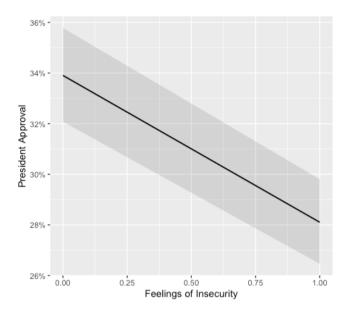
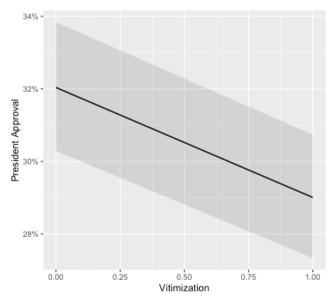


Figure 3. Predicted probabilities of presidential approval by victimization, Latin America, 2016-2018.



This last aspect can also be observed in the importance that public security issues have assumed in elections, especially concerning changes in crime control and the emergence of penal populism (Garland 2008). It is important to highlight that the crime victim's concrete experience also influences approval,

which is significant as this variable considers crimes that occurred within the last 12 months and does not contemplate indirect experiences of crime victimization of family and friends.

Although this effect may seem smaller, we note that the equations include the two economic rating metrics which the literature on economic voting has already agreed upon. Mendez's study (2018) demonstrated the relationship between the economic situation and the influence of violence on presidential approval in Mexico. The effects of the two variables in relation to the national economic situation were confirmed once again as they presented increases in the probability of presidential approval of 122% and 29%, respectively. Moreover, all the predictors were relevant.

As for our analysis of the relationship between the contextual dimension (clarity of responsibility and homicide rate) and government approval, models 3 and 4 indicate that the national homicide rate and assignment of responsibility do not directly affect approval, and their inclusion does not significantly alter the effects of the individual-level predictors.

The homicide rate may not have had an effect as a result of its high level of aggregation, as there are significant differences between regions, states, and municipalities of the same country, which might by considerably diluted in the national homicide rate. For example, from 2006 to 2016, while seven Brazilian states reduced their homicide rates, the homicide rate increased by 50 to 100 percent in other eight states.<sup>8</sup> Also, other variables related to crime, such as robberies and theft, may have greater influence.

As for the clarity of responsibility variable, we did expect some form of direct association between the variables.

Despite these results, we developed the last two models using cross-level interactions to test our third hypothesis, which suggests that assignment of responsibility for security policies could moderate or magnify the effects of crime victimization and feelings of insecurity. The results confirmed our hypothesis, as the national-level variable for clarity of responsibility increases the negative effect of feelings of insecurity by 15%. The interaction involving the victimization measure did not reach the required level of statistical significance.

The contextual variable in reference to clarity of responsibility magnifies the effects of feelings of insecurity and contribute to the decline in presidential approval. Therefore, clarity of responsibility for public policies alone does not affect presidential approval, but it does when it interacts with feelings of insecurity, as was expected given the literature and theoretical framework. It is a moderating variable.

<sup>8</sup> According to the 2018 Atlas of Violence.

### V. CONCLUSIONS

This study affirms that feelings of insecurity and crime victimization have a significant and negative impact on presidential approval in Latin America. Feelings of insecurity have a more substantial effect on approval than crime victimization, thus confirming our first and second hypotheses and reinforcing Perez's (2015) findings.

We also observed that when responsibility for public policies is exclusive to the national government, feelings of insecurity and crime victimization have a stronger effect on presidential approval than in contexts where this responsibility is shared. This confirms our third hypothesis and the theory on the effect of clarity of responsibility proposed by Powell and Witten (1993).

For research in Latin America, this paper's contribution is in its exploration of the consequences of one of the three main concerns of the Latin American population in their approval of the president – public security.

This study contributes to research on electoral behavior in two ways. First, it expands our understanding of retrospective economic voting from a multidimensional perspective for public security policies, an area which has been explored little. It considers the issue of public security in retrospective voting, which is much needed in Latin America. Its second contribution pertains to testing and confirming the clarity of responsibility theory in other areas other than the economy. This study demonstrated that institutional arrangements affected the relationship between feelings of insecurity and crime victimization on one side and presidential approval on the other.

For public security analyses, this paper determined that homicide rates, a contextual variable, did not have a direct or moderating effect on presidential approval. Finally, it emphasizes the relevance of feelings of insecurity as a stronger predictor of presidential approval than crime victimization. In other words, our findings do not refute criticisms of moral panic.

While this paper may provide answers, it also raises new questions. In the case of shared responsibility over public security, which entity is affected more by feelings of insecurity and crime victimization? What determines feelings of insecurity? We believe that there is a very strong agenda to be pushed for public security and electoral behavior research in Latin America today.

### REFERENCES

Altamirano, Melina and Sandra Ley. 2020. "The Economy, Security, and Corruption in the 2018 Presidential Election. Campaign Issues and Electoral Preferences in Mexico", *Política y Gobierno* 27(2): 1–39.

Anderson, Christopher. 2000. "Economic Voting and Political Context: A Comparative Perspective". *Electoral Studies*, v. 19, p. 151-170.

- Bateson, Regina. 2012. "Crime Victimization and Political Participation". American Political Science Review 106(3): 570–587.
- Blanco, Luísa. 2013. "The Impact of Crime on Trust in Institutions in Mexico". European Journal of Political Economy 32: 38–55.
- Blattman, Christopher. 2009. "From Violence to Voting: War and Political Participation in Uganda". American Political Science Review 103(2): 231–247.
- Berens, Sara and Mirko Dallendörfer. 2019. "Apathy or Anger? How Crime Experience Affects Individual Vote Intention in Latin America and the Caribbean". *Political Studies* 67(4): 1010–1033.
- Booth, John and Mitchell Seligson. 2009. *The Legitimacy Puzzle in Latin America*. Cambridge: Cambridge University Press.
- Brooks, Sarah. 2014. "Insecure Democracy: Risk and Political Participation in Brazil". *The Journal of Politics* 76 (4): 972–985.
- Carlin, Ryan, Gregory Love and Cecilia Martinez-Gallardo. 2015. "Security, Clarity of Responsibility, and Presidential Approval". *Comparative Political Studies*, Vol 48(4): 438-463.
- Carreras, Miguel. 2013. "The Impact of Criminal Violence on Regime Legitimacy in Latin America". Latin American Research Review 48 (3): 85–107.
- Dammert, Lucia. 2012. Fear and Crime in Latin America: Redefining State-Society Relations. New York: Routledge.
- Dammert, Lucia and Felipe Salazar Tobar. 2018." Fear and Insecurity in Latin America". In *The Routledge Handbook on Fear of Crime*, edited by M. Lee and G. Mythen. New York: Routledge.
- Doyle, David and Ana Isabel López García 2021. "Crime, remittances, and presidential approval in Mexico". *Journal of Ethnic and Migration Studies*, 47:6, 1395-1413, DOI: 10.1080/1369183X.2019.1623325
- Duch, Raymond, and Randolph Stevenson. 2010. *The Economic Vote: How Political and Economic Institutions Condition Elections Results*. New York: Cambridge University Press. 418p
- Fernandez, Kenneth and Michele Kuenzi. 2010. "Crime and Support for Democracy in Africa and Latin America". *Political Studies* 58(3): 450–471.
- Garland, David. 2008. A Cultura do Controle. Rio da Janeiro: Revan.
- Hale Chris. 1996. "Fear of Crime: A Review of the Literature". *International Review of Victimology*4 (2):79–150.
- Henisz, Witold. 2010. *Political Constraints Database*. Available at: https://mgmt.wharton.upenn.edu/faculty/heniszpolcon/polcondataset/
- Holland, Alisha 2013. "Right on Crime? Conservative Party Politics and Mano Dura Policy in El Salvador". *Latin American Research Review* 48(1): 44–67.
- Hox Joop. 2010. Multilevel Analysis: Techniques and Applications. New York: Routledge.
- Kiewiet, Roderick. 1983. *Macroeconomics & Micropolitics*. Chicago: The University of Chicago
  Press
- Lapop Latin American Public Opinion Project. Barómetro de las Américas, 2016-2017. Available at: <a href="https://www.vanderbilt.edu/lapop/">https://www.vanderbilt.edu/lapop/</a>.
- Latinobarometro. 2018. *Informe Latinobarometro*. Santiago, Chile. Available at: http://www.latinobarometro.org/latNewsShowMore.jsp?evYEAR=2018&evMONTH=-1
- Ley, Sandra. 2017. " Electoral Accountability in the Midst of Criminal Violence: Evidence From Mexico". Latin American Politics and Society 59(1): 3–27.
- Lewis-Beck, Michael and Mary Stegmaier. 2008. "Economic Models of Voting". In *The Oxford Handbook of Political Behavior*, edited by R Dalton and H Klingemann. Oxford: Oxford University Press, p. 518-538.
- Lewis-Beck, Michael and Mary Stegmaier. 2013. "The VP-Function Revisited: A Survey of the Literature on Vote and Popularity Functions After Over 40 Years". *Public Choice* 157(3-4): 367–385.
- Loo, Dennis and Ruth-Ellen Grimes. 2004. "Polls Politics, and Crime: The "Law and Order" Issue of the 1960s". Western Criminology Review 5(1): 50-67.

- Malone, Mary. 2012. "Does Crime Undermine Public Support for Democracy? Findings From the Case of Mexico". *The Latin Americanist* 17–44.
- Marcus, George and Michael MacKuen. 1993. "Anxiety, Enthusiasm, and the Vote: The Emotional Underpinnings of Learning and Involvement During Presidential Campaigns". American Political Science Review 87(3): 672–685.
- McLaughlin, Eugene. 2019. "Fear of Crime". In *The Sage Dictionary of Criminology*, edited by Eugene McLaughlin and John Muncie, 4th ed. Los Angeles: SAGE. P.118-119.
- Mendez, Luigi. 2018. "The Effects of Criminal Violence on Executive Approval: Aggregate and Individual-Level Analyses of Public Opinion in México". Tese defendida na Universidade de Carolina do Norte Chapel Hill.
- Mendez, Luigi Antonio. 2018. The Effects of Criminal Violence on Executive Approval: Aggregate and Individual-level Analyses of Public Opinion in Mexico. A thesis submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Political Science (Comparative Politics). Chapel Hill, 57p.
- Paldam, Martin. 1991. "How robust is the vote function? A study of seventeen nations over four decades". In *Economics and Politics: The Calculus of Support*, edited by H Norpoth, M.S. Lewis -Beck and J.D. Lafay. P. 9-31. Ann Arbor: University of Michigan Press.
- Pérez, Orlando. 2003. "Democratic Legitimacy and Public Insecurity: Crime and Democracy in El Salvador and Guatemala". *Political Science Quarterly* 118(4): 627–644.
- Perez, Orlando. 2015. "The Impact of Crime on Voter Choice in Latin America". In *The Latin American Voter: Pursuing Representation and Accountability in Challenging Contexts*, edited by Ryan Carlin, Matthew Singer, M.; Zechmeister, p. 324–45. Michigan: University of Michigan Press.
- Pinheiro, Paulo. 2000 "Introdução: O Estado de Direito e os Não-Privilegiados na América Latina". In *Democracia, Violência e Injustiça: O Não-Estado de Direito na América Latina,* edited by J. B. Méndez, G. O'Donnell, P.S. Pinheiro. São Paulo: Editora Paz e Terra.
- Powell, Bingham and Guy Whitten. 1993. "A Cross-National Analysis of Economic Voting: Taking Account of the Political Context". *American Journal of Political Science* 37 (2): 391–414.
- Ratto María Celeste. 2013. "Accountability y Voto Económico en América Latina: Un Estudio de las Pautas de Comportamento Eleitoral Entre 1996-2004". Revista Mexicana de Análisis Político y Administración Pública 2(1) 49.
- Raudenbush, Stephen and Anthony Bryk. 2002. *Hierarchical Linear Models*. Los Angeles: SAGE.
- Romero, Vidal; Beatriz Magaloni and Alberto Díaz-Cayeros. 2016. "Presidential Approval and Public Security in Mexico's War on Crime". Latin American Politics and Society 58(2): 100–123.
- Sapori, Luis; Cleber Lopes; André Zanetic e Gláucio Soares. 2018. "A Segurança Pública no Brasil a partir da Constituição Federal de 1988". In *A Constituição de 88 trinta anos depois*, edited by Cristina Buarque, Luciana F. Veiga e Oswaldo Amaral. Curitiba: UFPR,
- Shea, Evelyn. 2009. "Elections and the Fear of Crime: The Case of France and Italy", European Journal on Criminal Policy and Research 15(1):83-102.
- Silva, Thiago and Guy Whitten. 2017. "Clarity of Responsibility and Vote Choice". In *The SAGE Handbook of Electoral Behavior*, edited by K. ArzheimerJ. Evans and M. S. Lewis-Beck. (Vol. 1, pp. 80-91). 55 City Road, London: SAGE Publications.
- Silva, Gabriela e Ednaldo Ribeiro. 2016. "Confiança nas Instituições Democráticas e Vitimização por Crime: Qual a Relação?" Revista de Sociologia e Política 24(58): 59–84.
- Sommet, Nicolas and Davide Morselli. 2017. "Keep Calm and Learn Multilevel Logistic Modeling: A Simplified Three-Step Procedure Using Stata, R, Mplus, and SPSS". International Review of Social Psychology 30(1): 203-218.
- Sniderman, Paul and Matthew Levendusky. 2008. "An Institutional Theory of Political Choice". In *The Oxford Handbook of Political Behavior*, edited by Dalton and Klingemann. Oxford: Oxford University Press, p. 437-457.

- Stegmaier, M., Lewis-Beck, M., & Park, B. (2017). The vp-function: a review. In M. StegmaierM. Lewis-Beck, & B. Park The VP-Function: A Review (Vol. 2, pp. 584-605). SAGE Publications Ltd, https://dx.doi.org/10.4135/9781473957978
- Trelles, Alejandro and Miguel Carreras. 2012. "Bullets and Votes: Violence and Electoral Participation in Mexico". *Journal of Politics in Latin America* 4 (2): 89–123.
- United Nations. 2010. "Manual on Victimization Surveys." Geneva: United Nations. Available at: https://digitallibrary.un.org/record/682739
- Valente, Riccardo and Mattia Vacchiano. 2020. "Determinants of the Fear of Crime in Argentina and Brazil: A Cross-Country Comparison of Non-Criminal and Environmental Factors Affecting Feelings of Insecurity". Social Indicators Research, 154 (6), p. 1–15.
- Veiga Luciana and Steven Ross. 2016. "Os Determinantes da Avaliação da Economia na Eleição Presidencial Brasileira em 2014". *Opinião Pública* 22(3): 524-549.
- Visconti, Giancarlo. 2020. Policy Preferences after Crime Victimization: Panel and Survey Evidence from Latin America. *British Journal of Political Science* 50(4): 1481-1495.
- PNUD, Programa das Nações Unidas para o Desenvolvimento, and Secretaria Nacional de Segurança Pública do Ministério da Justiça e Cidadania– SENASP. 2016. Pensando a Segurança Pública Edição CONSEG (Edital nº 2/2015). Análise comparativa da arquitetura organizacional da área de Segurança Pública. Fórum Brasileiro de Segurança Pública Carta de Acordo nº 33926. São Paulo, p. 154. Report available at: https://dspace.mj.gov.br/bitstream/1/3385/1/52analise-comparativa-da-arquitetura-organizacional-da-area-de-seguranca-publica.pdf
- Zanetic, André. 2017. Ação Institucional, Confiança na Polícia e Legitimidade em São Paulo. Revista Brasileira de Ciências Sociais 32(95) 1-19.

Received: 8 Febraury 2022 Accepted: 18 november 2022

**Luciana Fernandes Veiga.** Holds a Masters and PhD in Political Science from the University Research Institute of the State of Rio de Janeiro - IUPERJ. Professor of the Department of Political Studies i at the Federal University of the State of Rio de Janeiro - UNIRIO. President of the Brazilian Association of Political Science – ABCP (2020-2022). Her areas of research interests are: Electoral Behavior, public opinion, and political communication E-mail: luciana.veiga@unirio.br

**Ednaldo Aparecido Ribeiro.** Political Science professor at the Department of Social Sciences at the State University of Maringa and at the Postgraduate Program in Political Science at the Federal University of Paraná. PhD in Sociology and researcher in the area of political behavior, with projects on political participation and political tolerance. Email: ednaldorip@gmail.com

**Julian Borba** is PHD in Political Science from Federal University of Rio Grande do Sul (UFRGS, Brazil) Professor in the Department of Sociology and Political Science at the Federal University of Santa Catarina (UFSC, Brazil). Research Interest: Public Opinion and Political Behavior. Email: borbajulian@yahoo.com.br

Gabriela Ribeiro Cardoso is PhD in Sociology and Political Science from University of Santa Catarina (UFSC, Brazil). Her doctoral research analysed the relation between victimization, fear of crime and democratic legitimacy in Latin America. Research Interest: Democratic Legitimacy, Fear of Crime and Political Behavior. Email: grcgabi@gmail.com

The authors are very grateful to the National Council for Scientific and Technological Development (CNPq) for funding the research of this article. Luciana Veiga, Ednaldo Ribeiro and Julian Borba receive Research Productivity Fellowship and Gabriela Cardoso received a PhD scholarship, all of them from CNPq. The authors would also like to thank the anonymous reviewers for invaluable comments on earlier versions of this paper.

## **APPENDIX**

Table A. Descriptive statistics for the variables by Latin American country

Argentina Panama Guatemala Costa Rica	2016 2018 2016 2018 2016 2018 2016 2018 2016 2018 2016 2018	28.48 14.8 19.95 10.05 28.12 17.3 14.49 26.93 44.41 34.12 55.41	45.82 45.26 67.15 32.84 48.74 52.47 32.13 45.19 42.74 37.71	25.6 31.11 15.99 21.50 23.83 20.36 22.14 22.2 21.63	0 0 1 1 1 1 1	6.03 5.32 10.03 9.39 27.26 22.5 11.80 11.26
Panama Guatemala	2016 2018 2016 2018 2016 2018 2016 2018 2016	19.95 10.05 28.12 17.3 14.49 26.93 44.41 34.12	67.15 32.84 48.74 52.47 32.13 45.19 42.74	15.99 21.50 23.83 20.36 22.14 22.2	1 1 1 1	10.03 9.39 27.26 22.5 11.80
Guatemala	2018 2016 2018 2016 2018 2016 2016 2018 2016	10.05 28.12 17.3 14.49 26.93 44.41 34.12	32.84 48.74 52.47 32.13 45.19 42.74	21.50 23.83 20.36 22.14 22.2	1 1 1 1	9.39 27.26 22.5 11.80
Guatemala	2016 2018 2016 2018 2016 2018 2016	28.12 17.3 14.49 26.93 44.41 34.12	48.74 52.47 32.13 45.19 42.74	23.83 20.36 22.14 22.2	1 1 1	27.26 22.5 11.80
	2018 2016 2018 2016 2018 2016	17.3 14.49 26.93 44.41 34.12	52.47 32.13 45.19 42.74	20.36 22.14 22.2	1	22.5 11.80
	2016 2018 2016 2018 2016	14.49 26.93 44.41 34.12	32.13 45.19 42.74	22.14 22.2	1	11.80
Costa Rica	2018 2016 2018 2016	26.93 44.41 34.12	45.19 42.74	22.2		
Costa Rica	2016 2018 2016	44.41 34.12	42.74		1	11.26
	2018 2016	34.12		21.63		
TT 1	2016	-	27 71	41.00	1	55.44
Honduras		55.41	37./1	19.43	1	38.93
T 1	2018	00.11	47.62	30.35	0	5.84
Ecuador		30.22	55.70	28.80	0	5.80
E1.0.11	2016	31.84	37.11	23.22	1	83.01
El Salvador	2018	32.57	45.52	20.64	1	52.02
Nicaragua	2016	64.64	25.71	18.34	1	7.19
	2018	34.45	41.51	17.72	1	7.19*
C1 '1	2016	21.4	35.14	22.4	1	3.36
Chile	2018	28.75	38.70	23.96	1	4.40
TT	2016	39.42	43.44	23.48	1	7.83
Uruguay	2018	34.83	47.65	20.30	1	12.06
C 1 1:	2016	25.42	49.42	25.10	1	25.74
Colombia	2018	40.69	51.76	23.77	1	25.34
Dominican	2016	63.81	61.20	25.97	1	15.54
Republic	2018	40.71	62.70	25.53	1	10.05
D	2016	25.18	55.08	30.97	1	7.87
Peru	2018	38.96	61.88	35.79	1	7.91**
D 1: :	2016	45.63	53.26	28.77	0	6.22
Bolivia	2018	46.24	58.58	28.23	0	6.22*
Dama outs	2016	35.81	49.41	23.70	1	9.87
Paraguay	2018	49.19	45.44	22	1	7.14
Brazil	2016	10.64	51.54	23.9	0	29.88
DraZII	2018	53.1	45.82	19.06	0	27.38
Marrian	2016	11	43.61	31.88	0	19.91
Mexico	2018	70.35	55.63	32.93	0	29.07
Latin America		34.17	47.06	24.85	-	17.83

Source: Lapop, 2016/2017 and United Nations Office on Drugs and Crime.

Notes: \*Due to the lack of data for 2018, the data from 2016 was repeated for Bolivia and Nicaragua. \*\* In the case of Peru, we used data from 2017. \*\*\* Information collected from the countries' constitutions and the study by UNDP and SENASP (2016).

Table B. Model with simultaneous inclusion of main predictors

Predictors	Level 1	Complete
Intercent	1.70[.18]***	-1.67***
Intercept	(.13)	(.25)
Crime Victimization	09[.91]***	09***
Cline victimization	(.03)	(.03)
Feelings of Insecurity	26[.77]***	26***
rectings of insecurity	(.13)09[.91]*** (.03)26[.77]*** (.02) .79[2.21]*** (.02) .24[1.27]*** (.02) .08[1.08]*** (.02) .16[1.18]*** (.01)12[.89]*** (.03) .10[1.11]*** (.03)15[.86]*** (.03) .04[1.04]*** (.00)	(.02)
Sociotropic Economic Voting		.79***
Sociotropic Economic voting	(.02)	(.02)
Egotropic Economic Voting	.24[1.27]***	.24***
Egotropic Economic voting	` ,	(.02)
Sex (Female)		.08***
Sex (Ferrale)	(.02) .08[1.08]*** (.02) .16[1.18]*** (.01)12[.89]*** (.03) .10[1.11]*** (.03)15[.86]***	(.02)
Age Range	2 2	.16***
rige Range	(.01)	(.01)
Education Level (Higher)		12***
Education Eever (Figure)	` '	(.03)
Ethnic Group (White)		.10***
Etitile Group (Wille)	` '	(.03)
Residential region (Urban)		16***
Residential region (Orban)	(.03)	(.03)
Ideological Self-positioning		.04***
racological sen positioning	(.00.)	(.00)
Homicide Rate	_	0.00
Tomiciae Rate		(0.01)
Responsibility	_	-0.11
Responsibility	_	(,27)
N countries 34		
Observations	41867	41867
AIC	45290.8	45294.5
BIC	45394.5	45415.5

Table C. Collinearity Dignostics

	Tolerance	VIF
Crime Victimization	0,95	1,05
Feelings of Insecurity	0,95	1,06
Sociotropic Economic Voting	0,80	1,25
Pocketbook Economic Voting	0,78	1,28
Sex (Woman)	0,98	1,02
Age Range	0,94	1,06
Education Level (Higher)	0,98	1,02
Ethnic Group (White)	0,98	1,02
Residential region (Urban)	0,97	1,03
Ideological Self-positioning	0,98	1,1
Condition Index	14,3	37

Table D. Linear models with individual and national variables and interactions, Latin America, 2018

Predictors	Mod.1	Mod.2	Mod.3	Mod.4	Mod. 5	Mod.6
Intercept	1.59***	1.63***	1.59***	1.63***	1.58***	1.61***
ппетсері	(0.07)	(0.07)	(0.13)	(0.07)	(0.13)	(0.13)
Crime Victimization	-0.11***	_	-0.11***	_	-0.07***	_
Crime victimization	(0.01)	_	(0.01)	_	(0.02)	_
Feelings of Insecurity	_	-0.13***	_	-0.13***	_	-0.08***
reemigs of misecurity		(0.01)		(0.01)		(0.02)
Sociotropic Economic Voting	0.42***	0.41***	0.42***	0.41***	0.42***	0.41***
Sociotropic Economic voting	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Pocketbook Economic	0.16***	0.15***	0.16***	0.15***	0.16***	0.15***
Voting	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Sex (Woman)	0.05***	0.06***	0.05***	0.06***	0.05***	0.06***
Sex (Wollian)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Age Range	0.06***	0.06***	0.06***	0.06***	0.06***	0.06***
Age Range	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)
Education Level (Higher)	-0.09***	-0.11***	-0.09***	-0.11***	-0.09***	-0.11***
Eddedion Eever (Higher)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Ethnic Group (White)	0.03**	0.04**	0.03**	0.04**	0.03**	0.04**
Etitile Gloup (Wille)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Residential region (Urban)	-0.12***	-0.12***	-0.12***	-0.12***	-0.12***	-0.12***
Residential region (Orban)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Ideological Self-positioning	0.02***	0.02***	0.02***	0.02***	0.02***	0.02***
racological Sell positioning	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Homicide Rate	_	_	0.00	0.00	0.00	0.00
Homelac Rate			(0.00)	(0.00)	(0.00)	(0.00)
Responsibility	_	_	0.00	-0.00	0.02	0.03
Responsibility			(0.14)	(0.14)	(0.14)	(0.14)
Crime Victimization:	_	_	_	_	-0.05*	_
Responsibility					(0.02)	
Insecurity: Responsibility	_	_	_	_	_	-0.07***
insecurity. Responsibility						(0.02)
N countries			3	4		
Observations	42243	41898	42243	41898	42243	41898
AIC	56160,7	115918.8	117025.2	115934.3	117028.8	115931
BIC	56255,65	116022.5	117146.3	116055.3	117158.5	116060.6

<sup>•</sup> *p*<0.1 \* *p*<0.05 \*\* *p*<0.01 \*\*\* *p*<0.001 Source: LAPOP, 2018.