

Who pays for crime? Criminal violence, right-wing incumbents, and electoral accountability in Latin America[☆]

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ABSTRACT

Are right-wing incumbents punished for failures in public security? Partisan accountability models predict greater sanctions for politicians who fail to deliver on issues they “own.” According to this logic, right-wing incumbents should suffer more from crime spikes. Contrary to this expectation, we show that right-wing governments are not always punished for sudden increases in crime just before an election. We take advantage of rich local crime data in Chile and Mexico to identify places that experienced a crime shock, and use a difference-in-differences design to illustrate the heterogeneous electoral effects of public security failures. We also provide survey evidence from 18 Latin American countries to improve the external validity of the main findings. We hold that right-wing incumbents’ greater electoral resilience to crime spikes could be explained by voters attributing security failures to exogenous factors or by voters still perceiving left-wing and centrist challengers as less competent at addressing crime.

1. Introduction

A significant part of the literature on retrospective voting has assumed that voters will always sanction incumbents for poor performance (Ferejohn 1986). Other studies similarly suggest that voters will channel their anger and frustration by blaming the government even for negative events beyond incumbent control (Achen and Bartels 2016). Both of these arguments, however, fail to take into account the role of issue ownership. Crime, as previous studies have shown, is a problem traditionally “owned” by right-wing parties (Cohen and Smith 2016). How, then, does issue ownership affect the electoral consequences of policy failures around public security?

Partisan accountability arguments expect voters to judge incumbents more harshly if they fail to deliver on an issue they “own” (Powell and Whitten 1993). If this is the case, right-wing incumbents should be punished more severely for public security failures. However, there are good reasons to expect the opposite. For instance, voters might be less likely to blame an incumbent right-wing government for a spike in crime since performance failures by parties that own a certain policy area might be attributed to exogenous factors or bad luck rather than lack of

ability (Egan 2013). Also, the alternative candidates (i.e., left-wing or centrist challengers) might be deemed less competent at addressing crime regardless of the performance of the right-wing incumbent since valence attributes are slow-moving variables (Calvo and Murillo, 2019).

Addressing this research question is important given the context of high criminality in Latin America and the failure of many governments throughout the region to curb criminal violence. In fact, criminal violence is one of the most compelling and seemingly intractable problems confronting Latin America today, which is often described as the most violent region in the world (Parkinson 2014). While the exact nature of the violence varies by country, some of the factors associated with the persistently high violent crime rates in the region include “the fragmentation of organized crime groups, growing domestic drug consumption markets and conflicts over trafficking routes, as well as local and national government corruption and lack of capacity” (Clavel 2017).

In light of this public security crisis, it is not surprising that criminal violence and insecurity top the political agenda in many Latin American countries (Arias and Goldstein 2010). Criminal violence is a prominent issue during national and subnational electoral campaigns in the region

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(Holland 2013; Pérez, 2015). It is also at the forefront of citizens' minds. In fact, almost one-third of Latin Americans (29.7%) consider criminal violence to be the most serious problem facing their countries.¹ Despite an explosion of research on the behavioral effects of crime (Fernandez and Kuenzi, 2010; Bateson 2012; Trelles and Carreras 2012; Carreras 2013; Ceobanu et al. 2011; Berens and Dallendörfer 2019; Ley 2018; Córdova 2019; Visconti 2020), we still know very little about how ownership of the crime issue affects citizens' retrospective evaluations of the incumbent and their vote choice.

We take advantage of rich administrative data in Chile and Mexico to identify municipalities that experienced short-term spikes in the frequency of crime just before an election. We implement a difference-in-differences design, which provides causal leverage to our analysis, to learn whether crime shocks affect support for right-wing incumbents. Furthermore, to address concerns about external validity and ecological inference, we also draw on survey data from 18 Latin American countries and implement several strategies for reducing sensitivity to unobserved factors. We find consistent evidence showing that right-wing governments are less likely to be punished because of crime spikes.

This paper makes two important contributions to the literature on retrospective and crime voting. First, most of the existing research either assumes a constant sanctioning effect for poor performance or a more severe punishment for incumbents that "own" the issues on which they are failing to deliver. We provide evidence of an alternative pattern, in which parties that are seen as more competent at fighting crime may be more resilient when they fail to achieve this goal. Second, studying the electoral consequences of crime is difficult because of methodological problems such as serial victimization (i.e., people who are constantly exposed to crime might become used to it) and reverse causality (i.e., people who distrust the government might be less likely to report a crime). When using both administrative and survey data, we propose a design that attempts to address these common limitations when studying crime.

2. Crime: a valence issue owned by right-wing parties

Crime is one of the most salient issues for Latin American voters, and often a prevalent theme during political campaigns. Even in countries where crime rates are relatively low, such as Argentina or Chile, the widespread public perception of worsening public security leads politicians to spend a lot of time and energy talking about crime, especially during campaigns.

Crime is a paradigmatic example of a valence issue. All political parties share the goal of providing public security and reducing crime (Marion and Farmer 2003; Burscher et al. 2015), but they disagree on the policy strategies for reaching that shared goal. Some parties (especially leftist parties) see crime as symptomatic of broader societal problems such as poverty and exclusion, and tend to favor less repressive policies (e.g., community policing). Other parties (especially right-wing parties) see crime as deviant behavior resulting from an individual's choice, and therefore advocate for more punitive policy solutions.

Although there is considerable evidence showing that more punitive solutions are not effective in reducing crime (Sherman et al., 2002; Chen and Shapiro 2007), right-wing parties in most countries are still perceived by voters as better able to deal with this issue.² Because parties on the right are more vocal about the problem of crime and propose more visible and immediate policies for combatting it, they tend to be recognized as more effective in this policy area. In the United States, for instance, the Republican Party is perceived as better able to handle crime because it repeatedly emphasizes "get-tough" stances on security issues. The Democrats, on the contrary, tend to be perceived as

"weak" on crime (Marion and Farmer 2003; Holian 2004). In European elections, right-wing parties are also recognized as more able to deal with crime and can gain a significant electoral advantage when crime is salient (Mayer and Tiberj, 2004; Smith 2010).

In the Latin American context, and especially in countries with legacies of civil wars or military regimes, the right also has had prior experience managing security during recent periods of high sociopolitical instability and is better connected with the military and security forces. Some right-wing parties in the region, such as *Renovación Nacional* in Chile and ARENA in El Salvador, are "authoritarian successor parties" (Loxton and Mainwaring, 2018) that continue to be associated with military and security issues decades after the transition to democracy. In a careful analysis of elections and security policies in El Salvador, Holland (2013: 52) shows that conservative parties have a "comparative advantage in touting their security credentials."

In other words, right-wing parties are more likely to "own" the crime issue. Political parties are said to "own" particular issues or policy problems when they have "a reputation for policy and program interests, produced by a history of attention, initiative, and innovation toward these problems, which leads voters to believe that one of the parties (and its candidates) is more sincere and committed to doing something about them" (Petrocik 1996: 826). The issue ownership theory of voting contends that parties can gain an electoral advantage when, during campaigns, they emphasize issues that they "own" and which other parties are perceived as less able to handle (Petrocik 1996). According to this theory, political parties try to prime voters to think about certain issues in order to make those policy problems salient in the run-up to elections.

Previous research has demonstrated that political parties can gain an electoral advantage when policy problems that they "own" are salient among the electorate. We know much less, however, about how issue ownership affects electoral accountability. In particular, are voters more or less likely to punish incumbent political parties that "own" the crime issue (i.e., right-wing parties) after a failure in public security?

3. Crime, issue ownership, and accountability

Our main theoretical proposition is that incumbent parties that "own" the crime issue will be less likely to pay an electoral price for poor performance in that policy area. This hypothesis builds upon the well-known characterization of elections as sanctioning and selection mechanisms (Manin et al. 1999). In particular, we argue that citizens who live in areas affected by a sudden increase in crime are both less likely to sanction a right-wing government and to select an alternative party if the incumbent owns the crime issue.

3.1. Blame attribution and sanctioning

Modern representative democracies require delegation. In an election, citizens are principals who elect representatives to serve as their agents in the government. Delegation in the political arena has two well-known problems. First, principals and agents may have conflicting interests. Second, they have asymmetric information about political decisions and policy goals, with politicians having more policy expertise than citizens (Lupia and McCubbins 2000). Ferejohn (1990) points out that by delegating to representatives the authority to act on their behalf, citizens "surrender to an enormous informational disadvantage." Most citizens are politically uninformed and do not follow policy decisions and policy implementation very attentively (Ferejohn and Kuklinski 1990). Given this information asymmetry, citizens may not be aware of politicians' efforts to curb security problems or the specific policies adopted by the government in this policy domain. Yet citizens are likely to observe the policy outcomes. Previous research has demonstrated that criminal violence receives wide media coverage in local television and radio broadcasts both in the United States and in Latin America (Gilliam and Iyengar 2000; Klite et al. 1997; Marshall 2019). People can also become aware of a sudden increase in crime in a municipality indirectly

¹ Source: 2016–2017 round of the AmericasBarometer.

² See Moncada (2016) and Durán-Martínez (2017) for alternative crime-reduction strategies.

through interpersonal discussions in their social networks (Baker et al. 2006; Arias, 2009). The emotional underpinnings of this process are well-known. Criminal threats generate anxiety, which is an emotion that stimulates attention and information seeking (Marcus and MacKuen 1993; Valentino et al., 2008). The key question is whether citizens interpret the spike in crime as a governmental failure and choose to sanction the incumbent government in the elections.

Most of the literature on partisan and ideological schemata³ has focused on showing how party and ideological cues shape the perception of candidates' issue positions (Hamill et al. 1985; Johnston Conover and Feldman 1989). Building on this tradition, we argue that the stored knowledge about the issue preferences and issue competence of different parties in the area of public security can also shape the attribution of responsibility for policy failures. The failure of left-wing parties to handle public security issues, for instance, might be attributed to a lack of ability in this area. On the contrary, parties that "own" the crime issue (i.e., conservative parties) might not be perceived as equally responsible when their policies fail to reduce crime.⁴

Our argument about the link between issue ownership and the differential attribution of responsibility to various political parties builds on The Lack of Fit model originating in political and organizational psychology. This model presupposes that expectations about a person's success at a particular task affect evaluation processes (Heilman 2001). People who are perceived as lacking stereotypical leadership qualities (e.g., women or ethnic minorities) are evaluated more harshly because performance failures are attributed to a lack of ability. In contrast, performance failures by individuals who possess the stereotypical characteristics of a leader are often attributed to bad luck or exogenous factors (Swim and Sanna 1996). While this argument is often made about individual leaders, it stands to reason that this psychological factor might bias voter evaluations of political parties. If voters perceive right-wing parties as stereotypically better to deal with public security issues, they might attribute an increase in crime under a right-wing incumbent to external factors rather than government incompetence.

3.2. Issue ownership and party selection

While most of the literature on retrospective voting (and our discussion so far) focuses on the role of elections as sanctioning devices, we put equal emphasis on elections as institutional mechanisms for selecting, based on signals of competence, good leaders and policies (Alesina and Rosenthal, 1995; Fearon 1999; Duch and Stevenson 2008; Hellwig 2012).

Considering elections as a selection device produces similar theoretical expectations about the impact of issue ownership on electoral accountability. Parties that "own" an issue might be punished less for failures in that particular policy area because those policy failures make that issue a priority for voters. In fact, Bélanger and Meguid (2008) demonstrate that a party's competence on an issue is much more likely to influence voting behavior when voters consider that issue as salient. Voters who want to signal that they want leaders to focus on combatting crime are likely to select a right-wing party even if their recent performance in this area is less than stellar (Swank 1993; Carlsen 2000). If conservative parties are perceived as better able to handle crime, an increase in crime under their watch might not lead to electoral punishment because voters consider the alternative parties (e.g., left-wing parties that are perceived as soft on crime) as even less appealing

³ A schema can be defined as "organized prior knowledge, abstracted from experience with specific instances" that guides "the processing of new information and the retrieval of stored information" (Fiske and Linville 1980: 543).

⁴ The valence attributes of political parties are of course not immutable but they change slowly. We argue that right-wing incumbents are less likely to be sanctioned for a crime shock, but the presence of multiple shocks might undermine their electoral performance in the long run.

since valence attributes are sticky and hard to change (Calvo and Murillo, 2019).⁵

Moreover, right-wing parties are more likely to politicize crime, which might make them more attractive to voters in contexts of high criminality. In an analysis of the politicization of crime in Western Europe, Estrada (2004: 438) argues that "crime is a social problem that is primarily placed on the political agenda by conservatives when social democratic governments are in power." Leftist parties might not be able to obtain a similar electoral advantage when crime is high because they do not emphasize crime to the same extent (Green and Hobolt 2008). In one of the most sophisticated analyses of political parties' rhetorical choices during electoral campaigns, Riker (1996: 6) argues and demonstrates that "when one side dominates in the volume of rhetorical appeals on a particular theme, the other side abandons appeals on that theme." Riker hypothesizes that this is because the latter party has deemed it detrimental to focus on an issue that it is perceived as less able to address. If, as we argue, conservative parties "own" the issue of crime, left-of-center parties are better off not making criminal violence a central issue in their campaigns (even during a crime spike).⁶

Previous studies lend considerable support to our theoretical expectations. Most notably, Arce (2003) shows that an increase in the level of guerrilla activity in Peru led to a decrease in the approval rating of President Alan García (a center-left politician) while a comparable increase in the level of political violence produced an increase in the popularity of President Alberto Fujimori (a conservative who adopted more repressive tactics). The explanation for this finding is worth quoting at length: "higher levels of guerrilla activity ought to hurt a left-leaning government like García's because voters are likely to attribute the violence to his 'softness.' In contrast, higher levels of guerrilla activity may not necessarily hurt a right-leaning government like Fujimori's because voters are likely to see violence as rationalizing a hard-line stance" (Arce 2003: 577).

Similarly, Romero et al. (2016) analyze the impact of a rapid increase in violent crime on the approval of President Felipe Calderón (from the right-wing PAN party) in Mexico (2006–2012). They demonstrate that Mexican citizens discounted the negative policy results and rewarded the bold policy interventions of this conservative president (e.g. deployment of the military in the fight against crime). Romero et al. (2016: 116) conclude that "a strong positioning by the chief executive is highly rewarded, even more than performance itself." In fact, approval levels for President Calderón remained above 50 percent throughout his term despite the severe public security crisis.

Merolla and Zechmeister (2013, 2009) provide congruent experimental evidence from the United States and Mexico showing that conditions of public security threat (terrorism and crime) make citizens less likely to assign responsibility for policy failures to incumbent candidates from parties that have a stronger reputation as owners of the security issue (the Republican Party in the United States and PAN in Mexico).

This theoretical discussion leads us to expect right-wing parties in Latin America to be punished less severely for policy failures in the area of public security. Therefore, we propose the following hypothesis:

⁵ Hellwig (2012: 95) discusses a similar "absolution"-type argument in selection models in economic voting: "forward-looking voters may not punish left-leaning governments when unemployment rises because an alternative government of the right waiting in the wings would fare no better, given its preference rankings. Right-of-center incumbents are to be absolved for high inflation per similar reasoning."

⁶ Yet another possible explanation for a higher likelihood of selecting right-wing parties during crime spikes is that voters exposed to crime become more likely to endorse iron-fist or strong-arm measures to combat delinquency (Bateson 2012; Visconti 2020). These mano dura policies are typically part of the electoral platform of right-wing parties as discussed above. This alternative mechanism would lead to an observationally equivalent outcome in the cases we examine, i.e. higher likelihood of selecting incumbent right-wing parties when crime goes up.

Hypothesis 1. The electoral performance of a left-wing/centrist government is more likely to be negatively affected by a crime shock than that of a right-wing government.

3.3. *Equal retrospective sanctions*

The most straightforward alternative argument is that voters do not take into account the position of the party along the ideological spectrum, and simply sanction parties or leaders retrospectively for their performance in office in prominent policy areas. A large body of literature on retrospective voting (especially economic voting) suggests that voters pay attention to the performance of the incumbent government, and “throw the rascals out” when performance is poor (Fiorina, 1981; Key 1966). Given that crime ranks very high among the preoccupations of Latin American voters (Singer 2011; Pion-Berlin and Carreras 2017), we can expect citizens to observe the performance of the government in this area and sanction incumbent parties when crime goes up. In other words, the “retrospective voting” hypothesis would lead us to expect equal sanctions for failures in public security regardless of the ideological position of the governing party:

Hypothesis 2. The electoral performance of both left-wing/centrist and right-wing governments should be negatively affected by a crime shock, and the effect size should be similar.

3.4. *Partisan accountability*

While we argue that right-wing parties are punished less severely for security shortcomings, the literature on “partisan accountability” (Kayser and Grafström, 2016) would lead us to expect just the opposite. In a classic study of economic voting, Powell and Whitten (1993) argue that left-wing governments tend to deliver lower unemployment rates and right-wing governments deliver lower inflation. Against our main hypothesis, Powell and Whitten (1993) argue that voters use this information to hold governments accountable retrospectively according to their partisan priorities.

The results of previous research testing the partisan accountability theory are decidedly mixed. While some studies find that left-wing governments are more severely sanctioned when unemployment increases and right-wing governments are held more accountable for rising inflation (Powell and Whitten 1993; Dassonneville and Lewis-Beck 2013; van der Brug, van der Eijk, and Franklin 2007), others show few partisan differences or present results that contradict the partisan accountability argument (Swank 1993; Magalhães 2012).

Moreover, these partisan accountability arguments have only been tested using partisan priorities in the economic arena, which might work differently than the area of public security explored in this paper. Although everyone prefers a robust economy, economic policies often involve trade-offs. Left-wing and right-wing parties propose different policies to achieve economic success. When these parties fail (especially in the area of the economy that they “own”), that might send a signal to voters that it is time to support a party with different economic solutions.⁷

The area of public security might be less amenable to partisan accountability because the crime issue is *fully* rather than *partially* owned by right-wing parties. Citizens might be reluctant to support left-wing parties during security crises, even if right-wing parties were in power during a recent spike in crime. In other words, since right-wing parties are perceived as more competent in the public security

domain, they are more likely to be selected by voters in contexts of increased criminality because alternatives on the left of the political spectrum are perceived as less competent in this area. Still, our empirical models will allow us to test this alternative hypothesis.

Hypothesis 3. The electoral performance of a right-wing government is more likely to be negatively affected by a crime shock than that of a left-wing/centrist government.

4. **Evidence of issue ownership**

Our theoretical framework is based on the assumption that right-wing parties “own” the public security issue in Latin America and that voters perceive conservative parties as better able to address crime. Before proceeding to the empirical test of our hypotheses, this section seeks to establish that this assumption is sound. Are right-wing parties actually associated with crime-reduction policies in Latin America? We provide evidence to support this claim by analyzing 61 “state of the union” speeches made by ten presidents in Chile and Mexico. Both countries have had right-wing and non-right-wing presidents in recent decades, which allows within-country variation (we expand on the case selection in the next section).

We acknowledge that using ideological labels to categorize presidents in Latin America is not always an easy task. It is not rare to see politicians making ambiguous ideological statements or violating electoral mandates when they come into power (Stokes 2001). However, our argument is based on the signals provided by political parties during electoral campaigns and in the policymaking process. Right-wing parties and politicians tend to talk more about crime and are more likely to initiate visible policies (e.g., iron fist policies) to fight crime, even if they do not always deliver better policy results. Analyzing widely publicized presidential speeches is therefore a good way to assess whether right-wing parties focus more on public security issues.

In order to tackle this question, we conduct text analysis based on 61 “state of the union” speeches using a new dataset on presidential speeches in Latin America (Arnold et al. 2017). We identify the frequency of crime-related words in Chile and Mexico to assess whether right-wing parties (or presidents) indeed “own” the crime issue (see the words in appendix A). Three of the ten presidents studied are coded as right-wing politicians using Baker and Greene’s (2016) ideological scores for presidential candidates in Latin America: Sebastián Piñera, Vicente Fox, and Felipe Calderón.

In Table 1 we regress the frequency of crime-related words on a binary indicator of right-wing presidents and the number of words used in the speech. The unit of analysis corresponds to each “state of the union.” We also include models with year and country fixed effects.⁸

The results show that right-wing presidents use between 17 and 29 more crime-related words per speech than non-right-wing presidents

Table 1
Results of text analysis of presidential speeches (Chile and Mexico).

	Frequency of crime-related words			
	(1)	(2)	(3)	(4)
Right-wing president	29.43*** (5.36)	17.10*** (8.98)	28.53*** (5.33)	16.62* (9.76)
N	61	61	61	61
Year fixed effects	No	Yes	No	Yes
Country fixed effects	No	No	Yes	Yes
Total number of words	Yes	Yes	Yes	Yes

*p < 0.1, **p < 0.05, ***p < 0.01.

⁷ In the Latin American context, it is not uncommon to see these pendulum swings between parties that prefer orthodox economic policies (e.g. neoliberalism) and parties that propose more statist economic policies when the limitations of the alternative economic model become clear to voters (Kingstone 2011).

⁸ We use traditional standard errors in this analysis, but our results are consistent when we use robust standard errors.

(depending on the specification), which suggests that right-wing politicians (and the parties they represent) should be more likely to be associated with crime-reduction strategies than other politicians. For instance, in Mexico Felipe Calderón (PAN-right) mentioned 113 crime-related words in his last 2012 speech. In contrast, Enrique Peña Nieto (PRI-center) mentioned only 24 such words in 2013 during his first “state of the union” speech. Similarly, in Chile Michelle Bachelet (PS-left) mentioned 11 crime-related words in 2009, while Sebastián Piñera (RN-right) mentioned 72 in 2010.

In appendix A, we conduct the same analysis but using all the Latin American countries included in the dataset (Arnold et al. 2017). We obtain consistent results: right-wing presidents use more crime-related words than non-right-wing presidents, which suggests that this is a regional pattern.

Another strategy for evaluating different parties’ policy priorities is to compare legislators’ ideological and policy preferences. We do that by using information from recent Chilean and Mexican surveys from the Latin American Parliamentary Elites (PELA) project. As can be observed in appendix B, legislators from right-wing parties (PAN in Mexico, UDI and RN in Chile) are more likely to prefer budget increases in the area of public security, at the expense of other policy investments such as health and education.

These different policy priorities can only influence public evaluations of the executive and voting behavior if citizens are aware that right-wing parties talk more about crime and propose more punitive solutions. In appendix C, we use the CSES election studies to show that right-wing candidates were perceived by the public as more competent in the area of public security in both Chile and Mexico.

Another useful source for studying this question is the Mexico panel study, which has been conducting surveys during and after electoral campaigns in Mexico since 2000. As can be observed in appendix D, PAN presidential candidates tend to be perceived as better able to fight crime than their centrist (PRI) and left-wing (PRD) competitors. In addition, in appendix E we provide evidence from a survey implemented in Chile that shows that a majority of respondents can associate iron-fist crime-reduction policies with right-wing candidates (Visconti, 2021).

In sum, the evidence presented in this section and in the appendix suggests that right-wing parties “own” the crime issue. Conservative parties are more likely to talk about crime during campaigns and while in office. They also tend to prefer more punitive solutions to crime, and the limited survey evidence we have suggests that they are perceived by voters as better able to fight crime.

5. Data and design

We use local crime and electoral data from Chile and Mexico to understand the heterogeneous effects of public security failures on the electoral prospects of parties located on different sides of the ideological spectrum. These countries were selected for both practical and methodological reasons. On the practical side, both countries have rich administrative crime data at the local level, which is critical for our empirical analysis. Moreover, Chile and Mexico have had both left-wing and right-wing governments in the last few years, which allows us to explore the effect of performance in the area of public security on accountability contingent on the ideology of the incumbent party.

On the methodological front, Chile and Mexico can be considered extreme cases (Seawright and Gerring 2008), which allows us to shed light on the effects of crime on accountability in a diverse set of contexts and scope conditions. On the one hand, Chile experiences a high frequency of property crimes (Mertz 2013) but low levels of organized (Dammert 2006) and violent crimes (UNODC 2013). Local drug-trafficking cartels are much less organized than their counterparts in other Latin American countries, such as Brazil and Mexico (Solar 2018). Additionally, the country has a centralized and national police force, and no regional or municipal police departments. Therefore, the national executive (i.e., the president) is likely to be held responsible for

policy failures in this area.

On the other hand, Mexico suffers from systemic violence and organized crime. The country has one of the highest homicide rates in the world (UNODC 2013), and in certain regions of the country, the state has lost its capacity to control organized crime (Snyder and Duran-Martinez 2009). Responsibility for public security is shared across different government levels since both federal and state police departments can investigate crimes (Marshall 2018). As a result, the attribution of responsibilities is complicated by having different levels of government implicated in efforts to curb criminality (Ley 2017).

We collected and analyze crime data at the municipality level for four presidential elections in Chile (2005, 2009, 2013, and 2017) and three in Mexico (2000, 2006, and 2012). Previous research has linked the evaluation of presidents with perceptions of crime and crime victimization in Latin America (Pérez, 2015; Holmes and Gutiérrez de Piñeres 2013),⁹ and an important subset of presidential candidates use the fight against crime as a central aspect of their platforms to appeal to voters (Cohen and Smith 2016; Holland 2013). We prefer to test our hypotheses analyzing the performance of incumbent parties in national (presidential) elections rather at the local level because ideology often becomes blurrier in subnational elections.¹⁰ Issue ownership might therefore be less salient in shaping people’s electoral choices in local races, although that remains to be investigated.

In the case of Chile, we use crimes of “greater social connotation,” which corresponds to a “criminological-bureaucratic category of offenses comprising burglary, thefts, homicides, and rape” (Hathazy 2013: 249). In the case of Mexico, only data on homicides is available at the municipal level over time, so we focus on that particular type of crime.

Traditional approaches to studying the impact of crime tend to overlook two important methodological problems. The first is serial victimization, which becomes particularly salient when using crime rates as the main independent variable. More specifically, under such circumstances, people might get used to a certain level of crime in their districts and might not react to constant (even high) crime rates. In other words, citizens from municipalities with consistently high crime rates might stop sanctioning governments for failures in the provision of public security in their localities. A similar issue has been noticed by scholars studying the impact of rainfall (Cooperman 2017): One inch of rain is a common event in Seattle, Washington but it is unusual in Phoenix, Arizona. Therefore, using the rate of rainfall could be misleading.

As a solution to this first problem, we distinguish between municipalities that have experienced a sudden increase in crime three months before the election, and municipalities that have not. Using such “crime shocks” can help us reduce the issues associated with serial victimization¹¹: in particular, to circumvent the problem of people getting used to certain crime levels. We focus on the final three months before an election based on evidence showing that in elections citizens evaluate the short-term performance of the government (Healy and Lenz 2014; Achen and Bartels 2016). In addition, this methodological decision is

⁹ Bland et al. (2021) find variation across the geographical landscape of the region. They show that the link between satisfaction with the police and executive trust is weaker in more remote locations (i.e., areas located far from large cities).

¹⁰ Additionally, using national elections is particularly relevant in the case of Chile. This is a unitary country with a centralized police and with mayors who do not have the capacity or the authority to unilaterally address the crime issue. In fact, recent evidence shows that their main approach to curbing criminality is the use of resources distributed by the central government (Alberti et al., 2022). As a result, there is not a strong reason to believe that voters will evaluate mayors by paying attention to security issues as they do with presidents.

¹¹ Marshall (2018) uses homicide shocks to leverage plausibly exogenous variation in homicide counts as an attempt to capture idiosyncratic short deviations from longer-term trends. However, he compares the months before and after the election, while we rely only on pre-election events.

also supported by research showing that people are more responsive to changes in conditions than to absolute levels (Kahneman and Tversky, 1979).¹²

The second problem refers to the role of crime trajectories before an election. The traditional approach to studying crime is to make comparisons between time t and t_{-1} . However, that strategy assumes stable patterns before t_{-1} , which might not always be the case. For example, imagine that municipality A in t_{-3} had a crime rate equal to 10, in t_{-2} equal to 6, in t_{-1} equal to 3, and in t equal to 10. Therefore, we could claim that municipality A experienced a sudden increase in crime between t and t_{-1} . However, time t and t_{-3} have the same crime rates, so it is hard to say that there has been an unusual increase in crime. Now, imagine a municipality B with constant crime rates equal to 3 in time t_{-3} , t_{-2} , and t_{-1} and a sudden increase to 10 in time t . That municipality is also experiencing a sudden increase in crime, but that event is unusual when evaluating the four time periods.

As a solution to this second problem, we focus on municipalities that before a sudden increase in crime had stable levels of crime in the year preceding the election. These treated municipalities can fruitfully be compared with “control” municipalities that also had stable crime levels in the year preceding the election but did not experience a sudden increase in crime before the election.

To implement these two solutions and identify treated and control municipalities, we gather information on the number of crimes committed in each municipality in the 12 months prior to the presidential election. We divided the data in quarters (i.e., three months periods), and computed the proportion of crime in a given quarter, which is the total number of crimes in that quarter divided by the annual total number of crimes. Therefore, the sum of the four quarters is equal to one.

After obtaining the proportion of crime by quarter for each municipality, we compute the changes in the proportion of crime between quarters, which is a measure of how crime changes from one quarter to the other in percentage points. Each municipality produces three data points: the difference between quarter 1 (between 9 and 12 months before the election) and quarter 2 (between 6 and 9 months before the election), the difference between quarter 2 and quarter 3 (between 3 and 6 months before the election), and the difference between quarter 3 and quarter 4 (3 months before the election).

Now we have a standard measure of change between quarters that is not based on crime rates but rather proportions of crime. This data allows us to learn how crime evolves from quarter to quarter and be able to compare different municipalities. The absolute average change of the proportion of crime between quarters in Chile is three percentage points and in Mexico is four percentage points.

As a final step, we identify treated municipalities when the difference between the fourth quarter (three months before the election) and third quarter (three to six months before the election) is equal or greater to one standard deviation above the mean of differences,¹³ so there is an unusual change in crime. Using standardized shocks (mean zero and unit standard deviation) is a common approach to study the impact of shocks (Bazzi and Blattman 2014). As expected, in only a few cases there was a change greater than one standard deviation above the mean, which illustrates why we can define this as an unusual event: 11 and 13 percent of the differences between quarters in Chile and Mexico, respectively.

Fig. 1 depicts the distribution of changes in the proportion of crime between quarters in both countries. Mexico has a wider distribution than

Chile because we are using only homicides for the former. Therefore, there are some municipalities with few homicides, which provides a greater probability of seeing a large change in the proportion of crime between quarters.¹⁴ The vertical line represents the cutoff for sudden changes between quarters: one standard deviation above the mean. In appendix F, we include empirical results using ten different cutoffs to identify sudden shocks for both Chile and Mexico, and results are consistent across all of them.

Additionally, we need to adjust for municipalities’ crime trajectories before the shock. We determine that the absolute differences between quarter 1 and 2 and quarter 2 and 3 cannot be larger than the differences between quarter 3 and 4 (the crime shock). As a result, this strategy allows us to identify places with a sudden rise in crime that occurs shortly before a presidential election and excludes municipalities where that crime spike in quarter 4 is not an unusual event in the year preceding the election. For the control group, the differences cannot be larger than one standard deviation above the mean of differences for any of the quarters.

Equation (1) summarizes the strategy for identifying treated municipalities in Chile and Mexico. The proportion of crime by quarter in a given municipality is represented by q_1 , q_2 , q_3 , and q_4 ; and we know that $q_1 + q_2 + q_3 + q_4 = 1$. The value δ refers to a change in the proportion of crime between quarters that is equal to one standard deviation above the mean. A treated municipality will have constant changes in crime across quarters but a sudden and unusual increase before the election (i.e., equal or greater than δ). A control will have constant changes across the four quarters. Municipalities that are not classified as either treated or control are excluded from the analysis (i.e., places with irregular changes in the proportion of crime).

$$Crime\ shock_m \begin{cases} 1 : q_4 - q_3 \geq \delta + |q_3 - q_2| < \delta + |q_2 - q_1| < \delta \\ 0 : |q_4 - q_3| < \delta + |q_3 - q_2| < \delta + |q_2 - q_1| < \delta \end{cases} \quad (1)$$

Our approach can be summarized as follows: we study the four quarters before a presidential election in each country. In our first step, we compute the proportion of crime by quarter using the last 12 months as a reference. In our second step, we compute the differences between quarters. In our third step, we generate a vector with all the changes in proportion of crime between quarters for each country and compute its standard deviation and mean to construct δ , which allows us to identify treated and control municipalities.

Fig. 2 shows the change in proportion of crime between quarters in Chile and Mexico. We can clearly observe that in the treatment group the proportion of crimes experienced a sudden increase shortly before the election and that the changes between the other quarters are smaller than the shock and stable across time. In the control group, we also see that stability but without a sudden crime shock before the election.

An important consideration is whether the crime shocks observed in treated municipalities are political in nature, especially in the Mexican case where many local political figures have been assassinated in recent years (Ley 2018; Trelles and Carreras 2012). Our data does not allow us to distinguish between political and non-political homicides, but we have every reason to believe that the vast majority of the homicides are non-political in nature. In fact, Trejo and Ley (2020) demonstrate that local government officials are more likely to become targets of criminal attacks during subnational (rather than national) election cycles.¹⁵ Moreover, the political assassinations of municipal politicians began in earnest after the war on drugs started by President Calderón following his election in 2006. Our data also covers homicides during the 2000 and 2006 election cycles, which leads us to believe that most of the crime shocks we observe in Mexico are due to common or organized crime,

¹² We cannot directly observe whether individuals are aware of the increase in crime; therefore, what we are estimating is the intention to treat (ITT). More specifically, we study the effect of being assigned to observe a sudden rise in crime via the effect of a crime shock. That can happen through crime victimization, networks, or media consumption.

¹³ For each country, we use the differences across all the municipalities to compute the mean and the standard deviation.

¹⁴ To address this concern, we focus on municipalities that experienced more than one crime.

¹⁵ Only a small subset of local elections in Mexico occurs concurrently with national elections.

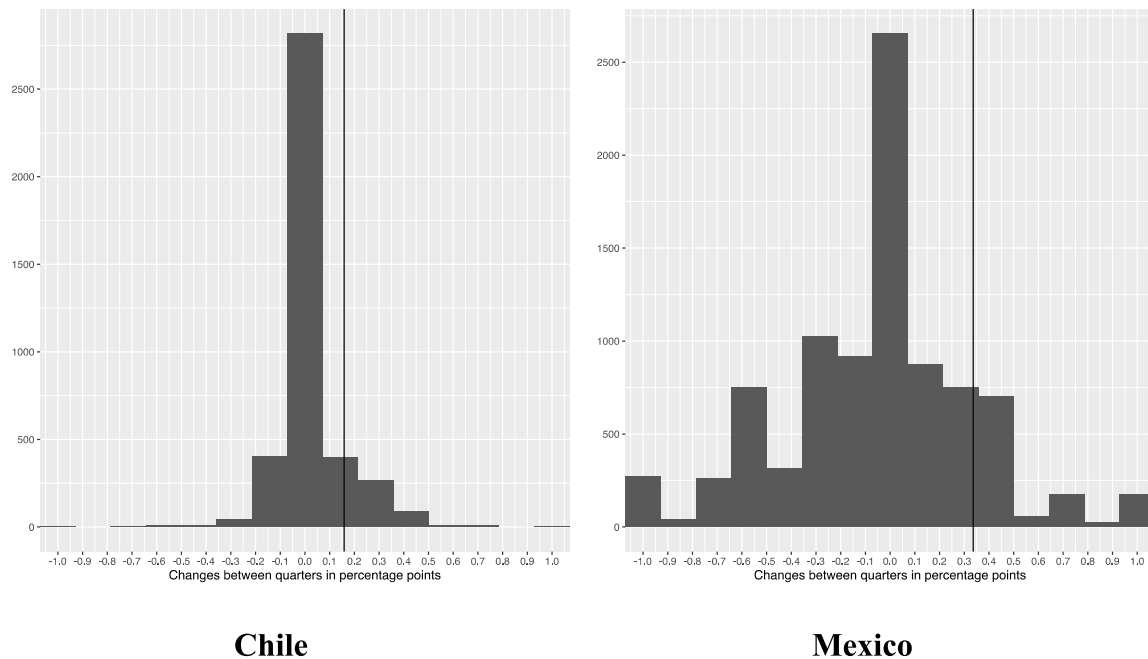


Fig. 1. Distribution of changes in the proportion of crime between quarters.

rather than political assassinations.

The dependent variable corresponds to the change in the vote for the incumbent between consecutive presidential elections. This indicator provides a more precise measurement of voter assessment of government performance than just the incumbent vote share since it considers the evolution of preferences across time (Murillo and Visconti 2017).

Regarding the ideology of the president’s party, we use Baker and Greene’s (2016) ideological scores for presidential candidates in Latin America. These scholars developed an indicator that goes from 0 to 20 along the left-right scale. When incumbent presidents have a score greater than 15, we classify them as right-wing politicians. In Chile and Mexico: Sebastián Piñera, Vicente Fox, and Felipe Calderón are classified as right-wing presidents; all of the other presidents are non-right-wing. These three presidents also belong to political parties that are widely categorized as right-wing or conservative (*Renovación Nacional* -RN- in Chile and *Partido Acción Nacional* -PAN- in Mexico).¹⁶

Finally, our empirical models include pretreatment covariates such as the socioeconomic and demographic characteristic of municipalities that are usually used as predictors of vote choice in Latin America (see Carlin et al. 2015). Since the unit of analysis is the municipality-election year, all of the municipal characteristics were obtained for periods before the corresponding election (see appendix G for more details and sources). In the case of Chile, we use the following covariates: natural logarithm of total population, income index, and education index. In the case of Mexico, we use the following covariates: natural logarithm of total population, marginalization index, and illiteracy.

Regarding our empirical strategy, we employ a generalized difference-in-differences design (two-way fixed effects). The key assumption is that the outcomes move in parallel trends when there is no treatment, which allows the treatment and control group to have different observed and unobserved characteristics. Specifically, we study the effect of crime shocks on the changes in the vote share for the incumbent party in presidential elections at the municipal level. In

addition to estimating the effects of a crime shock, we are interested in its heterogeneity depending on whether the president is right-wing or not. Equation (2) depicts how this design is implemented using a linear regression:

$$Y_{it} = \alpha + \beta_1 T_{it} + \beta_2 I_{it} + \beta_3 T_{it} * I_{it} + \beta_4 X_{it} + \sigma_i + \omega_t + \varepsilon_{it} \quad (2)$$

Y represents the change in the vote share for the incumbent between consecutive presidential elections. T corresponds to a binary indicator that identifies the existence of a crime shock in the municipality i at time t . I is an indicator that captures whether there is a right-wing incumbent, X is a vector of pretreatment covariates (socioeconomic and demographic characteristics), σ_i represents municipality fixed effects, and ω_t year fixed effects. The unit of observation is a municipality-electoral year. The coefficient of interest is β_3 , which captures the difference between right-wing and non-right-wing parties (hypothesis 1).¹⁷ We clustered the standard errors at the municipality level. We estimate different models for Chile (932 observations) and Mexico (1243 observations).¹⁸ Additionally, this design allows us to rule out the alternative hypotheses presented above.

6. Results: the impact of crime on incumbents’ electoral performance in Chile and Mexico

Fig. 3 summarizes the main results when implementing equation (2) in Chile and Mexico. The plot provides the point estimates and 95% confidence intervals for the impact of crime shocks on voting for the incumbent party contingent on whether that party is right-wing or not, and the difference between both point estimates.

The results are consistent with our theoretical intuitions. The difference between right and non-right incumbents is 15.8 percentage points in Chile (CI: [0.08–0.23]) and 9.6 percentage points in Mexico (CI: [0.01–0.18]), which means that the ideology of the incumbent party

¹⁶ Since incumbent presidents in Chile and Mexico cannot run for immediate reelection, our models assess whether right-wing parties (rather than individual politicians) pay a lower electoral price for a spike in crime shortly before the election.

¹⁷ Or in other words, the change in effect between non-right-wing and right-wing incumbents.

¹⁸ Chile has 345 and Mexico 2454 municipalities. As a reminder, not all of them are included in the analysis since municipalities that are not classified as either treated or control are excluded from the analysis.

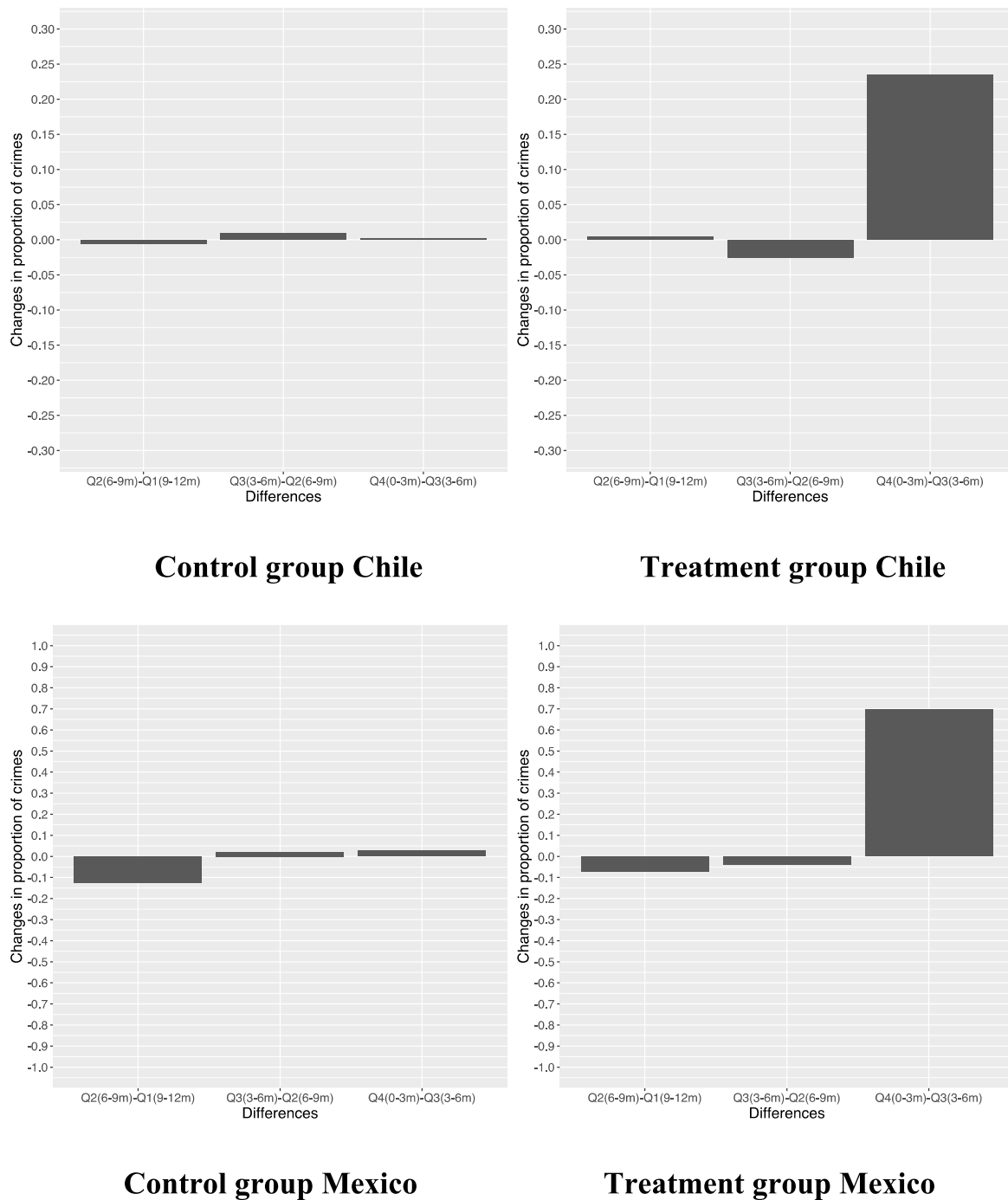


Fig. 2. Changes of proportion of crime between quarters.

modifies the effect of a crime shock on support for the incumbent in presidential elections. The plots show that right-wing candidates tend to experience an electoral boost when there is a failure in the provision of public security, meanwhile non-right-wing candidates experience the opposite pattern. We report the estimates and standard errors in appendix H, and implement robustness checks by excluding covariates one by one.

These empirical models also allow us to reject the alternative hypotheses 2 and 3. In particular, there is no evidence in any of the models presented here that a public security failure (i.e., a crime shock) leads to a homogenous decline in electoral support for all parties across the ideological spectrum (equal retrospective sanctions) or to a stronger decline in support for right-wing parties that “own” the crime issue

(partisan accountability).

One may wonder why PAN lost the 2012 presidential election in Mexico in the midst of a public security crisis if this party has traditionally taken a stronger stance on this issue. Our point is not that incumbent right-wing parties will never lose an election when they face a security crisis. Glaring and sustained policy failures might erode the reputation of conservative parties as owners of the crime issue. The exponential increase in crime during the Calderón administration (2006–2012) might have led the Mexican citizenry to re-evaluate the competence of PAN in this policy area. Right-wing presidents can be punished for repeated failures in the area of public security; however, we expect they should be punished less severely than non-right-wing presidents. In other words, our results suggest that a non-right-

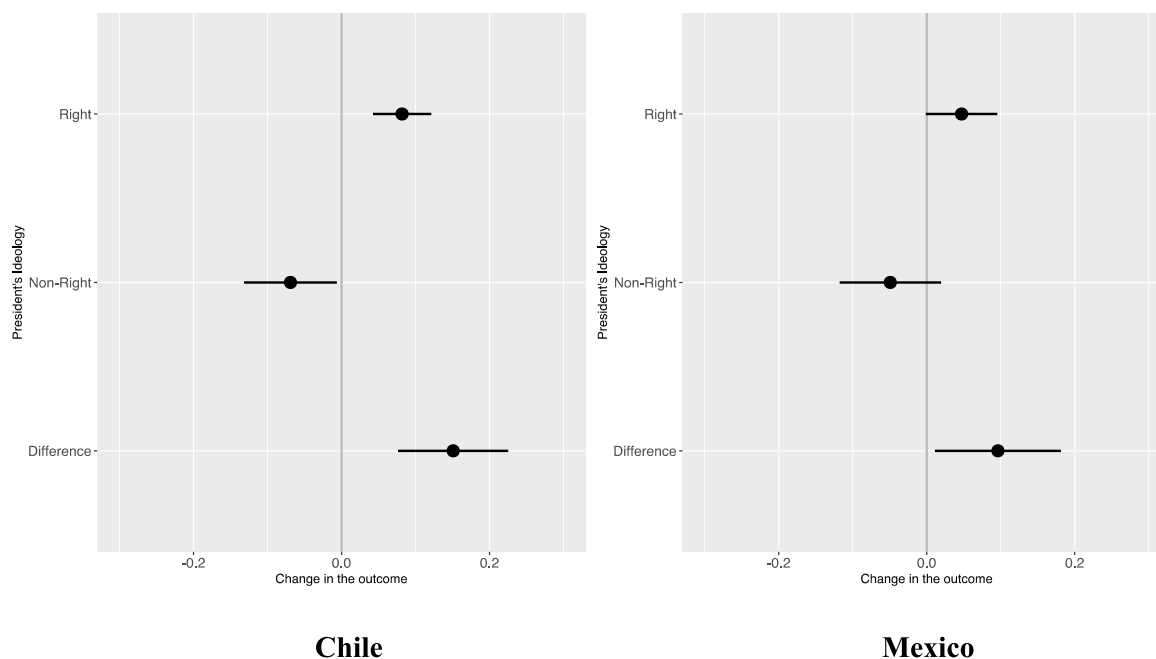


Fig. 3. Heterogeneous effects of crime shocks on support for the incumbent

president experiencing the same dismal performance in fighting crime as Calderón would have suffered even more electoral damage.¹⁹ Moreover, any particular election is about more than one issue; so other factors (unrelated to crime) might have contributed to the defeat of PAN in 2012. What our results show is that not all parties are equally punished after a sudden crime spike just before the election.²⁰

Local data from Chile and Mexico might raise concerns about external validity and ecological inference. As a robustness test, we conducted additional analyses using survey data from 18 Latin American countries to illustrate the heterogeneous effect of crime based on the president's ideology. Those robustness models show the impact of crime victimization and perceptions of insecurity on voting for the incumbent using four waves of surveys from the Latin American Public Opinion Project data. We acknowledge that neither crime victimization nor perceptions of insecurity are perfect proxies for a crime shock. However, the individual-level analyses allow us to assess whether citizens for whom crime is a very salient issue are less likely to abandon a right-wing party than a left-wing party (having voted for that party in a previous election). The results of these additional analyses are entirely consistent with our theoretical expectations (i.e., citizens are less likely to defect from a right-wing party when they are victimized or when they have higher perceptions of crime). We provide more details about the data and analysis in appendix I.

7. Discussion and conclusion

Elections serve at least two functions in a democratic system. First, they allow voters to sanction incumbent parties for policy failures, and

reward them for good performance. Second, they facilitate the selection of competent leaders. Most studies of democratic accountability (especially in the economic arena) expect citizens to evaluate the performance of the government retrospectively and vote accordingly. In this paper, we argue that the effect of crime on electoral accountability is heterogeneous. We show that right-wing parties are less likely to suffer a decline in electoral support after a sudden crime spike. We argue that this lack of punishment could be explained by voters attributing the shock to bad luck or exogenous factors rather than a lack of ability or by people perceiving the alternative parties (i.e., left-wing and centrist challengers) as even less competent at addressing crime problems and therefore less likely to be selected when there is an increase in criminality.

Studying the impact of crime on political behavior can be complicated by methodological concerns such as serial victimization and reverse causality. To address these issues, we use sudden increases in crime before elections and implement a difference-in-differences design when using local data, and follow a design-based approach by constructing an observational study that reduces sensitivity to unmeasured biases when using survey data. Using local and individual data, we find that the effect of a crime shock is conditional on the ideology of the incumbent party.

One of the limitations of our paper is that our observational design does not allow us to test the two mechanisms we hypothesize are driving the results: 1) lesser sanctioning of right-wing parties due to differential blame attribution, and 2) a lower likelihood of selecting a left-wing alternative when crime goes up. Both mechanisms might be present, but it is also possible that the results are driven primarily by sanctioning effects or selection effects. For instance, even if voters are able to precisely attribute blame for policy failures in the area of public security, they might still choose to continue to support a right-wing incumbent because they dislike the partisan alternatives perceived as less competent on crime issues. A different research design (e.g., a survey experiment) might be necessary to disentangle which of these two mechanisms drives the results reported in our paper. We plan to explore this question in future research, and we invite other scholars to join us in this effort.

While we postulate that right-wing parties pay a smaller electoral price for policy failures in the area of public security because they are perceived as more competent in this area (i.e., they own this issue), there

¹⁹ Romero (2013) finds a negative correlation between crime victimization at the household level and Calderón's presidential approval. It is important to keep in mind that presidential popularity is a different outcome than electoral results. In an election, voters also need to consider the alternatives, which might lead to weaker sanctions for right-wing parties when the partisan alternatives are perceived as even less competent in the area of public security.

²⁰ Another factor that might have contributed to the poor electoral performance of PAN in 2012 is the fact that the party's candidate was a woman (Josefina Vázquez Mota), since it has been demonstrated that women are generally perceived as less able to deal with security issues (Carlin et al. 2020).

are two alternative explanations we cannot completely rule out in our empirical analysis. First, it is possible that crime shocks increase support for right-wing parties not because these parties are perceived as more competent, but due to an increased taste for iron fist policies among voters who are exposed to crime (Visconti 2020; Bateson 2012), for which right-wing parties provide a home. While there is a qualitative difference between the two mechanisms, we think both explanations are closely related. If voters prefer the use of longer prison sentences and harsher policing tactics, they are likely to also perceive parties that advocate for those iron fist policies as more competent in this area. Second, a crime increase might not damage the electoral prospects of right-wing parties if the negative effects of violent crime are concentrated among the lower-middle classes and the poor—i.e., the traditional constituency of the left—(Schargrodsy and Freira 2021). In other words, the core supporters of conservative parties (i.e., the upper-middle classes and the elites) might continue to support them even if crime goes up because they are less touched by crime. On the contrary, left-wing parties might be sanctioned more harshly for policy failures in the area of public security because it is precisely their core constituency (i.e., the poor) that suffers more acutely from criminal violence.²¹ Trying to tease out the exact mechanisms that link a spike in crime and support for right-wing parties is a fruitful avenue for further research.

The arguments advanced in this paper call attention to the link between issue ownership and accountability, which has largely flown under the radar in the literature.²² Voters might be reluctant to abandon an incumbent party for poor performance on an issue that is clearly “owned” by that party, especially if that issue is salient at the time of the election. Our theoretical framework should apply to many other policy areas in which one of the parties is perceived to have a clear edge in terms of reputation and expertise. For instance, if the immigration issue is salient, right-wing parties might not pay a heavy electoral price for perceived policy failures because other parties have a worse reputation in this policy domain. In a similar vein, the electoral performance of Green parties in office might not be strongly affected by poor performance on environmental policies because they are perceived as better able to handle this policy domain than other political parties.²³ While these questions are well beyond the scope of this study, they are suggestive of the wider set of puzzles our results place on the table.

These findings also have relevant political and policy implications. For example, the adoption of iron-fist policies has been associated with violations of citizens’ rights (Fuentes 2004), the use of extralegal detentions (Dammert and Malone 2006), and the deterioration of procedural rights (Holland 2013). These strategies can be linked to right-wing politicians in Honduras, Mexico, Peru, El Salvador, and Brazil, among other countries (Cohen and Smith 2016; Holland 2013; Magaloni et al. 2015). Conservative parties might adopt strong-arm policies that erode citizens’ rights to maintain their reputation as “owners” of the crime issue and keep their brands intact (Lupu 2016). In so doing, however, these policies can perpetuate violence and exacerbate social tensions (poor citizens tend to suffer more from state abuses) without addressing the roots of the crime problem. Further research should continue to assess whether the adoption of punitive and repressive policies by right-wing parties is driven by electoral calculations.

²¹ This alternative explanation is inspired by a recent paper on accountability and issue ownership in the Latin American context, which shows that the left benefits from economic growth when the gains are distributed widely to their constituents (i.e., the poor) and the right benefits from growth when the benefits are captured by the elites (Carlin et al., 2021).

²² For some exceptions, see Bélanger and Meguid (2008) and Green and Hobolt (2008).

²³ As mentioned before, our argument might not travel well to countries experiencing an economic crisis because affected citizens might focus on policy issues owned by parties on the right (e.g., reducing inflation) and on the left (e.g., reducing unemployment or increasing welfare protection).

Data availability

Our data and code will be made available in a public repository (e.g. Dataverse) when the paper is accepted for publication.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.electstud.2022.102522>.

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