

CITIZENS' ELECTORAL EXPECTATIONS IN IMPERFECT DEMOCRACIES: INSIGHTS FROM FIVE CENTRAL AMERICAN COUNTRIES*

Las expectativas electorales de los ciudadanos en democracias imperfectas: perspectivas desde cinco países de centroamérica

Expectativas Eleitorais dos Cidadãos em Democracias Imperfeitas: Perspectivas de Cinco Países da América Central

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Abstract

Citizens can predict election outcomes well in advance of voting. However, nearly all existing research only examines mature democracies. Therefore, little is known about citizens' forecasting abilities in other types of political regimes. This article addresses that gap by examining whether citizens in other regimes can form accurate vote expectations. Drawing on a large dataset of nearly 60,000 respondents, we evaluate citizens' forecasting accuracy across 22 presidential elections in five Central American countries between 1999 and 2022. We also examine how partisan motivated reasoning and political sophistication are associated with vote expectations. We find that supporters of the eventual winner are significantly more likely to forecast the correct outcome. We also observe that political sophistication is associated with weak to moderate improvements in forecasting accuracy. Political sophistication increases accuracy only among winning-party supporters, suggesting that it may reflect heightened emotional or partisan engagement.

Palabras clave:

*predicción
ciudadana;
expectativas
de voto;
Centroamérica;
sofisticación;
pensamiento
ilusorio*

Resumen

Los ciudadanos pueden predecir los resultados electorales con mucha antelación al momento de votar. Sin embargo, casi toda la investigación existente solo examina democracias consolidadas. Por lo tanto, se sabe poco sobre la capacidad de los ciudadanos para pronosticar resultados en otros tipos de regímenes políticos. Este artículo aborda esa brecha al analizar si los ciudadanos en otros regímenes pueden formar expectativas electorales precisas. A partir de un amplio conjunto de datos de casi 60 000 encuestados, evaluamos la precisión de las predicciones ciudadanas en 22 elecciones presidenciales en cinco países de Centroamérica entre 1999 y 2022. También examinamos cómo el razonamiento motivado por el partidismo y la sofisticación política se asocian con las expectativas de voto. Encontramos que los simpatizantes del eventual ganador tienen una probabilidad significativamente mayor de prever correctamente el resultado. También observamos que la sofisticación política está asociada con mejoras débiles a moderadas en la precisión de las predicciones. La sofisticación política aumenta la precisión solo entre los simpatizantes del partido ganador, lo que sugiere que puede reflejar un mayor compromiso emocional o partidista.

Palabras clave:

*previsão cidadã;
expectativas de
voto; América
Central;
sofisticação;
pensamento
ilusório*

Resumo

Os cidadãos podem prever os resultados eleitorais muito antes da votação. No entanto, quase toda a pesquisa existente examina apenas democracias consolidadas. Portanto, sabe-se pouco sobre a capacidade dos cidadãos de prever resultados em outros tipos de regimes políticos. Este artigo aborda essa lacuna ao analisar se cidadãos em outros regimes conseguem formar expectativas eleitorais precisas. Com base em um amplo conjunto de dados de quase 60 mil entrevistados, avaliamos a precisão das previsões dos cidadãos em 22 eleições presidenciais em cinco países da América Central entre 1999 e 2022. Também examinamos como o raciocínio motivado pelo partidismo e a sofisticação política estão associados às expectativas de voto. Constatamos que os apoiadores do vencedor final têm uma probabilidade significativamente maior de prever corretamente o resultado. Também observamos que a sofisticação política está associada a melhorias fracas a moderadas na precisão das previsões. A sofisticação política aumenta a precisão apenas entre os apoiadores do partido vencedor, o que sugere que ela pode refletir um envolvimento emocional ou partidário mais intenso.

1. INTRODUCTION

Since the 1980s, scholars have developed a range of models to forecast electoral outcomes, including structural models, vote intention models, and vote expectation models. Structural models draw on political theories of voting behaviour and typically employ regression equations to explain electoral results using key economic and political indicators (Lewis-Beck *et al.*, 2025). Vote intention models rely on survey data that ask citizens which candidate or party they plan to support. In contrast, vote expectation models ask citizens to predict which candidate

or party they believe will win—*regardless of their personal preferences* (Temporão *et al.*, 2019; Rothschild & Wolfers, 2012).

Among these approaches, vote expectation models have emerged as a particularly effective and parsimonious method of election forecasting. A growing body of empirical research shows that citizens are surprisingly adept at anticipating electoral outcomes, producing highly accurate forecasts across diverse countries, electoral systems, and historical contexts (see Murr, 2017 for a comprehensive review). In the United States, Graefe (2014) found that vote expectation surveys consistently outperformed other forecasting methods—including vote intention polls, expert surveys, prediction markets, and structural models—in terms of predictive accuracy. Similar findings have been reported in the United Kingdom (Murr *et al.*, 2021). These results suggest that individual citizens are capable of aggregating politically relevant information in ways that rival, and sometimes surpass, more complex institutional forecasting mechanisms. One of the most widely cited theoretical explanations for this phenomenon is Condorcet's Jury Theorem. In its classical form, the theorem posits that if each member of a group has an independent and better-than-random chance of making a correct binary decision, then the probability of the majority arriving at the correct decision increases with group size. While the original formulation assumed equal competence and independence among voters, subsequent extensions have relaxed these assumptions (see, *e. g.*, Murr, 2011; 2015; Mongrain *et al.* 2025).

Despite their demonstrated accuracy, citizen-based forecasts have been studied primarily in geographically and institutionally narrow contexts. Most existing research focuses on consolidated democracies in North America and Western Europe. To date, no systematic studies have examined whether citizens in other types of political regimes—particularly those with weaker democratic institutions—can forecast elections with similar precision (for notable exceptions, see Murr, 2025; Thompson-Collart *et al.*, 2024). This paper addresses that gap by evaluating citizen forecasting accuracy in less mature political systems, including electoral democracies and hybrid regimes. These contexts present citizens with fundamentally different informational and institutional environments than those found in consolidated democracies (Morgenbesser, 2014).

Hybrid regimes, in particular, blend elements of democratic contestation with authoritarian control (Diamond, 2002). While they allow multiparty competition and the possibility of incumbent turnover, they are marked by systematic manipulation of the electoral process. Incumbents often exploit state resources, restrict media access, and undermine judicial independence to tilt the playing field in their favour (Levitsky & Way, 2020). As Levitsky and Way (2010) put it, such competition is “real but unfair”. These conditions complicate the forecasting task for citizens, raising critical questions about the limits of voter perception and the quality of electoral information in politically constrained environments.

Beyond their utility in forecasting, vote expectations offer broader insights into political cognition and democratic functioning. Understanding how citizens form expectations about electoral outcomes sheds light on how they process political information, perceive institutional legitimacy, and evaluate the broader political landscape. Forecast accuracy can serve as a proxy for both informational awareness and political engagement. Yet, little attention has been paid to how individuals anticipate collective outcomes, despite growing evidence that these anticipations shape key democratic attitudes and behaviours—including political efficacy, trust in institutions, and post-election responses such as acceptance or protest. In polarized or fragile democracies, widespread mismatches between expectations and outcomes may even fuel perceptions of fraud and contribute to democratic erosion (Mongrain, 2023). Investigating vote expectations thus provides a valuable lens for assessing the degree to which citizens are attuned to political reality—a core component of democratic competence (Delli Carpini & Keeter, 1996)—and how they navigate uncertainty in electoral environments.

This paper addresses two central research questions: (1) Can citizens in regimes outside of consolidated democracies accurately predict election outcomes? (2) Which individual-level characteristics influence their ability to form accurate vote expectations? While prior research has demonstrated the forecasting accuracy of citizens in mature democracies, it remains unclear whether this ability extends to more distorted or opaque electoral environments. To investigate this, we examine citizen forecasting accuracy across five Central American countries that span a range of regime types: Costa Rica (serving as a democratic benchmark), El Salvador, Guatemala, Honduras, and Nicaragua. By situating vote expectations within these diverse political contexts, we aim to broaden both the empirical scope and theoretical relevance of the citizen forecasting literature. Although scholars have proposed various regime classification frameworks (e. g., Bogaards, 2009; Gilbert & Mohseni, 2011; Morlino, 2009), each offers distinct strengths and limitations (see Munck & Verkuilen, 2002). Our objective is not to assign these countries to a fixed typology. Instead, we treat them as illustrative cases of regimes that fall short of full democratic consolidation. This approach enables us to explore how citizens form electoral expectations in environments characterized by varying degrees of institutional distortion and informational constraint.

2. ELECTORAL EXPECTATIONS

Individual-level characteristics and contextual factors jointly influence the accuracy of citizen forecasts. At the individual level, two broad categories help explain variation in forecasting performance. The first involves cognitive and informational traits, such as political interest, attentiveness to campaign coverage,

factual political knowledge, and educational attainment (Dolan & Holbrook, 2001; Lewis-Beck & Tien, 1999; Stiers & Dassonneville, 2018). A common assumption is that individuals who are more politically sophisticated tend to make more accurate predictions (Blais & Bodet, 2006; Daoust *et al.*, 2020; Mongrain, 2021a; 2021b). The second category relates to partisan predispositions. Party affiliation and candidate preferences often introduce wishful thinking into citizen forecasts, whereby individuals interpret political realities through the lens of their own preferences (Lewis-Beck & Skalaban, 1989; Mongrain, 2021a; Tikochinski & Babad, 2023). Dolan and Holbrook (2001, p. 28) define wishful thinking as the “tendency to fit perceptions of reality into a mold that is heavily influenced by [...] preferences.” Empirical evidence shows that individuals who support the winning candidate or party tend to make more accurate predictions than those who support losing candidates or parties. However, this difference reflects partisan bias rather than superior forecasting ability among winners’ supporters. While partisan predispositions are a dominant force in shaping vote expectations, cognitive traits such as political knowledge and education can serve as moderating influences, though the literature offers inconsistent findings regarding the magnitude of their corrective effect (Dolan & Holbrook, 2001; Mongrain, 2021a).

Beyond individual-level characteristics, the broader electoral context plays a critical role in shaping how citizens form expectations. Two contextual factors stand out: the competitiveness of the race and the availability of polling data. Less competitive elections tend to be somewhat easier to predict, although the effect size is modest (Mongrain, 2021a). More consequential is the presence and quality of polling information. Exposure to polls increases the likelihood of accurate forecasts, but only when such polls are methodologically sound, widely disseminated, and sufficiently frequent to capture the evolving dynamics of the race (Daoust *et al.*, 2020). In many Latin American countries and emerging democracies, however, polling quality remains uneven—often undermined by limited media independence and weak regulatory oversight (Seligson, 2005). As McClintock (2018) observes, pre-election polls in Latin America are frequently inaccurate compared to those in the United States, complicating voters’ strategic calculations and contributing to unexpected outcomes that may carry legitimacy costs. The scarcity of polling data further exacerbates these challenges. For instance, only 14 public polls were released during the 2014 Salvadoran presidential election and 29 during the 2019 cycle (Bunker, 2020). By contrast, Panagopoulos (2009) reports that 975 trial heat items were fielded in statewide polls between Labor Day and election day during the 2008 U.S. presidential election. Moreover, even when polls are conducted, they may not be widely distributed or accessible to the general public, limiting their utility as informational cues. As a result, large segments of the electorate remain unaware of polling trends that could otherwise inform their expectations.

In addition to these informational constraints, citizens in Central America are asked to make predictions within highly complex electoral environments. Two structural features contribute to this complexity. First, Latin American elections are characterized by the frequent entry of new political parties, which introduces volatility and reduces informational clarity (Ratto *et al.*, 2022). The emergence of unfamiliar parties makes it difficult for citizens to estimate their electoral strength, especially in the absence of historical performance data or reliable polling. Second, incumbents in hybrid and authoritarian regimes often engage in practices that distort electoral competition, such as media manipulation, legal repression of opposition candidates, and strategic use of state resources. These tactics obscure the true competitiveness of the race and further complicate individuals' assessments of likely outcomes.

Previous research commonly categorizes the world's political systems into democratic and non-democratic regimes. Diamond (2002), however, offers a more nuanced typology, classifying countries along a continuum that includes liberal democracies, electoral democracies, competitive authoritarian regimes, and closed authoritarian regimes. The distinction between liberal and electoral democracies hinges on the extent to which civil liberties and political rights are protected to ensure meaningful political competition and participation (Hameed, 2022). Further along the continuum, competitive authoritarian regimes violate at least one of democracy's core pillars: free elections, broad civil liberties, and a level electoral playing field (Levitsky & Way, 2010). In such regimes, incumbents frequently restrict opposition access to state resources, media platforms, and judicial institutions. Yet, despite these constraints, elections can still result in leadership turnover. As Levitsky and Way (2010, p. 12) observe, "whereas officials in full authoritarian regimes can rest easy on the eve of elections [...] incumbents in competitive authoritarian regimes cannot."

Political regimes are not static; countries may shift between types over time. In Latin America, democratic backsliding typically leads to one of two outcomes (Guachalla *et al.*, 2021). In the first, an incumbent consolidates power and establishes a competitive authoritarian regime that endures beyond two electoral cycles. In the second, a would-be autocrat is defeated at the ballot box, allowing democratic institutions to recover. These divergent trajectories often hinge on the strategic behaviour of both incumbents and opposition forces. Autocrats frequently maintain support through the targeted distribution of state resources (Perelló & Navia, 2023), while sustained opposition coordination can enable challengers to resist authoritarian drift (Freeman & Perelló, 2022). Although military dictatorships have largely disappeared from the region, Bílek (2024) notes that many Latin American countries remain "stuck in a gray zone." In these contexts, non-state actors play a significant role in distorting democratic processes to advance their interests. Criminal-political alliances are widespread and continue to undermine electoral fairness. As Balderacchi (2022, p. 1456) explains, "[i]n commonly defined democracies

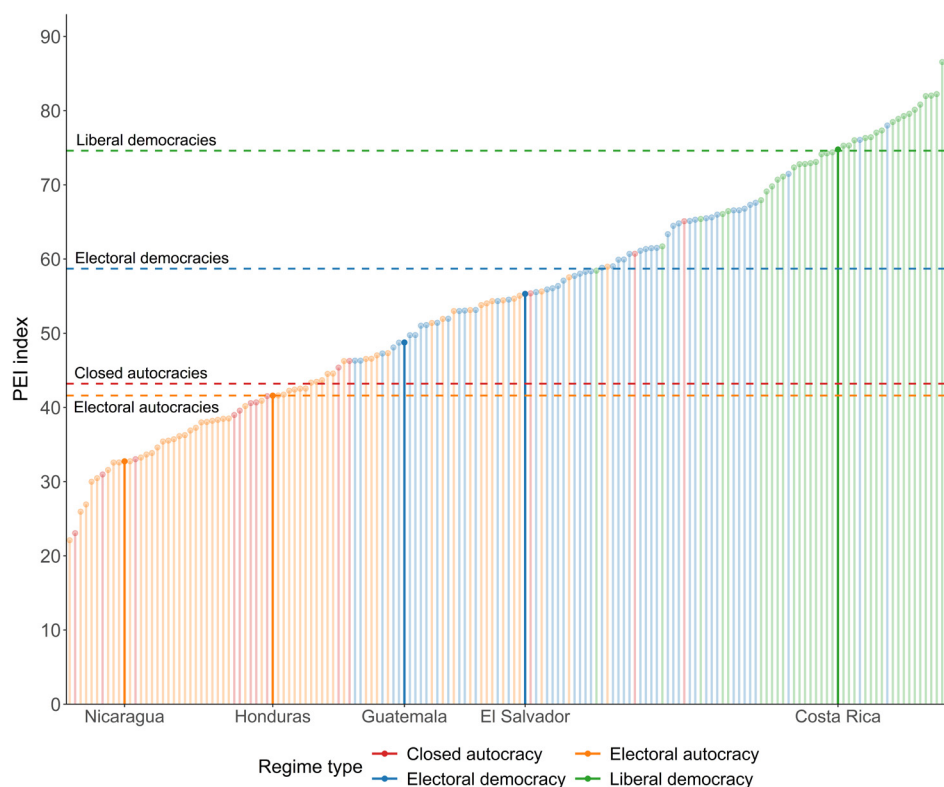
such as Colombia, Guatemala and El Salvador, actors and organizations other than the incumbent and the state have secured a significant, continuous advantage over competitors through the systematic and profound distortion of electoral competition.” Practices such as vote-buying, illicit campaign financing, electoral violence and intimidation, and the influence of organized crime are pervasive across the region. These dynamics may be sufficient to transform already fragile democracies into competitive non-democratic regimes.

Election experts consistently rate electoral integrity in Central American countries—particularly Honduras and Nicaragua—significantly lower than in fully democratic nations such as Costa Rica. Figure 1 illustrates this disparity, presenting expert evaluations of electoral integrity across 161 countries based on data collected from 2012 to 2023 as part of the Perceptions of Electoral Integrity (PEI) project (Garrett *et al.*, 2024). Public sentiment mirrors these expert assessments. Data from the AmericasBarometer reveal persistently low confidence in the electoral process in Guatemala and Honduras since the early 2000s. Nicaragua also exhibits lower levels of trust in elections compared to countries with stronger democratic institutions. Interestingly, despite low scores on measures of democracy and civil liberties, a slight majority of citizens in El Salvador report trust in the electoral process.

As already mentioned, little research has examined whether citizens in non-democratic or hybrid regimes can form accurate vote expectations. Several regime-specific characteristics may shape this ability. First, although hybrid regimes vary in their degree of competitiveness, those with weaker opposition and lower electoral uncertainty may make forecasting easier for citizens. In such contexts, predictable outcomes and limited political alternatives can reduce the cognitive burden of forming expectations. Second, autocratic governments frequently restrict access to information (Schedler, 2013), curtailing the availability of independent polling and media coverage that citizens in democratic settings rely on to anticipate electoral outcomes (Blais & Bodet, 2006; Cox, 1997; Daoust *et al.*, 2020). The absence of reliable information sources may leave citizens in authoritarian environments with fewer tools to assess the political landscape accurately.

Third, clientelism further complicates expectation formation. During election campaigns, incumbents in non-democratic regimes often allocate state resources to targeted groups in exchange for political support (González-Ocantos *et al.*, 2020; Sandberg & Tally, 2015; Taylor-Robinson, 1996). These transactional practices can distort electoral dynamics in ways that are difficult for individuals to anticipate. As Karl (1995, p. 80) notes, “[i]n rural municipalities in particular, local notables can interfere in the electoral process in a manner that systematically biases the outcome, distributes favors based on political loyalties, and actively encourages or discourages mass mobilization.” Such interference may obscure the true level of electoral support for candidates and parties, making it harder for citizens to form accurate expectations about the likely winner.

Figure 1. Perceptions of electoral integrity (PEI) index by country



Notes. Data from the Perceptions of Electoral Integrity (PEI) dataset (PEI-10.0) of the Electoral Integrity Project (EIP). The PEI-10.0 cumulative release (Garnett *et al.*, 2024) covers 586 national parliamentary and presidential contests held worldwide in 170 countries from 1 July 2012 to 20 December 2023. Imputed values of the PEI index were used in order to include Nicaragua. Higher PEI values indicate greater electoral integrity. The dotted horizontal lines show average PEI index values according to the four regime types of the RoW classification from V-Dem (*i. e.*, closed autocracies, electoral autocracies, electoral democracies, and liberal democracies).

Finally, corruption poses an additional barrier to accurate forecasting. It remains a salient concern for many citizens across Latin America (Davis *et al.*, 2004; Canache & Allison, 2008), and perceptions of political malpractice have been shown to erode trust, depress voter turnout, and diminish broader political engagement. While some studies suggest that corruption can mobilize voters under certain conditions (Dahlberg & Solevid, 2016; Neshkova & Kalesnikaite, 2019), in flawed

democracies, widespread perceptions of corruption, electoral misconduct, and irregularities are more likely to foster political disengagement (Carreras & İrepoğlu, 2013). This disengagement reduces individuals' exposure to relevant political information and deepens apathy toward the electoral process. As a result, citizens may struggle to assess electoral dynamics accurately, express greater uncertainty about the likely winner, or decline to answer election-related questions altogether. In Mexico, Murr (2025) has shown that those expressing doubts about the cleanliness the elections tend to be worst forecasters than more trusting individuals.

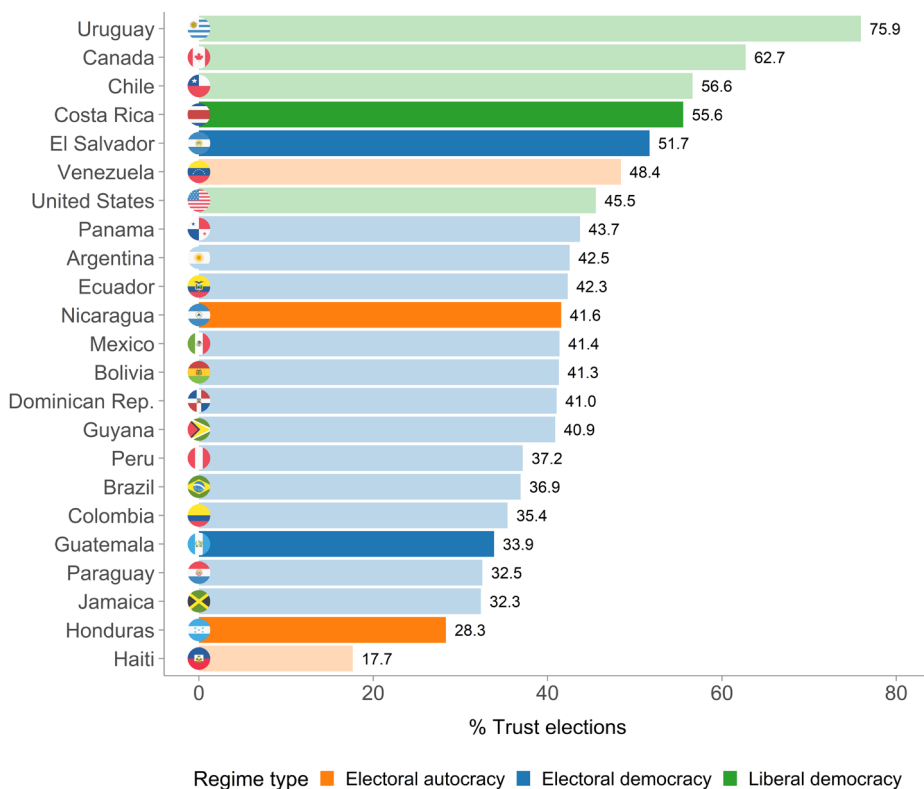
Building on previous research, we derive several hypotheses regarding the psychological and informational foundations of citizen vote expectations. First, we expect wishful thinking to significantly shape electoral forecasts—a robust and well-documented phenomenon in political behaviour research (Granberg & Brent, 1983; 1986). Individuals tend to project their preferences onto expected outcomes, often assuming their favoured candidate will win. Accordingly, we hypothesize that individuals who voted for the eventual winner will be more likely to correctly forecast the election outcome than those who supported losing candidates (H1).

Second, prior work suggests that political sophistication enhances forecasting accuracy (Lewis-Beck & Tien, 1999; Stiers & Dassonneville, 2018). More educated and politically engaged individuals are generally better equipped to process political information, track campaign developments, and integrate polling data into their expectations. Politically interested citizens, in particular, are more likely to seek out relevant information, which can improve the accuracy of their forecasts (Leiter *et al.*, 2018). However, political sophistication may also amplify partisan bias. As Zaller (1992) argues, individuals with greater cognitive resources possess more “ammunition” to defend their prior beliefs and resist disconfirming evidence. Importantly, education and political interest may differ in their effects: while education is often associated with broader cognitive flexibility and tolerance for ambiguity, political interest may intensify emotional investment and attachment to preferred outcomes. Thus, politically interested individuals may be especially prone to motivated reasoning, using their attentiveness not to correct bias but to reinforce it. Indeed, Murr's (2025) study of citizens' forecasts in Mexican presidential elections points in that direction. While these competing dynamics warrant attention, we hypothesize that, on balance, higher political sophistication—particularly education—will be positively associated with forecasting accuracy (H2).

Finally, existing studies indicate that politically sophisticated individuals—those with higher levels of education or political interest—are less prone to overestimating their party's electoral prospects (Dolan & Holbrook, 2001; Stiers & Dassonneville, 2018). This suggests that sophistication may moderate the influence of partisan bias on vote expectations. Specifically, we hypothesize that political sophistication attenuates the impact of wishful thinking, particularly among supporters of losing candidates (H3). However, this moderating effect may be more pronounced for education than

for political interest, given the latter's potential to preserve bias through selective exposure and motivated reasoning. In other words, while partisan bias may persist, its distorting effect on forecasting accuracy should be less severe among more educated individuals, whereas politically interested individuals may remain more susceptible to biased expectations despite their informational engagement.

Figure 2. Trust in elections across North and Latin America



Notes: Data from the AmericasBarometer surveys (2004–2023) conducted by the Latin American Public Opinion Project (LAPOP). Respondents were asked: “To what extent do you trust elections [in this country]?” with answers given on a 1–7 scale, where 1 indicates “Not at all” and 7 indicates “A lot.” Following LAPOP’s convention, we recoded responses into a binary variable: responses from 1 to 4 were coded as not trusting elections, and responses from 5 to 7 as trusting. Countries without available Region of the World (RoW) data were excluded. Regime type was classified based on the most frequently observed regime type during the study period; in cases of a tie, the most recent classification was used.

This paper makes two key contributions to the study of electoral behaviour and political cognition. First, it presents the first systematic analysis of citizen forecasting in across multiple political regimes beyond established democracies. Existing research on vote expectations has overwhelmingly focused on stable North American and Western European contexts, where elections are generally free and fair, and citizens benefit from access to reliable information and robust public opinion polling. By extending this line of inquiry into hybrid and competitive authoritarian regimes, the present study challenges the implicit assumption that accurate citizen forecasting is a phenomenon confined to democratic environments. It sheds light on how individuals form electoral expectations under conditions of media control, restricted political competition, and institutional manipulation—offering a more nuanced understanding of voter cognition across diverse regime types.

Second, this paper presents the first large-scale investigation of citizen forecasting in Latin America based on nationally representative samples. While the region has long been a focal point for research on democratization, electoral volatility, and political clientelism, the ability of Latin American citizens to anticipate electoral outcomes remains strikingly underexplored. Existing studies on forecasting accuracy in the region are limited. For instance, Thompson-Collart *et al.* (2024) employed a non-representative sample of social media users to predict the first round of the 2023 Argentinian presidential election. More recently, Murr (2025) conducted a broader longitudinal analysis of citizen forecasting in Mexico, spanning all presidential elections from 2000 to 2024. In contrast, the present study leverages high-quality survey data from multiple countries over the past 25 years, encompassing diverse regime types and institutional contexts. This methodological breadth substantially improves the generalizability of the findings. By doing so, the study advances our understanding of how political environments influence voter expectations and offers a more nuanced account of electoral cognition in the Global South.

3. DATA AND METHODS

This study draws on data from surveys conducted by CID Gallup, a public opinion firm that regularly polls citizens on political issues across multiple countries in Central and South America, as well as the Caribbean. The dataset comprises 44 nationally representative surveys covering 22 presidential elections in the Central American countries of Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. Respondents were randomly selected at the national level, yielding a total sample of over 57,000 individuals. Access to the dataset was secured through a paid acquisition agreement with CID Gallup. For the purposes of this study, only surveys that included electoral expectation items were retained.

Central America was selected as the focal region for several compelling reasons. First, it exhibits substantial variation in regime types both across countries and over time. During the 1980s and 1990s, El Salvador, Guatemala, Honduras, and Nicaragua underwent significant political transitions. As Karl (1995; see also Bernzén, 1993) noted in the mid-1990s, with the exception of democratic Costa Rica, the region was marked by an uneven acquisition of the procedural requisites of democracy. Since then, these countries have experienced both democratizing and de-democratizing trajectories (Cannon & Hume, 2012). Recent scholarship points to sustained democratic backsliding in El Salvador, Guatemala, Honduras, and Nicaragua (Colburn & Cruz, 2014; Mainwaring & Pérez-Liñán, 2023; Meléndez-Sánchez, 2021; Pérez & Wade, 2023; Schwartz & Isaacs, 2023), with some cases exhibiting clear authoritarian reversals (Haggard & Kaufman, 2021). Additional details on election outcomes and contextual information for specific contests are provided in Section A of the online Appendix.

Each survey asked citizens to identify which candidate they believed would win the upcoming presidential election, regardless of their own voting intentions (e. g., “Regardless of who you are voting for, who do you think will be the next president of Honduras?”—our translation). The forecasting item was consistent across surveys, with only minor variations in wording. In Nicaragua, the question did not explicitly prompt respondents to separate their forecast from their personal vote intention. However, we do not expect this to significantly affect the results. Even strong interventions designed to reduce wishful thinking—such as financial incentives to encourage unbiased predictions—have generally shown limited success in improving forecast accuracy (Marsh & Wallace, 2014). Responses were grouped into three categories: (1) correct forecasts, (2) incorrect forecasts, and (3) “don’t know” answers and non-responses.¹ Most surveys were conducted within three months of the election, although in some cases, citizens were asked for their expectations as early as 14 months before election day. In a few instances—particularly in Costa Rica and Guatemala—respondents were surveyed after a first-round election had taken place, presumably lowering the difficulty of the forecasting task.

Individuals often expect their preferred candidate to win—a tendency attributed to motivated reasoning (Lodge & Taber, 2013). This “wishful thinking” bias reflects a psychological inclination to interpret political information in ways that affirm partisan identity and reinforce prior beliefs. To measure partisan alignment, we coded respondents’ party identification as a categorical variable: 1 for those who identified with a losing candidate’s party (reference category), 2 for those who did not identify with any party, and 3 for those who identified with the winning

1. In most surveys, DKs and non-responses were grouped in a single category. For these reasons, when DKs and non-responses were reported separately, we recoded them as a single category.

candidate's party. However, not everyone is equally susceptible to this bias. Political sophistication has traditionally been viewed as a mitigating factor, with more informed and engaged individuals better able to distinguish between personal preferences and likely outcomes (Bartels, 2002; Lau & Redlawsk, 2006). Yet sophistication is not monolithic. In this study, we treat educational attainment and political interest as distinct dimensions of sophistication, each potentially exerting different effects on forecasting behaviour. Education—categorized as primary or less, (incomplete/completed) secondary, and (incomplete/completed) tertiary—is often associated with structural political knowledge, such as understanding electoral rules and institutional dynamics (Elo & Rapeli, 2010).² Political interest—measured on a four-point scale from “no interest” to “a lot of interest”—is more closely tied to situational awareness, including familiarity with candidates, campaign developments, and partisan control.

As already noted, these two dimensions may not operate in the same direction. While education is generally expected to improve forecast accuracy by enhancing cognitive capacity and reducing reliance on affective heuristics, political interest may have a more complex effect. Politically interested individuals are more likely to seek out information, but they may also be more emotionally invested in the outcome, making them more resistant to disconfirming evidence and more prone to motivated reasoning (Zaller, 1992). As such, political interest may preserve or even intensify partisan bias, whereas education may help counteract it. We therefore examine these variables separately to assess their distinct contributions to forecasting accuracy and susceptibility to wishful thinking.³

In addition to forecast correctness, we pay close attention to respondents who selected “don't know” or declined to provide a forecast. Although such non-responses are often dismissed as indicators of apathy or ignorance, they may reflect a range of underlying dynamics—from genuine uncertainty to strategic reticence in politically sensitive environments (Berinsky, 1999). Prior research suggests that demographic

2. It is worth noting that in all countries examined here, except Costa Rica, a very small percentage of the population has a (short-cycle) tertiary education (10 % or less compared to an average of 47 % in OECD countries). Furthermore, only a quarter to a third of the population in El Salvador, Guatemala, Honduras, and Nicaragua has a certificate of upper secondary education (OECD 2023; World Bank 2024a; 2024b). Low educational attainment likely hampers the formation of (accurate) vote expectations within most of the countries in our sample.

3. Social networks offer an alternative explanation for partisan bias in citizen forecasts. Individuals tend to form social circles composed of like-minded peers, and previous studies suggest that citizens “sample” from these networks when forming perceptions of electoral dynamics (Uhlman & Grofman, 1986). More recent research shows that partisan diversity within a citizen's social network reduces the likelihood of expecting one's preferred party to win (Leiter *et al.*, 2018; 2020). Unfortunately, our dataset does not include measures of social network composition, limiting our ability to adjudicate between psychological and social explanations for the partisan bias observed in citizen forecasts. We can only identify associations between partisanship and forecast accuracy.

factors, particularly gender, shape the likelihood of opting out. Women, for instance, are consistently more likely to select “don’t know” in political surveys, a pattern attributed to both disparities in political knowledge and socialization processes that discourage assertive political expression (Krosnick & Milburn, 1990; Mondak & Anderson, 2004). Age and proximity to election day may also shape response patterns. Older individuals, having accumulated greater political experience, are generally expected to exhibit stronger opinionation. However, this tendency may be attenuated in emerging democracies and hybrid regimes, where older cohorts were socialized under different—and often inequitable—political conditions (Murr, 2025). Additionally, respondents surveyed closer to election day are likely to have greater access to relevant information and contextual cues, which may facilitate the articulation of political forecasts. Leiter *et al.* (2018) further demonstrated that individuals with higher levels of political interest in Germany were significantly less likely to withhold forecasts, underscoring the role of engagement in shaping response patterns. Therefore, we interpret “don’t know” responses not merely as noise, but as politically meaningful signals. By incorporating demographic controls—specifically age, gender, and timing of the interview (measured in months before the election)⁴—we aim to isolate the effects of political sophistication and partisan alignment on forecast behaviour. These controls help clarify whether non-response stems from informational deficits, motivational biases, or contextual constraints.

To estimate the relationship between our explanatory variables and citizen forecasting behaviour, we ran multinomial regression models separately for each country, incorporating fixed effects for election and survey wave, and clustering standard errors at the same level. This approach allows us to account for country-specific dynamics and temporal variation in campaign environments. The models include interaction terms between political sophistication (measured separately via educational attainment and political interest) and partisan identity to capture heterogeneous effects across partisan groups. As discussed, we expect motivational biases—such as wishful thinking—to be attenuated among more educated and politically interested individuals. By modeling both forecast correctness and non-response, we provide a more comprehensive account of how citizens engage with electoral expectations and the psychological and structural factors that shape their predictions.⁵

4. The timing of survey administration is a critical factor to consider. Forecasts made closer to election day tend to be more accurate, as citizens have access to more complete and up-to-date information (Murr, 2011). This temporal dimension highlights the dual importance of informational availability and electoral proximity in shaping the accuracy of voter expectations. Unfortunately, the CID Gallup surveys did not include the exact dates of respondent interviews. To approximate temporal proximity, we therefore relied on the number of months prior to the election in which each survey was conducted.

5. See sections A and B of the online Appendix for more details on data sources and variable coding.

5. RESULTS

How well do citizens in Central America predict presidential elections? Table 1 visualizes citizens' forecasting competence across presidential elections in the five Central American countries covered in the present study. The table provides the percentage of correct predictions, incorrect predictions, and "don't know" answers/non-responses (DK/NR). In Costa Rica, runoff elections were held in 2002, 2014, 2018, and 2022 as none of the presidential nominees managed to gather the required 40 % of the votes to win during the first round. In Guatemala, where candidates need to secure an absolute majority of the votes to win the presidency, a second round of voting took place in all elections since 1985. Therefore, in some elections, citizens were interviewed only before the first round (*i. e.*, Costa Rica 2014 and 2018, Guatemala 2007 and 2015), only after the first round (*i. e.*, Costa Rica 2022) or both before and after the first round (Costa Rica 2002, Guatemala 2003 and 2007). Percentages of (in)correct forecasts for predictions made before the first round and those made after are presented separately in Table 1. In most elections (16 out of 22), less than half of citizens interviewed were able to foresee who would end up becoming president. It would then only be fair to conclude that Central American citizens have trouble forming accurate expectations about upcoming elections. However, a more informative and useful indicator is the most frequent answer given in each election. When focusing on this measure, we see that a clear plurality of citizens *correctly* predicted the outcome of the election in 16 out of the 22 elections.

Overall, if one were to bet on the outcome of an election in any of the five countries covered in this study, following the opinion of the plurality would likely yield favourable results most of the time. However, some elections proved especially challenging for citizens. In both the 2014 and 2018 Costa Rican elections, fewer than 5 % of respondents correctly identified the winner. In 2014, nearly 49 % of citizens predicted that Johnny Araya of the National Liberation Party (PLN) would be the most likely winner, followed by José María Villalta of *Frente Amplio* with 15.6 %. All citizens were interviewed in January, prior to the first round of voting. Their expectations largely mirrored the vote intention polls at the time, with Araya and Villalta in first and second place, respectively, and Luis Guillermo Solís (the eventual winner) of the Citizens' Action Party (PAC) in third. By 2018, Costa Rican respondents' expectations were much more divided. Antonio Álvarez Desanti of PLN and Juan Diego Castro Fernández of *Partido Integración Nacional*, a much smaller party, were seen as the top contenders by 22.8 % and 15.8 % of citizens, respectively. However, neither of these candidates advanced to the second round. For Colburn and Cruz (2018), the 2014 and 2018 elections marked the end of the traditional PLN–PUSC two-party system. In 2018, an unprecedented 13 candidates ran for the presidency, likely contributing to the difficulty citizens experienced in

predicting the outcome. The profound partisan realignment during this period may help explain why respondents struggled to correctly identify the winner.

Citizens performed poorly in the 2015 Guatemalan election. Nearly 49 % predicted Manuel Baldizón, candidate of the LIDER party and runner-up in the 2011 election, would prevail. The 2015 election followed the resignation of President Otto Pérez Molina amid widespread corruption allegations. This political upheaval was accompanied by anti-corruption protests, signaling deep disillusionment with political institutions. This climate likely contributed to the victory of Jimmy Morales, a comedian with no prior political experience (Althoff, 2019). His party, *Frente de Convergencia Nacional*, was participating in its first presidential election. The poor forecasting performance in this election can be attributed to the unpredictable nature of the race, as the first-round results showed a relatively close three-way contest between Morales, Baldizón, and Sandra Torres of UNE.

Table 1. Citizens' forecasts in five Central American countries

Election	Round	n	% Incorrect	% Correct	% DK/NR	Plurality
<i>Costa Rica</i>						
2002		2,774	29.42	54.54	16.04	Yes
2002	Before 1 st	1,552	35.44	47.36	17.20	Yes
2002	After 1 st	1,222	21.77	63.67	14.57	Yes
2006	Only one	1,823	11.19	74.33	14.48	Yes
2010	Only one	1,106	32.28	67.72	–	Yes
2014	Before 1 st	2,417	76.71	4.63	18.66	No
2018	Before 1 st	1,213	56.80	3.22	39.98	No
2022	After 1 st	1,200	38.08	48.67	13.25	Yes
<i>El Salvador</i>						
1999	Only one	2,626	11.01	49.85	39.15	Yes
2004	Only one	2,638	22.96	59.37	17.67	Yes
2009	Only one	2,438	38.43	42.95	18.62	Yes
2014	Only one	2,209	34.95	46.94	18.11	Yes
2019	Only one	1,607	22.96	59.37	17.67	Yes

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Election	Round	<i>n</i>	% Incorrect	% Correct	% DK/NR	Plurality
<i>Guatemala</i>						
2003		3,702	28.58	47.27	24.15	Yes
2003	Before 1 st	2,468	25.89	45.58	28.53	Yes
2003	After 1 st	1,234	33.95	50.65	15.40	Yes
2007	Before 1 st	3,721	16.96	39.37	43.67	No
2011		3,701	26.91	46.83	26.26	Yes
2011	Before 1 st	2,486	26.23	49.40	24.38	Yes
2011	After 1 st	1,215	28.31	41.56	30.12	Yes
2015	Before 1 st	1,274	62.17	14.60	23.23	No
<i>Honduras</i>						
2001	Only one	4,116	32.02	52.53	15.45	Yes
2005	Only one	5,989	43.93	30.04	26.03	No
2009	Only one	3,824	35.30	45.89	18.80	Yes
2013	Only one	2,745	45.46	36.98	17.56	No
2021	Only one	2,428	53.46	26.36	20.18	No
<i>Nicaragua</i>						
2001	Only one	1,598	34.29	38.86	26.85	Yes
2011	Only one	1,100	31.27	37.82	30.91	Yes

Notes. Across surveys, typically respondents were asked to answer the following question:
"Regardless of who you are voting for, who do you think will be the next president of [country]?"

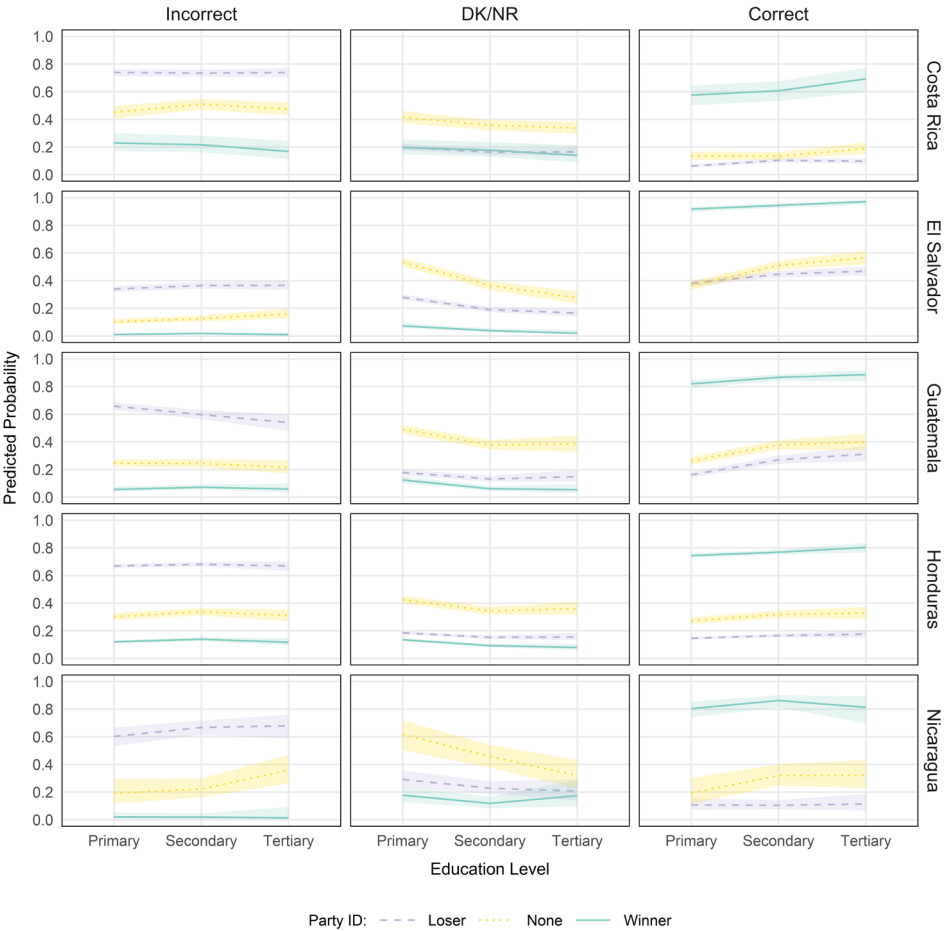
Source: Data from various CID-Gallup datasets

Despite these more challenging cases, Table 1 indicates that Central American citizens forecast similarly to those in established democracies. For instance, Lewis-Beck and Stegmaier (2011) reported that 60 % of British citizens correctly predicted the winner across 13 national elections, with accuracy rates ranging from 26 % to 87 %. In Canada, Temporão *et al.* (2019) found that correct predictions across 10 federal and provincial elections ranged from approximately 43 %

to 69 %. Lewis-Beck and Tien (1999) showed that 71 % of citizens across 11 ANES surveys accurately forecasted US presidential election outcomes, with individual survey results varying between 43 % and 92 %. These comparative findings suggest that, while individual-level election forecasting is inherently imperfect, Central American citizens perform at a level consistent with citizens in more institutionally established democratic contexts.

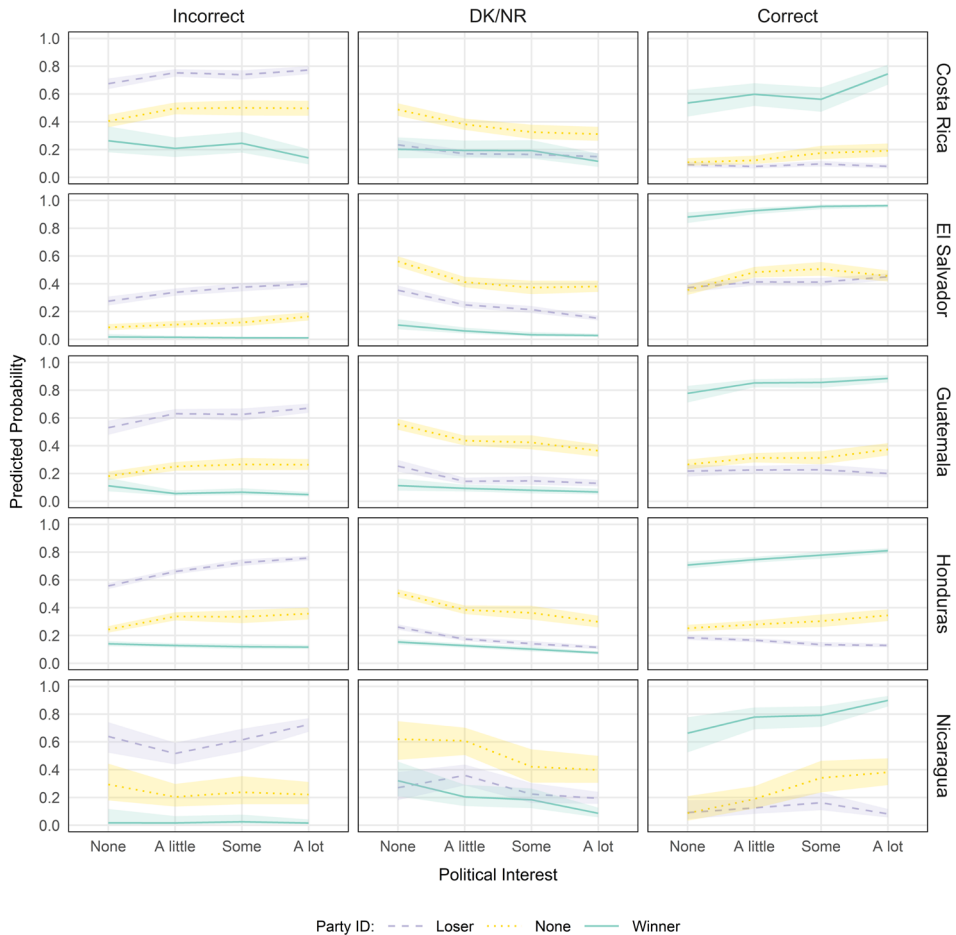
Based on estimates from our multinomial models, we computed the predicted probabilities of providing a correct forecast, incorrect forecast, or a “don’t know” answer/non-response in each country. To assess the statistical significance of interaction terms—namely those involving party identification, education, and political interest—we computed second differences following the approach recommended by Mize (2019). Of the 135 second differences computed for the interaction between education and party identification across all five countries, only 21 (15.56 %) reach statistical significance. In contrast, 166 out of the 270 (61.48 %) second differences for the interaction between political interest and party identification are statistically significant. This disparity already suggests that political interest is a more potent moderator of partisan effects on forecast accuracy than education. While both variables condition the influence of party identification, interest appears to more consistently amplify or mitigate partisan biases across contexts. Full regression output for all models is available in Section C of the online Appendix. These predicted probabilities reveal a robust and theoretically consistent structure in the way political identity interacts with individual-level cognitive and motivational resources. Specifically, the data illuminate how party identification status—whether respondents support the winning side, the losing side, or have no party affiliation—intersects with both educational attainment and political interest to shape the accuracy of electoral expectations. These findings underscore the dual role of information and motivation in political judgment, with partisan alignment emerging as the most powerful predictor of forecast accuracy, and education and interest serving as conditional moderators that either reinforce or mitigate partisan biases. fig presents the predicted probabilities for each response category—correct forecast, incorrect forecast, and DK/NR—across levels of educational attainment and party identification. Figure 4 illustrates the same probabilities, this time disaggregated by political interest and party identification. Predicted probabilities for both combinations of variables can be found in Section D of the online Appendix.

Figure 3. Predicted probabilities by Party ID and Education Level with 95 % CIs



Source: Data from various CID-Gallup datasets

Figure 4. Predicted probabilities by Party ID and Interest Level with 95 % CIs



Source: Data from various CID-Gallup datasets

Across all countries, and consistent with Hypothesis 1, individuals who identify with the winning side of the election exhibit markedly higher probabilities of making correct forecasts than those who support the losing side or report no party affiliation. This partisan gap is particularly pronounced in El Salvador and Nicaragua, where tertiary-educated winners correctly forecast the outcome with probabilities of 97.13 % and 81.31 %, respectively, compared to just 46.84 % and 11.40 % among similarly educated losers. A similar pattern emerges with political interest: in El Salvador, winners with high interest forecast correctly 96.24 % of the

time, while highly interested losers do so only 44.92 % of the time. These disparities suggest that partisan alignment with the victorious party provides a powerful heuristic for electoral expectations, likely driven by motivated reasoning, affective investment, and selective exposure to congruent information. Importantly, both education and interest amplify forecast accuracy among winners, indicating that cognitive sophistication and political engagement enhance the salience and processing of reinforcing cues.

In contrast, supporters of the losing side demonstrate persistently high rates of incorrect forecasts, with education and political interest exerting minimal corrective influence. In Costa Rica, incorrect forecasts among losers remain above 73 % across all education levels, and rise with increasing political interest—from 67.47 % among those with no interest to 77.24 % among those with high interest. Similar trends are observed in Honduras and Guatemala, where increased political interest among losers is associated with higher probabilities of incorrect forecasts and lower probabilities of expressing uncertainty. These results imply that greater cognitive resources and engagement may intensify motivated reasoning rather than mitigate it, reinforcing partisan bias and reducing openness to disconfirming information. The data suggest that when electoral expectations are incongruent with partisan preferences, individuals may selectively interpret or discount contrary evidence, and that education and interest—rather than serving as correctives—may instead deepen the commitment to erroneous beliefs.

Among respondents without a party affiliation, education and political interest play more nuanced roles. Non-partisans consistently show the highest probabilities of responding “don’t know” or providing no response (DK/NR), particularly at lower levels of education and interest. In Nicaragua, unaffiliated respondents with primary education have a DK/NR rate of 61.78 %, while those with no political interest exhibit a similar rate of 61.98 %. These elevated levels of uncertainty suggest that lacking partisan cues, and in the absence of sufficient cognitive or motivational resources, individuals are more likely to disengage from electoral forecasting altogether. However, as education and interest increase, the likelihood of correct forecasts among non-partisans also rises, albeit modestly. In Guatemala, correct forecasts among unaffiliated respondents increase from 26.28 % at the primary level to 39.81 % at the tertiary level, and from 26.47 % among the least interested to 37.31 % among the most interested. These patterns suggest that in the absence of partisan heuristics, cognitive and motivational resources serve as compensatory mechanisms, enhancing individuals’ capacity to engage with and interpret electoral information. Therefore, Hypotheses 2 and 3 fail to fully capture the nuance of our findings: political sophistication appears to fulfill its intended role, but only when partisan biases do not interfere.

Turning to the other covariates, female respondents are more likely than male respondents to select “don’t know” or provide no answer when asked to make forecasts.

This aligns with prior research suggesting that men are more inclined to guess or display overconfidence in their judgments. Somewhat unexpectedly, older individuals also exhibit a higher likelihood of giving “don’t know” or no responses—challenging the common assumption that political experience and system familiarity increase with age. However, in post-authoritarian democracies, where older generations may have lived through more repressive political regimes, this could reflect a form of strategic silence—a cautious approach to political expression—or inexperience with democracy (see Murr, 2025). The timing of the interview shows inconsistent effects, occasionally producing patterns that run counter to theoretical expectations.

Taken together, these findings reveal a complex but coherent interplay between political identity, education, and interest in structuring citizens’ expectations of electoral outcomes. While education and political interest enhance forecast accuracy among winners and, to a lesser extent, non-partisans, they have little ameliorative effect among losers, for whom partisan bias appears to dominate. The data thus support a model in which motivated reasoning and informational capacity jointly shape political perception, with partisan alignment serving as the primary axis of differentiation. These dynamics have important implications for understanding the cognitive foundations of political competence and the conditions under which citizens engage accurately—or inaccurately—with democratic processes. They also suggest that interventions aimed at improving political judgment must address not only informational deficits but also the motivational structures that guide how individuals process and respond to political information. In particular, efforts to promote political literacy and engagement must contend with the possibility that increased education and interest may not uniformly enhance accuracy, but may instead deepen partisan divides when individuals are confronted with outcomes that contradict their political preferences.

6. DISCUSSION AND CONCLUSION

This study offers the first systematic evaluation of citizens’ electoral forecasting accuracy in Central America, a region marked by institutional constraints, electoral volatility, and uneven access to political information. We investigated whether individuals can accurately predict presidential election outcomes and which individual-level characteristics shape their forecasting ability. Across all countries examined, a plurality of respondents correctly identified the winning candidate, suggesting a baseline level of electoral awareness. However, this accuracy is not evenly distributed and is strongly conditioned by partisan alignment. Supporters of the winning side consistently exhibit higher probabilities of correct forecasts, while those aligned with losing parties are markedly less accurate, often maintaining confidence in incorrect outcomes.

Our analysis reveals that partisan identity is the most powerful predictor of forecast accuracy. Both education and political interest influence this relationship, but in asymmetrical ways. Among supporters of the winning party, higher levels of education and interest are associated with increased forecasting accuracy, likely due to greater exposure to congruent information and stronger affective investment. In contrast, among supporters of the losing side, neither education nor interest exerts a significant corrective effect. Indeed, political interest among losers is often associated with higher rates of incorrect forecasts and lower rates of uncertainty, suggesting that greater engagement may intensify motivated reasoning rather than mitigate it.

These findings challenge conventional assumptions about the role of education in political judgment. While education is often viewed as a pathway to more informed and less biased political behaviour, our results indicate that its effect on forecasting accuracy is modest and context-dependent. Among respondents without party affiliation, education and political interest play more nuanced roles. Non-partisans are more likely to express uncertainty or abstain from forecasting, particularly at lower levels of education and interest. However, as these resources increase, so does the likelihood of correct forecasts, albeit modestly. This pattern suggests that in the absence of partisan heuristics, cognitive and motivational resources can serve as compensatory mechanisms, enabling individuals to engage more effectively with electoral information.

An inverse relationship between age and forecasting accuracy emerges in most countries under study. Older citizens, socialized under authoritarian rule, possess less experience with democracy than younger ones. The nature of older citizens' political socialization likely reduces their ability to understand and forecast within a democratic system. However, we also observe this pattern in Costa Rica, a country that has enjoyed democratic rule for more than seven decades. Further research should clarify the link between pre-adult political socialization and forecasting ability.

These findings reveal a complex interplay between political identity, education, and interest in shaping citizens' expectations of electoral outcomes. They underscore the dual role of information and motivation in political judgment, with partisan alignment serving as the primary axis of differentiation. The data support a model in which motivated reasoning and informational capacity jointly structure electoral perceptions, often reinforcing rather than correcting partisan biases. These dynamics have important implications for understanding the cognitive foundations of political competence and the conditions under which citizens engage accurately—or inaccurately—with democratic processes.

Future research should pursue several directions. First, comparative analysis with mature democracies would allow for a more systematic assessment of how regime type and institutional design influence forecasting accuracy. Second, more

granular measures of political knowledge, media literacy, and cognitive processing could help clarify the mechanisms through which education and interest affect electoral expectations. Third, the role of electoral integrity and institutional trust remains underexplored. In hybrid regimes, where democratic norms are contested, understanding how perceptions of fairness and legitimacy shape expectation formation could deepen our understanding of political cognition in constrained environments.

Ultimately, efforts to improve political judgment must address not only informational deficits but also the motivational structures that guide how individuals process and respond to political information. Interventions aimed at enhancing political literacy and engagement must contend with the possibility that increased education and interest may not uniformly improve accuracy, but may instead deepen partisan divides when individuals are confronted with outcomes that contradict their preferences. Recognizing the limits of cognitive resources in overcoming motivated reasoning is essential for designing strategies that foster more reflective and less polarized democratic participation.

REFERENCES

- Althoff, A. (2019). Right-wing populism and evangelicalism in Guatemala: The presidency of Jimmy Morales. *International Journal of Latin American Religions*, 3(3), 294–324. <https://doi.org/10.1007/s41603-019-00090-2>
- Balderacchi, C. (2022). Overlooked forms of non-democracy? Insights from hybrid regimes. *Third World Quarterly*, 43(6), 1441–1459. <https://doi.org/10.1080/01436597.2022.2059460>
- Bartels, L. (2002). Beyond the running tally: Partisan bias in political perceptions. *Political Behavior*, 24(2), 117–150. <https://doi.org/10.1023/A:1021226224601>
- Berinsky, A. (1999). The two faces of public opinion. *American Journal of Political Science*, 43(4), 1209–1230. <https://doi.org/10.2307/2991824>
- Berntzen, E. (1993). Democratic consolidation in Central America: A qualitative comparative approach. *Third World Quarterly*, 14(3), 589–604. <https://doi.org/10.1080/01436599308420344>
- Bilek, J. (2024). Electoral manipulation and postelectoral protests in Latin America. *Latin American Policy*, 15(3), 362–371.
- Blais, A., & Bodet, M. A. (2006). How do voters form expectations about the parties' chances of winning the election? *Social Science Quarterly*, 87(3), 477–493. <https://doi.org/10.1111/j.1540-6237.2006.00392.x>
- Bogaards, M. (2009). How to classify hybrid regimes? *Democratization*, 16(2), 399–423. <https://doi.org/10.1080/13510340902777800>
- Bunker, K. (2020). A two-stage model to forecast elections in new democracies. *International Journal of Forecasting*, 36(4), 1407–1419. <https://doi.org/10.1016/j.ijforecast.2020.02.004>

- Canache, D., & Allison, M. (2005). Perceptions of political corruption in Latin American democracies. *Latin American Politics and Society*, 47(3), 91–111. <https://doi.org/10.1111/j.1548-2456.2005.tb00320.x>
- Cannon, B., & Hume, M. (2012). Central America, civil society and the 'Pink Tide': Democratization or de-democratization? *Democratization*, 19(6), 1039–1064. <https://doi.org/10.1080/13510347.2011.619775>
- Carreras, M., & İrepoğlu, Y. (2013). Trust in elections, vote buying, and turnout in Latin America. *Electoral Studies*, 32(4), 609–619. <https://doi.org/10.1016/j.electstud.2013.07.012>
- Colburn, F., & Cruz, A. (2014). El Salvador's beleaguered democracy. *Journal of Democracy*, 25(3), 149–158. <https://doi.org/10.1353/jod.2014.0057>
- Colburn, F., & Cruz, A. (2018). Latin America's shifting politics: The fading of Costa Rica's old parties. *Journal of Democracy*, 29(4), 43–53. <https://doi.org/10.1353/jod.2018.0061>
- Cox, G. (1997). *Making votes count: Strategic coordination in the world's electoral systems*. Cambridge University Press.
- Dahlberg, S., & Solevid, M. (2016). Does corruption suppress voter turnout? *Journal of Elections, Public Opinion and Parties*, 26(4), 489–510. <https://doi.org/10.1080/17457289.2016.1223677>
- Daoust, J.-F., Durand, C., & Blais, A. (2020). Are pre-election polls more helpful than harmful? Evidence from the Canadian case. *Canadian Public Policy / Analyse de politiques*, 46(1), 175–186. <https://doi.org/10.3138/cpp.2019-011>
- Davis, C., Ai Camp, R., & Coleman, K. (2004). The influence of party systems on citizens' perceptions of corruption and electoral response in Latin America. *Comparative Political Studies*, 37(6), 677–703. <https://doi.org/10.1177/0010414004265879>
- Delli Carpini, M., & Keeter, S. (1996). *What Americans know about politics and why it matters*. Yale University Press.
- Diamond, L. (2002). Elections without democracy: Thinking about hybrid regimes. *Journal of Democracy*, 13(2), 21–35. <https://doi.org/10.1353/jod.2002.0025>
- Dolan, K., & Holbrook, T. (2001). Knowing versus caring: The role of affect and cognition in political perceptions. *Political Psychology*, 22(1), 27–44. <https://doi.org/10.1111/0162-895X.00224>
- Elo, K., & Rapeli, L. (2010). Determinants of Political Knowledge: The Effects of the Media on Knowledge and Information. *Journal of Elections, Public Opinion & Parties*, 20(1), 133–146.
- Freeman, W., & Perelló, L. (2022). The long game: The opposition wins in Honduras. *Journal of Democracy*, 33(2), 118–132. <https://doi.org/10.1353/jod.2022.0022>
- Garnett, H. A., James, T., & Caal-Lam, S. (2024). Perceptions of electoral integrity (PEI-10.0). *Harvard Dataverse*. <https://doi.org/10.7910/DVN/FQ5ECC>
- Gilbert, L., & Mohseni, P. (2011). Beyond authoritarianism: The conceptualization of hybrid regimes. *Studies in Comparative International Development*, 46(3), 270–297. <https://doi.org/10.1007/s12116-011-9088-x>
- González-Ocantos, E., Kiewit de Jonge, C., Meléndez, C., Nickerson, D., & Osorio, J. (2020). Carrots and sticks: Experimental evidence of vote-buying and voter intimidation in Guatemala. *Journal of Peace Research*, 57(1), 46–61. <https://doi.org/10.1177/0022343319884998>
- Graefe, A. (2014). Accuracy of vote expectation surveys in forecasting elections. *Public Opinion Quarterly*, 78(S1), 204–232. <https://doi.org/10.1093/poq/nfu008>

- Granberg, D., & Brent, E. (1983). When prophecy bends: The preference-expectation link in U.S. presidential elections, 1952–1980. *Journal of Personality and Social Psychology*, 45(3), 477–491. <https://psycnet.apa.org/doi/10.1037/0022-3514.45.3.477>
- Granberg, D., & Brent, E. (1986). Political perception among voters in Sweden and the US: Analyses of issues with explicit alternatives. *Western Political Quarterly*, 39(1), 7–28. <https://doi.org/10.1177/106591298603900103>
- Guachalla, X. V., Hummel, C., Handlin, S., & Smith, A. E. (2021). When does competitive authoritarianism take root? *Journal of Democracy*, 32(3), 63–77. <https://doi.org/10.1353/jod.2021.0034>
- Haggard, S., & Kaufman, R. (2021). The anatomy of democratic backsliding. *Journal of Democracy*, 19(6), 27–41. <https://dx.doi.org/10.1353/jod.2021.0050>
- Hameed, M. (2022). Hybrid regimes: An overview. *Islamabad Policy Research Institute Journal*, 22(1), 1–24. <https://doi.org/10.31945/iprij.220101>
- Karl, T. L. (1995). The hybrid regimes of Central America. *Journal of Democracy*, 6(3), 72–86. <https://doi.org/10.1353/jod.1995.0049>
- Krosnick, J., & Milburn, M. (2011). Psychological determinants of political opinionation. *Social Cognition*, 8(1), 49–72. <https://psycnet.apa.org/doi/10.1521/soco.1990.8.1.49>
- Lau, R., & Redlawsk, D. (2006). *How voters decide: Information processing during election campaigns*. Cambridge University Press.
- Leiter, D., Reilly, J. L., & Stegmaier, M. (2020). Echoing certainty in uncertain times: Network partisan agreement and the quality of citizen forecasts in the 2015 Canadian election. *Electoral Studies*, 63, 102132. <https://www.sciencedirect.com/science/article/abs/pii/S0261379419302380>
- Leiter, D., Murr, A., Rascón Ramírez, E., & Stegmaier, M. (2018). Social networks and citizen election forecasting: The more friends the better. *International Journal of Forecasting*, 34(2), 235–248. <https://doi.org/10.1016/j.ijforecast.2017.11.006>
- Levitsky, S., & Way, L. A. (2010). *Competitive authoritarianism: Hybrid regimes after the Cold War*. Cambridge University Press.
- Levitsky, S., & Way, L. A. (2020). The new competitive authoritarianism. *Journal of Democracy*, 31(1), 51–65. <https://doi.org/10.1353/jod.2020.0004>
- Lewis-Beck, M. S., Kenny, J., Leiter, D., Murr, A., Ogili, O., Stegmaier, M., & Tien, C. (2025). Election forecasting: Political economy models. *International Journal of Forecasting*. <https://doi.org/10.1016/j.ijforecast.2025.02.006>
- Lewis-Beck, M. S., & Skalaban, A. (1989). Citizen forecasting: Can voters see into the future? *British Journal of Political Science*, 19(1), 419–427. <https://doi.org/10.1017/S000712340000538X>
- Lewis-Beck, M. S., & Tien, C. (1999). Voters as forecasters: A micromodel of election prediction. *International Journal of Forecasting*, 15(2), 175–184. [https://doi.org/10.1016/S0169-2070\(98\)00063-6](https://doi.org/10.1016/S0169-2070(98)00063-6)
- Lewis-Beck, M. S., & Stegmaier, M. (2011). Citizen forecasting: Can UK voters see the future? *Electoral Studies*, 30(2), 264–268. <https://doi.org/10.1016/j.electstud.2010.09.012>
- Lodge, M., & Taber, C. (2013). *The rationalizing voter*. Cambridge University Press.
- Mainwaring, S., & Pérez-Liñán, A. (2023). Why Latin America's democracies are stuck. *Journal of Democracy*, 34(1), 156–170. <https://doi.org/10.1353/jod.2023.0010>

- Marsh, K., & Wallace, H. (2014). The influence of attitudes on beliefs: Formation and change. In D. Albarracín, B. T. Johnson, & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 369–396). Psychology Press.
- McClintock, C. (2018). *Electoral rules and democracy in Latin America*. Oxford University Press.
- Meléndez-Sánchez, M. (2021). Millennial authoritarianism in El Salvador. *Journal of Democracy*, 32(3), 19–32. <https://doi.org/10.1353/jod.2021.0031>
- Mize, T. D. (2019). Best practices for estimating, interpreting, and presenting non-linear interaction effects. *Sociological Science*, 6, 81–117. <https://doi.org/10.15195/V6.A4>
- Mondak, J., & Anderson, M. (2004). The knowledge gap: A reexamination of gender-based differences in political knowledge. *Journal of Politics*, 66(2), 492–512. <https://doi.org/10.1111/j.1468-2508.2004.00161.x>
- Mongrain, P. (2021a). Did you see it coming? Explaining the accuracy of voter expectations for district and (sub)national election outcomes in multi-party systems. *Electoral Studies*, 71, Article 102317. <https://doi.org/10.1016/j.electstud.2021.102317>
- Mongrain, P. (2021b). A technocratic view of election forecasting: Weighting citizens' forecasts according to competence. *International Journal of Public Opinion Research*, 33(3), 713–723. <https://doi.org/10.1093/ijpor/edab010>
- Mongrain, P. (2023). Suspicious minds: Unexpected election outcomes, perceived electoral integrity and satisfaction with democracy in American presidential elections. *Political Research Quarterly*, 76(4), 1589–1603. <https://doi.org/10.1177/10659129231166679>
- Morgenbesser, L. (2014). Elections in hybrid regimes: Conceptual stretching revived. *Political Studies*, 62(1), 21–36. <https://doi.org/10.1111/1467-9248.12020>
- Morisi, D., & Leeper, T. (2024). What influences citizen forecasts? The effects of information, elite cues, and social cues. *Political Behavior*, 46, 21–41. <https://doi.org/10.1007/s11109-022-09811-4>
- Morlino, L. (2009). Are there hybrid regimes? Or are they just an optical illusion? *European Political Science Review*, 1(2), 273–296. <https://doi.org/10.1017/S1755773909000198>
- Munck, G., & Verkuilen, J. (2002). Conceptualizing and measuring democracy: Evaluating alternative indices. *Comparative Political Studies*, 35(1), 5–34. <https://doi.org/10.1177/001041400203500101>
- Murr, A. (2011). Wisdom of crowds? A decentralised election forecasting model that uses citizens' local expectations. *International Journal of Forecasting*, 30, 771–783. <https://doi.org/10.1016/j.electstud.2011.07.005>
- Murr, A. (2017). Wisdom of crowds. In K. Arzheimer, J. Evans, & M. S. Lewis-Beck (Eds.), *The SAGE handbook of electoral behaviour* (pp. 835–860). SAGE.
- Murr, A. E. (2025). Predicciones ciudadanas de las elecciones presidenciales mexicanas, 2000-2024. *Política y Gobierno*, 32(1), 1–39.
- Neshkova, M., & Kalesnikaite, V. (2019). Corruption and citizen participation in local government: Evidence from Latin America. *Governance*, 32(4), 677–693. <https://doi.org/10.1111/gove.12401>
- Organisation for Economic Cooperation and Development. (2023). *Educational attainment*. <https://data.oecd.org/education.htm>

- Panagopoulos, C. (2009). Polls and elections: Preelection poll accuracy in the 2008 general elections. *Presidential Studies Quarterly*, 39(4), 896–907. <https://doi.org/10.1111/j.1741-5705.2009.03713.x>
- Perelló, L., & Navia, P. (2023). Conditional cash transfers and voting for incumbents under democratic backsliding: The case of Honduras' Bono 10 000. *Journal of the Society for Latin American Studies*, 42(3), 456–472. <https://doi.org/10.1111/blar.13463>
- Pérez, O., & Wade, C. (2023). Militarism, authoritarianism and corruption: Post-coup Honduras and the decline of democracy. *Revista Latinoamericana de Opinión Pública*, 12(2), 147–177. <https://doi.org/10.14201/rlop.31391>
- Ratto, M., Lewis-Beck, M. S., & Bélanger, É. (2022). Forecasting elections in Latin America: An overview. *Revista Latinoamericana de Opinión Pública*, 11(1), 5–13. <https://doi.org/10.14201/rlop.29171>
- Rothschild, D., & Wolfers, J. (2012). Forecasting elections: Voter intentions versus expectations. Brookings Institution Report.
- Sandberg, J., & Tally, E. (2015). Politicisation of conditional cash transfers: The case of Guatemala. *Development Policy Review*, 33(4), 503–522. <https://doi.org/10.1111/dpr.12122>
- Schedler, A. (2013). *The politics of uncertainty: Sustaining and subverting electoral authoritarianism*. Oxford University Press.
- Schwartz, R., & Isaacs, A. (2023). How Guatemala defied the odds. *Journal of Democracy*, 34(4), 21–35. <https://doi.org/10.1353/jod.2023.a907685>
- Seligson, M. (2005). Improving the quality of survey research in democratizing countries. *PS: Political Science & Politics*, 38(1), 51–56. <https://doi.org/10.1017/S1049096505055782>
- Stiers, D., & Dassonneville, R. (2018). Affect versus cognition: Wishful thinking on election day—An analysis using exit poll data from Belgium. *International Journal of Forecasting*, 34(2), 199–215. <https://doi.org/10.1016/j.ijforecast.2017.12.001>
- Taylor-Robinson, M. (1996). When electoral and party institutions interact to produce caudillo politics: The case of Honduras. *Electoral Studies*, 15(3), 327–337. [https://doi.org/10.1016/0261-3794\(96\)00003-0](https://doi.org/10.1016/0261-3794(96)00003-0)
- Temporão, M., Dufresne, Y., Savoie, J., & van der Linden, C. (2019). Crowdsourcing the vote: New horizons in citizen forecasting. *International Journal of Forecasting*, 35(1), 1–10. <https://doi.org/10.1016/j.ijforecast.2018.07.011>
- Thompson-Collart, B., Brie, E., & Dufresne, Y. (2024). Can Latin American voters see the future? Citizen forecasting in Argentina. *Revista Latinoamericana de Opinión Pública*, 13, e31348. <https://doi.org/10.14201/rlop.31348>
- Tikochinski, R., & Babad, E. (2023). Voters' wishful thinking in an unprecedented event of three national elections repeated within one year: Fast thinking, bias, high emotions and potential rationality. *Western Political Quarterly*, 29(2), 250–275. <https://doi.org/10.1080/13546783.2022.2071990>
- Uhlener, C., & Grofman, B. (1986). The race may be close but my horse is going to win: Wish fulfillment in the 1980 presidential election. *Political Behavior*, 8(2), 101–129. <https://doi.org/10.1007/BF00987179>
- World Bank. (2024a). Educational attainment, at least completed short-cycle tertiary, population 25+, total (%) (cumulative). <https://data.worldbank.org/indicator/SE.TER.CUAT.ST.ZS>

World Bank. (2024b). Educational attainment, at least completed upper secondary, population 25+, total (%) (cumulative). <https://data.worldbank.org/indicator/SE.SEC.CUAT.UP.ZS>

Zaller, J. (1992). *The nature and origins of mass opinion*. Cambridge University Press.