

# LABOR INFORMALITY AND ECONOMIC POLITICAL ACCOUNTABILITY OF EXECUTIVE INCUMBENTS IN LATIN AMERICA

*Informalidad Laboral y Evaluación Política Económica de Líderes Ejecutivos en América Latina*

*Informalidade Trabalhista e Responsabilidade Política Econômica de Líderes Executivos na América Latina*

**JULIÁN ACEVEDO-PARDO**  [jacevedo@go.olemiss.edu](mailto:jacevedo@go.olemiss.edu)<sup>1</sup>

<sup>1</sup> University of Mississippi

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## **Abstract**

Many governments across Latin America have been unable to reduce stubbornly high levels of labor informality and the lack of legal and social protection has put informal workers in a situation of continuous economic peril and uncertainty. This paper argues that the inherent characteristics and conditions of informal workers act as noisy signals that diminish the effect that economic perceptions have on evaluations of the incumbent executive across Latin American countries. The empirical results support the argument, suggesting that the effect of perceptions of the economy on evaluations of the incumbent is lower among informal relative to formal workers. Furthermore, this dynamic is prevalent in urban areas where there is a more evident differentiation between formal and informal workers, and disappears in rural areas, where both formal and informal workers face challenges that produce noisy signals and diminish the effect of perceptions of the economy on evaluations of the incumbent.

**Palabras clave:**

*informalidad laboral;  
voto económico;  
vulnerabilidad  
económica; señales  
ruidosas; América  
Latina*

**Resumen**

Varios gobiernos en América Latina han sido incapaces de reducir los altos niveles de informalidad laboral y de proveer protecciones sociales y legales que contribuyan a disminuir la vulnerabilidad e incertidumbre de trabajadores informales. Este ensayo argumenta que las inherentes condiciones de trabajadores informales actúan como señales ruidosas decreciendo el efecto que percepciones de la economía tiene sobre evaluaciones del trabajo del ejecutivo en países latinoamericanos. Los resultados empíricos soportan el argumento, indicando que el efecto de percepciones económicas sobre evaluaciones del trabajo del ejecutivo es menor entre trabajadores informales en comparación con trabajadores formales. Adicionalmente, estos resultados son más prevalentes en áreas urbanas donde hay una más clara diferenciación entre trabajadores formales e informales, y menos prevalente en áreas rurales. En estas últimas, ambos grupos, trabajadores formales e informales, se enfrentan a retos que producen señales ruidosas disminuyendo el efecto que percepciones de la economía tiene sobre las evaluaciones del desempeño del ejecutivo por parte de los ciudadanos.

**Palavras-chave:**

*informalidade  
trabalhista;  
votação econômica;  
vulnerabilidade  
econômica; sinais  
ruidosos; América  
Latina*

**Resumo**

Vários governos na América Latina não conseguiram reduzir os altos níveis de informalidade do trabalho e fornecer proteções sociais e legais que contribuam para reduzir a vulnerabilidade e a incerteza dos trabalhadores informais. Este ensaio argumenta que as condições inerentes aos trabalhadores informais atuam como sinais ruidosos, diminuindo o efeito que as percepções da economia têm nas avaliações do trabalho executivo nos países latino-americanos. Os resultados empíricos corroboram o argumento, indicando que o efeito das percepções econômicas sobre as avaliações do trabalho executivo é menor entre os trabalhadores informais em comparação com os trabalhadores formais. Além disso, esses resultados são mais relevantes em áreas urbanas onde há uma diferenciação mais clara entre trabalhadores formais e informais, e menos prevalentes em áreas rurais. Nestas, ambos os grupos, trabalhadores formais e informais, enfrentam desafios que produzem sinais ruidosos, reduzindo o efeito dessas percepções que a economia tem sobre as avaliações sobre o desempenho do executivo pelos cidadãos.

## INTRODUCTION

One of the most well-founded theoretical and empirical propositions in political science suggests the economy influences people's support for the incumbent leader (Stokes, 1963). Nevertheless, empirical results have shown this relationship to be far from simple, with many other factors conditioning the link between the economy and citizens' vote or support for the incumbent (Anderson, 2007). Some researchers suggest the importance of the country's political context as a contingent element in the relationship of the economy and voting behavior (Anderson, 2000; Hernández & Kriesi, 2016; Powell & Whitten, 1993; Singer, 2011). Others point out individual traits, such as political sophistication, as a relevant conditional

factor (Alt et al., 2016; Gomez & Wilson, 2001, 2006). More recently, academics have investigated how the information environment or nature of the sources of information can meddle in the logic of economic voting (Alt et al., 2016; Carlin et al., 2021). However, more work focusing on the structural composition of societies could help us understand the moderating dynamics of economic evaluations of political leaders.

The extant literature provides empirical evidence supporting the argument that the economy plays a relevant role when individuals assess the performance of the incumbent executive in Latin American countries (Cabezas & Navia, 2019; Lewis-Beck & Ratto, 2013). Nevertheless, few analyses examine how a critical structural factor in the region, specifically job informality, affects the logic of economic voting. I argue that the inherent job insecurity and economic vulnerability of informal workers, their limited capacity to access social services, and their disconnection from the government, overall, act as noisy signals that diminish the effect that perceptions of the economy have on evaluations of the incumbent executive. The vulnerable reality of informal workers and the lack of economic and legal linkage to their governments make it difficult for such citizens to connect the government's actions and policies to personal and national economic outcomes. Consequently, informal workers downplay the importance of national economic performance when assessing the incumbent's job.

To test the proposed argument, I use public opinion survey data from 17 Latin American countries in the Latin America Public Opinion Project (LAPOP) AmericasBarometer 2018-19 wave, which uniquely provides a region-wide direct measure of job informality along with individuals' perceptions of the economy and executive approval. The empirical results support my argument, indicating that the effect of perceptions of the economy, egotropic or sociotropic, on the evaluation of the incumbent executive is lower among informal rather than formal workers. Furthermore, this dynamic is most prevalent in urban areas where there may be a more evident differentiation regarding the role of the government in mediating the economic relations and providing social benefits across formal and informal workers. The importance of these results lies in the indication that salient structural characteristics of a region, such as informality in Latin America, might meddle in the dynamics of well-established theoretical and empirical propositions such as economic political accountability of incumbents. In the specific case of this work, if a group of individuals faces a harder time identifying how an incumbent helps the economy and their economic interests, these individuals will be similarly unable to hold the incumbent accountable for her economic performance while in office. Thus, incumbents' focus on economic outputs and policies appeal more strongly to workers in the formal sector, who in turn, will place greater weight on economic factors in their calculus to evaluate incumbents.

Going forward, the paper has the following structure: First, I provide a conceptual definition of labor informality, the sources of vulnerability of informal workers, and how political science scholars have analyzed labor informality. Second, I review the small literature that examines the relationship between vulnerability and economic voting and assesses how labor informality relates to these works. Third, I provide an alternative theoretical argument challenging the common academic expectation linking individual vulnerability and labor informality to economic voting. Fourth, I develop an empirical analysis that tests the proposed argument, discuss the results, and conclude.

## A REVIEW OF LABOR INFORMALITY

Informal workers are generally defined as those workers who do not have contracts that have specific rules regarding the length of their jobs or stipulation of job security such as notice periods, severance payments, and/or definitions of just causes of dismissal (Gasparini & Tornarolli, 2009; Pages & Marquez, 1998). Additionally, because informal workers do not make social security contributions, they often do not have access to key social security benefits such as retirement or health insurance (Gasparini & Tornarolli, 2009; Gideon, 2007; Mesa-Lago, 2009; OECD et al., 2016; Salazar-Xirinachs & Chacaltana, 2018; Tokman, 2007). The lack of legal protections and social safety net resources put informal workers in a more vulnerable position than formal workers. This vulnerability has implications in various aspects of their jobs and wellbeing. First, the duration of informal jobs is shorter relative to formal jobs, and the likelihood of informal workers becoming unemployed is higher than that of formal workers (Bosch & Maloney, 2010). Second, informal workers often do not benefit from increases in minimum wages (Gindling & Terrell, 2005), which might be a contributing reason for the lower salaries they obtain compared to formal workers (Daza & Gamboa, 2013; Gasparini & Tornarolli, 2009).

Beyond the vulnerability generated by the absence of legal protections, informal workers' exclusion from social security benefits is another source of hardship. Informality does not translate into complete denial of access to social protection as in previous decades. Governments in the region have implemented various redistributive programs for those individuals outside of the formal contributory framework (Holland & Schneider, 2017). For instance, most countries in Latin America have some sort of noncontributory and conditional cash transfer programs in place for the unemployed and most vulnerable (Dodlova et al., 2018). Nonetheless, these programs are insufficient to provide comparable social benefits to the ones formal workers obtain, or inadequate to mitigate the inherent insecurities and vulnerabilities of labor informality. For instance, an informal worker does not

receive severance payments for being laid off, nor does she receive unemployment insurance when she is out of work. Conditional cash transfer programs can help to mitigate the absence of income related to the work of individuals, but the coverage of these programs is low and often fails to reach even 50 percent of the people who need them (Robles et al., 2019).

Political scientists have already inquired how labor informality affects the political preferences, attitudes, and behaviors of individuals in Latin America. Some of these works find that informal workers are not different from formal workers regarding their political engagement, ideology, support for noncontributory social programs (Baker & Velasco-Guachalla, 2018), or preferences for redistribution (Berens, 2015). However, informal workers in Latin America are more skeptical about labor laws' protective capacity and less likely to vote than their formal counterparts (Berens & Kemmerling, 2019). Additionally, evidence suggests that informal workers' inherent state of uncertainty and vulnerability has caused an erosion of the linkages between these workers and political parties across the Latin American region (Altamirano, 2019).

In sum, the lack of legal and social protection of informal workers put them in a situation of continuous job insecurity and economic vulnerability. While governments across Latin America have implemented conditional cash transfer and noncontributory programs as strategies to help the most vulnerable individuals, the utility of these programs for informal workers is limited and insufficient to mitigate the adverse effects of working informally. Furthermore, evidence suggests that labor informality has implications in some aspects of the political life of individuals but not in others. The task put forward by this paper is identifying the moderating effect of labor informality on economic voting in Latin America.

## LABOR INFORMALITY AND ECONOMIC VOTING

In Latin America, the stubbornly high levels of labor informality and lack of legal and social protection that put informal workers in a situation of continuous economic peril and uncertainty might play an important role in meddling in the logic of economic voting and evaluations of incumbents. To evaluate this potential contingent effect, it is important to understand first some common assumptions that provide a theoretical base to the postulate of economic voting. First, voters must recognize incumbent leaders are responsible for the economic performance of the country (Duch & Stevenson, 2008; Powell & Whitten, 1993). Scholars have evaluated this assumption finding, for instance, that when executive leaders have little control over the effects of the world economy on the domestic economy, voters will not hold these leaders accountable (Carlin & Hellwig, 2020); and when the political and institutional context provides greater clarity of the role of the

executive on the economic outputs, the influence of economic factors on executive approval increase (Selios, 2019). Second, the economy must be a salient issue for individuals for them to consider it when they evaluate the incumbent. Empirical evidence suggests that this is the case (Singer, 2011), and it is not just the salience of the economy, but what economic element (e.g., economic growth, inflation, or unemployment) is relevant at the time (Singer, 2013a). Third, individuals must expect the performance of the economy will eventually affect their wellbeing. This assumption suggests individuals are self-interested, and when they evaluate the national economy, they might do it thinking about the impact it would end up having on their welfare rather than thinking from an altruistic perspective (Kiewiet & Lewis-Beck, 2011; Kinder & Kiewiet, 1981:132).

When analyzing the previous assumptions with a focus on vulnerable individuals, scholars have suggested that the economy more strongly influences their evaluation of the incumbent leaders relative to less vulnerable individuals. The basic idea is based on the higher risk exposure of vulnerable individuals to economic shocks (Fossati, 2014; Singer, 2013b). Singer (2013a) examines vulnerability from the perspective of job insecurity and employability. He mentions that workers who feel anxious about their job situation and stability, and workers who believe they will not find a similar job if they get laid off will “benefit from a strong economy that makes job losses less likely and creates opportunities should a job dislocation occur” (p. 149). As a consequence, they consider the economy a salient issue since shifts in the economy will put their wellbeing at risk.

Informal workers can be categorized as vulnerable individuals. These workers, as previously discussed, are more likely to be unemployed, the duration of their job is shorter than formal workers, and they do not have strong social protections that help them to cope with potential economic dislocations. Therefore, considering the argued impact that vulnerability has on the logic of economic voting, informal workers would, theoretically, rely more strongly on the economic performance of the country when evaluating an incumbent executive than less vulnerable individuals such as formal workers.

*H1. The effect of perceptions of the economy on assessments of the executive will be higher for informal rather than formal workers.*

While some of the existing literature supports the previous expectation, certain empirical and theoretical reasons shed some doubt on it. First, the only empirical analysis, to my knowledge, that directly tests the contingent effect of job informality in the logic of economic voting suffers from an issue of external validity. Singer (2016) test this expectation using survey data from Argentina in the year 2005 during the presidency of Néstor Kirchner. In the 2003 Argentinian presidential elections, when Kirchner was elected president, the country was in

the immediate aftermath of a severe financial crisis. Kirchner was able to promote economic recuperation “exceeding pre-crisis levels [of growth] within a year of the start of his administration” (Wylde, 2011, p. 438). An economic crisis as deep as the Argentinian case is an extreme circumstance that can condition voters' behavior, including informal workers, in ways not likely replicable in more stable economic circumstances (Singer, 2013a). Hence, the results Singer obtained might not be generalizable, and an empirical test beyond the specifics of Argentina in 2005 may show a different pattern linking informality and economic voting/approval.

If Argentina in 2005 is not representative of the general conditions of informality and politics in Latin America, what might we expect of the link between one's nature of employment and economic voting/approval in more “normal” times. Contrary to what Singer (2016) finds, there are theoretical reasons to expect that the effect of the perceptions of the economy on executive approval in more “normal” times is weaker among informal workers than formal workers. These reasons are related to the information informal workers receive from their environment. In short, the following argument suggests that while informal workers can perceive that the economic situation of the country is good, they face a harder time inferring the responsibility of the incumbent in producing such performance, and redistributing the gains, given their particular disconnection with the government apparatus.

The state of the economy has implications for citizens' evaluation of an incumbent when they perceive that the economic situation of a nation is principally due to the competency of the executive and not for an external shock (Duch & Stevenson, 2008). In addition, voters not only care about the government's ability to supply macro-economic outcomes, but also how such economic outcomes influence their wellbeing (Kiewiet & Lewis-Beck, 2011; Kinder & Kiewiet, 1981, p. 132), which implies the capacity of executives to effectively redistribute such gains among the population. Hence, assuming that individuals are self-interested (Feldman, 1984; Kramer, 1983), they will reward incumbents they consider responsible for the current state of the economy and the redistribution of gains to national accounts (Carlin et al., forthcoming).

Informal workers' linkages with the government and various other political actors are looser (Altamirano, 2019) compared to other groups of society, such as formal workers. As the government is absent in mediating many of the economic relations of informal workers, the information to provide clarity of the responsibility of incumbents in generating economic outcomes becomes sparse for workers in the informal sector. To put it in other words, the lack of job security informal workers face being outside of the legal protective framework offered to formal sector works, and the economic volatility and vulnerability caused by the lack of mechanisms to shift economic risks and decrease future economic uncertainty (e.g., unemployment insurances and retirement programs), make the government

an absent actor in the economic interactions of informal workers. Since these daily economic interactions importantly contribute to shaping individuals' perceptions of the economy (Ansolabehere et al., 2014), and the government is generally absent from such interactions, informal workers will downplay the extent to which they consider the incumbent executive influences their perceived state of the economy.

All in all, as the government is an absent actor in the day-to-day of informal workers, this absence acts as a noisy signal regarding the competency of the government and incumbent executive in influencing economic outcomes at the personal and national level. Consequently, while informal workers might perceive that the country's economic performance is improving, they will not importantly attribute this improvement to the competency of the incumbent, neither will they expect that the government will redistribute such gains to them. Thus, informal workers will diminish the influence of economic factors when evaluating the incumbent leader's job compared to formal workers.

*H2. The effect of perceptions of the economy on assessments of the executive will be lower for informal rather than formal workers.*

## DATA AND METHODS

For the empirical evaluation of the proposed hypotheses, I use survey data from 17 Latin American countries<sup>1</sup> in the Latin America Public Opinion Project (LAPOP) AmericasBarometer 2018-19 wave<sup>2</sup>, with a sample size of 26,734 observations. This cross-national survey is unique in that it includes measures for labor informality, executive approval and perceptions of the economy. The dependent

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1. The countries included in this analysis are: Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Colombia, Ecuador, Bolivia, Peru, Paraguay, Chile, Uruguay, Brazil, Argentina, and Dominican Republic.

2. The 2006 and 2008 LAPOP waves also include some measures that might tap on the concept of labor informality. Nevertheless, these measures are not the same than the one in the 2018/19 wave. More specifically, the 2006 wave asks whether a person has social security, dismissing whether this social security comes from the payment of social security contributions or from other sources such as spouses or non-contributory programs of the state. The 2008 measure, on the other hand, asks whether a person has health insurance through the company they work for or from their employer. This question, however, might exclude those formal workers who are self-employed and still pay social security contributions, or have other type of formal contracts that require workers themselves to pay the social security contributions. Additionally, the 2006 and 2008 waves do not allow for the inclusion of controls such as *help* and/or *partisanship*.



variable in this analysis is *approval*, which is scaled from 0 to 4, where 0 indicates very poor approval of the president and 4 is very high approval<sup>3</sup>.

Among the explanatory variables are *sociotropic* and *egotropic* retrospective evaluations of the economy, which are scaled from 0 to 2 with 0 indicating the economy is worse than the previous year, 1 is about the same, and 2 is better than the previous year. The decision to include perceptions of the personal economy as a relevant explanatory variable is because this paper assumes that individuals assess the extent to which their personal economic conditions are attributable to government actors' efforts (Gomez & Wilson, 2006). Additionally, I include the variable *formality*, a categorical variable indicating whether a respondent is an informal worker, a formal worker, unemployed, or belongs to another category. To categorize informal workers, this analysis uses a legalistic definition of informality which classifies as informal workers those who do not have access to a pension linked to their employment (Gasparini & Tornarolli, 2009, p. 21). More specifically, the LAPOP questions allow me to classify informal workers as those who either themselves or their employers do not make contributions towards pension or retirement. For the empirical evaluation of the proposed hypotheses, I include an interactive term between the variables *sociotropic/egotropic* and *formality* (*sociotropic/egotropic\*formality*) to identify whether the effect of perceptions of the economy on executive approval differs between formal and informal workers. Such interactive terms serve as the principal explanatory variables in the Models.

Finally, I control for standard demographic and political factors such as *education*, measured in years of education. *Male*, where 0 is female and 1 is male. *Age*, measured in years. *Skin color*<sup>4</sup>, which is an ordinal variable from 0 to 10 where higher values indicate darker skin. *Material wealth*<sup>5</sup>, which is an ordinal variable from 1 to 5 (higher numbers indicate more material wealth) that measures relative wealth quintiles, based on individuals' ownership of various household assets. *Partisanship*, which is a dichotomous variable where 0 indicates that a person does not sympathize with the party of the incumbent, and 1 indicates a person sympathizes with the party of the incumbent. Lastly, I control for whether a person receives any periodic monetary or another type of assistance by the government, and it is captured by the dichotomous variable *help* where 0 indicates that the person does not receive governmental help, and 1 indicates that the person does.

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3. The wording of the dependent and explanatory variables can be found in the supplementary material.

4. Skin color is not a common control included in many works of Latin American politics. Nevertheless, studies have shown that skin color play a role in influencing electoral dynamics (e.g. Johnson, 2020). In this paper, the expectation is that skin color relates to socioeconomic disparities (Flores & Telles, 2012; Telles et al., 2015), which in turn, might influence how individuals evaluate the incumbent.

5. For more information on the measure of the variable *material wealth* see Córdova (2009).

Since the data I use is structured with individual respondents nested within countries, and thus likely to violate OLS assumptions, I use a hierarchical approach for all models presented in the paper. Specifically, hierarchical linear models are fit with country-level random intercept and makes no assumptions regarding the covariance structure between panels.

## RESULTS

The results from the hierarchical models can be observed in Table 1. Baseline Model 1 presents results of the effect of sociotropic and egotropic perceptions of the economy over evaluations of the executive. While both egotropic and sociotropic evaluations are positive and statistically significant at conventional levels, the coefficient of the variable sociotropic is a little more than twice the coefficient of the variable egotropic, holding all the other variables constant. In other words, going from an evaluation of the national economy of worse (0) to better (2) relative to the previous year increases an individual's evaluation of the performance of the executive by .73 on the 0 to 4 scale of the dependent variable approval. On the other hand, going from an evaluation of the personal economy of worse (0) to better (2), the increase in executive approval is around .34. These results support previous evidence indicating that sociotropic evaluations of the economy have a more relevant effect on executive approval than egotropic evaluations (Kinder & Kiewiet, 1981; Lewis-Beck, 1986; Lewis-Beck & Ratto, 2013).

Models 2 and 3, Table 1, test the competing hypotheses 1 and 2. The interactive term between the variable sociotropic and the category for informal workers in Model 2, suggests that the effect of sociotropic evaluations of the economy is weaker among informal workers relative to formal workers, and this difference is statistically significant at conventional levels. Figure 1, left panel, additionally, graphs the coefficients of the effect of sociotropic evaluations on executive approval across informal and formal workers, indicating that the coefficient of the variable sociotropic is 0.35 for informal workers and 0.42 for formal workers. The interactive variable between egotropic and informal workers on Model 3, shows the effect of egotropic perceptions of the economy is weaker among informal relative to formal workers and this difference is statistically significant at conventional levels. Figure 1, right panel, depicts the coefficients of egotropic evaluations on the executive approval scale for informal and formal workers, showing that the coefficient of the variable egotropic for informal workers is 0.16 and the coefficient of the variable egotropic for formal workers is 0.22.

**Table 1. Hierarchical Linear Model on Executive Approval**

VARIABLES	Model 1	Model 2	Model 3
Other †‡	0.043** (0.017)	0.097*** (0.021)	0.119*** (0.024)
Unemployed †	0.056** (0.022)	0.096*** (0.027)	0.078*** (0.029)
Informal †	0.018 (0.017)	0.062*** (0.022)	0.073*** (0.026)
Sociotropic	0.365*** (0.010)	0.429*** (0.019)	0.366*** (0.010)
Egotropic	0.171*** (0.010)	0.172*** (0.010)	0.225*** (0.018)
Other * Sociotropic †‡		-0.092*** (0.022)	
Unemployed * Sociotropic †		-0.066** (0.032)	
Informal * Sociotropic †		-0.074*** (0.024)	
Other * Egotropic †‡			-0.093*** (0.022)
Unemployed * Egotropic †			-0.004 (0.031)
Informal * Egotropic †			-0.064*** (0.023)
Help	0.091*** (0.019)	0.092*** (0.019)	0.091*** (0.019)
Education	-0.010*** (0.002)	-0.010*** (0.002)	-0.010*** (0.002)
Male	-0.038*** (0.012)	-0.037*** (0.012)	-0.038*** (0.012)
Urban	-0.095*** (0.014)	-0.095*** (0.014)	-0.095*** (0.014)
Age	0.004*** (0.000)	0.004*** (0.000)	0.004*** (0.000)
Skin Color	-0.012*** (0.004)	-0.012*** (0.004)	-0.012*** (0.004)

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VARIABLES	Model 1	Model 2	Model 3
Material Wealth	-0.028*** (0.005)	-0.028*** (0.005)	-0.027*** (0.005)
Partisanship	0.766*** (0.021)	0.765*** (0.021)	0.766*** (0.021)
Constant	1.738*** (0.080)	1.697*** (0.081)	1.690*** (0.081)
<b>Random Effect Parameters</b>			
Var (Constant)	0.085 (0.029)	0.085 (0.029)	0.085 (0.029)
Var (Residual)	0.887 (0.007)	0.887 (0.007)	0.887 (0.007)
Observations	26,734	26,734	26,734
Number of groups	17	17	17

Standard errors in parentheses

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Notes: † Formal workers is the base category.

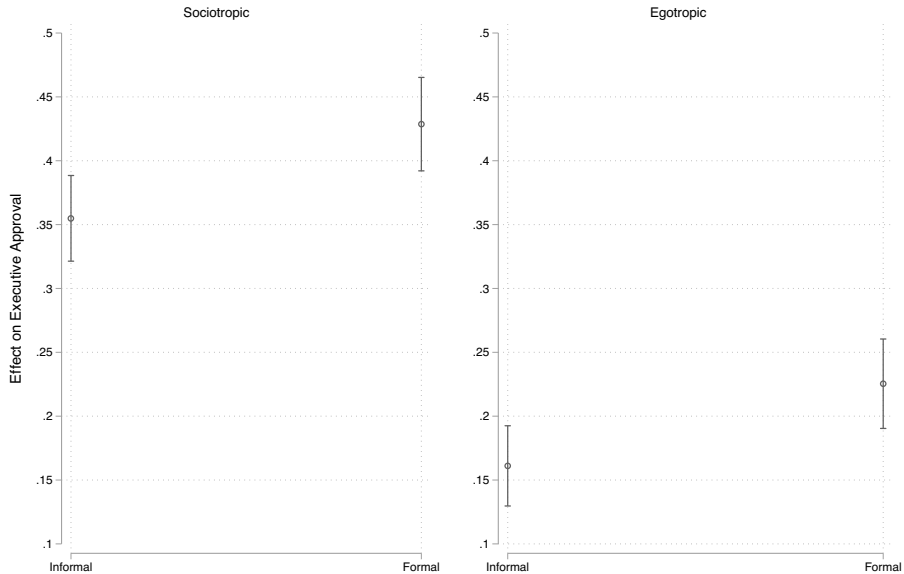
‡ Within the category *other* are included students, retired people, and other groups beyond the specified.

Source: own elaboration

In general, the previous evidence suggests that informal workers are no more reliant than formal workers on perceptions of the national or personal economy to evaluate the executive's performance, contradicting previous empirical findings (Singer, 2016). Instead, the results provide evidence that the effects of sociotropic and egotropic perceptions of the economy on executive approval are weaker among informal relative to formal workers, providing empirical support to hypothesis 2.

Finally, Table 1, Model 2 shows that the effect of the variable sociotropic on executive approval is lower for the unemployed compared to formal workers. While this result is interesting, I do not discuss or theorize about the differential effect of perceptions of the economy on evaluations of the incumbent beyond the groups formal and informal, as it goes beyond the scope of this paper.

**Figure 1. Effects of the Variables Sociotropic and Egotropic on Approval Across Informal and Formal Workers.**



Source: own elaboration

## DIFFERENCES ACROSS URBAN AND RURAL AREAS

In an effort to check the robustness of the theoretical findings outlined above, I use the same dataset to examine another implication of the theoretical argument outlined above. In particular, differences in the effect of formality on economic political attribution between urban and rural regions. Latin American countries are often characterized by welfare regimes with uneven outcomes across rural and urban areas, in part due to the social reforms which disproportionately benefited skilled and organized workers in urban areas (Carnes, 2014; Collier & Collier, 2002). This legacy, potentially, contributes to varying degrees of subnational inequality<sup>6</sup> across territorial subunits within countries in the region (Otero-Bahamon, 2019). Worsened in some cases by policies that are not place-sensitive<sup>7</sup>,

6. With subnational inequality inequality, the author refers to the provision of public goods such as education, health, sanitation, and opportunity that relate to social development. (p. 189)

7. With place-sensitivity, the author refers to such policies that consider specific features of the nation's territories in the design of the policy, impacting the success of the social outcomes that such policies will have across various different territories of a nation (Otero-Bahamon, 2020).

influencing suboptimal service provisions and an overall lower presence of the government in rural, poor, and marginal areas compared to more urban territorial subunits (Otero-Bahamon, 2020).

In practice, one implication of the uneven conditions across urban and rural areas is the extent to which individuals in rural and urban areas consider the government a relevant economic actor. As mentioned previously, this paper assumes that individuals care about the competency of the incumbent in producing economic outcomes and redistributing economic gains to evaluate the incumbent. Because rural areas tend to have an overall lower presence of the government, and the provision of benefits formal workers are entitled to are comparatively worse than for formal workers in urban areas, formal workers in rural areas should have interactions with the state economic apparatus more similar to informal than urban formal workers. Therefore, similarly to informal workers, formal workers in rural areas will have a challenging time identifying the competency of the government is generating economic outcomes and redistributing national economic gains to them. Hence, for rural residents of both employment conditions, economic evaluations will represent noisy signals and mute somewhat the larger effect that perceptions of the economy have on evaluations of the incumbent for formal workers in rural areas. To test this expectation, I develop additional Models separating the sample between rural and urban areas, as can be observed in Table 2.

From the results in Table 2, Models 4 and 6, we see that in rural areas the effects of both sociotropic and egotropic perceptions of the economy on executive approval are not significantly different for informal and formal workers. But in urban areas, Models 5 and 7 suggest the effect of sociotropic and egotropic perceptions of the economy on incumbents' approval is statistically weaker among informal workers than formal workers. In short, these results provide evidence suggesting that the difference in the effects of perceptions of the economy on approval across formal and informal workers should be more noticeable in urban areas, and get somewhat muted in rural areas.

Figure 2 shows the effect of sociotropic and egotropic perceptions of the economy on approval differs for formal and informal workers in urban but not rural areas. However, we also see that the effect of either socio or egotropic evaluations of formal sector workers is not significantly different between urban and rural areas. Neither is it significantly different for informal workers. With the caveats, these results provide suggestive evidence that the difference in the effect that sociotropic and egotropic evaluations between formal and informal workers is somewhat muted in rural contexts. Further work examining the specific relevant factors that differ between urban and rural areas is needed to further refine and test the proposed mechanism.

**Table 2. Hierarchical Linear Model on Executive Approval Across Urban and Rural Areas**

VARIABLES	Model 4 Rural	Model 5 Urban	Model 6 Rural	Model 7 Urban
Other ††	0.085* (0.044)	0.090*** (0.024)	0.091* (0.051)	0.118*** (0.028)
Unemployed †	0.084 (0.055)	0.094*** (0.031)	0.020 (0.060)	0.092*** (0.034)
Informal †	0.025 (0.046)	0.066** (0.026)	0.034 (0.052)	0.078*** (0.029)
Sociotropic	0.372*** (0.043)	0.439*** (0.021)	0.309*** (0.019)	0.384*** (0.012)
Egotropic	0.171*** (0.018)	0.172*** (0.011)	0.211*** (0.041)	0.225*** (0.020)
Other * Sociotropic ††	-0.096** (0.048)	-0.079*** (0.026)		
Unemployed * Sociotropic †	-0.075 (0.066)	-0.057 (0.037)		
Informal * Sociotropic †	-0.042 (0.051)	-0.074*** (0.028)		
Other * Egotropic ††			-0.077* (0.046)	-0.091*** (0.025)
Unemployed * Egotropic †			0.059 (0.061)	-0.025 (0.035)
Informal * Egotropic †			-0.042 (0.049)	-0.065** (0.026)
Help	0.152*** (0.035)	0.067*** (0.023)	0.150*** (0.035)	0.067*** (0.023)
Education	-0.006* (0.003)	-0.011*** (0.002)	-0.006* (0.003)	-0.011*** (0.002)
Male	-0.045* (0.025)	-0.036** (0.014)	-0.045* (0.025)	-0.036** (0.014)
Age	0.004*** (0.001)	0.005*** (0.000)	0.004*** (0.001)	0.005*** (0.000)
Skin Color	-0.008 (0.008)	-0.013*** (0.005)	-0.008 (0.008)	-0.013*** (0.005)
Material Wealth	-0.015* (0.008)	-0.032*** (0.005)	-0.015* (0.008)	-0.032*** (0.005)

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VARIABLES	Model 4 Rural	Model 5 Urban	Model 6 Rural	Model 7 Urban
	(0.009)	(0.005)	(0.009)	(0.005)
Partisanship	0.674***	0.800***	0.675***	0.800***
	(0.038)	(0.025)	(0.038)	(0.025)
Constant	1.658***	1.613***	1.666***	1.601***
	(0.108)	(0.085)	(0.110)	(0.086)
<b>Random Effect Parameters</b>				
Var (Constant)	0.097	0.088	0.098	0.088
	(0.034)	(0.030)	(0.035)	(0.030)
Var (Residual)	0.867	0.889	0.867	0.888
	(0.014)	(0.008)	(0.014)	(0.008)
Observations	7,155	19,579	7,155	19,579
Number of groups	17	17	17	17

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Notes: † Formal workers is the base category.

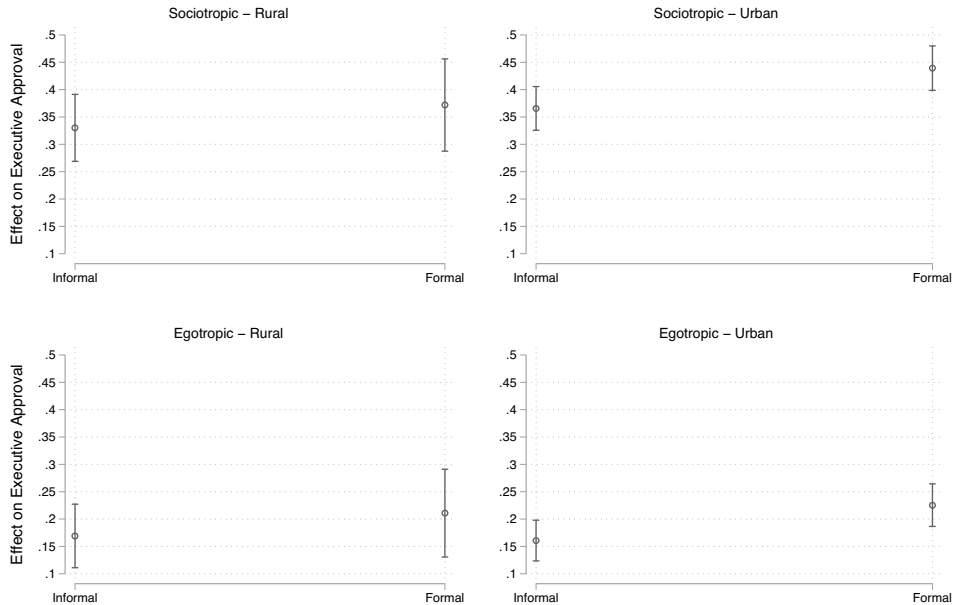
‡ Within the category others are included students, retired people, and other groups beyond the specified.

Source: own elaboration

It is important to clarify the extent of the information all the empirical models in this paper conveys, and some of its limitations. First, while the theoretical propositions provided in this manuscript suggest that the lower effect of economic perceptions on evaluations of the incumbent is due to noisy signals prevented from the disconnection between informal workers and the government, this analysis cannot make claims of causality as does not test this causal link directly. Hence, this paper mainly presents evidence of the expected relationship, but further analyses that directly test the proposed theoretical mechanism are necessary to identify causality. Second, in the years (2018/19) when the surveys used for this analysis were fielded, many countries in Latin America were having electoral competitions for president. These specific electoral contexts might condition the generalizability of these results, and future analyses using data from other time frames might be necessary. Third, heterogeneity among informal workers might affect the logic of the outlined relationship. However, making typologies of informal workers and accounting for the differential effect of this heterogeneity is beyond the scope of this paper and future works are necessary for this.



**Figure 2. Effects of the Variables Sociotropic and Egotropic on Approval Across Informal and Formal Workers in Rural and Urban Areas**



Source: own elaboration

## CONCLUSION

Individuals rely more strongly on evaluations of the economy to evaluate incumbent leaders when they identify that the economic outcomes of the nation are the competency of the incumbent (Duch & Stevenson, 2008). This paper argues that the absence of the government in the day-to-day economic interactions of informal workers makes it harder for them to identify the responsibility of the incumbent in producing economic outcomes they perceive for themselves and their nation. These evaluations become noisy signals of the leadership's competency for informal workers, limiting the extent to which they use perceptions of the economy to evaluate incumbent executives.

Empirically, this paper offers support to the theorized argument that informal workers rely less on sociotropic and egotropic perceptions of the economy when evaluating the executive compared to formal workers. Additionally, in rural areas, where the government is more likely to be an absent actor and the provision of benefits to formal workers is less than in urban areas, the effect of egotropic and sociotropic evaluations of the economy have on presidential approval

is somewhat muted. Overall, the empirical results regarding labor formality and economic-based presidential approval support the new hypothesis (#2) developed above. Nevertheless, it is important to mention that these results do not allow strong claims of causality as the models and data lack a direct test of the causal mechanisms outlined in the argument. Future works could test the proposed mechanisms.

This work importantly contributes to the small but expanding literature that seeks to identify how labor informality affects individuals' political preferences, attitudes, and behaviors in Latin America (Altamirano, 2019; Baker & Velasco-Guachalla, 2018; Berens, 2015, 2020; Berens & Kemmerling, 2019). However, future efforts are vital. Labor informality is a widespread phenomenon across various Latin American countries influencing the economic and social dynamics not just of individuals but states in general. Therefore, political scientists that study Latin America should more carefully examine labor informality as it might have strong and important implications for democracy, government performance, among other areas.

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## APPENDIX

### Questions Wording

The coding that appear in the wording of these questions do not necessarily resemble those in the LAPOP questionnaire. The coding in this document resemble the coding of the variables used for the statistical analysis of the paper, and in many instances, I recoded them from the original LAPOP dataset for consistency with the other variables and clarity.

#### Dependent variable:

Approval: "Talking in general about the current government, would you say that the job that the president (name of president) is doing is?"

0 Vary bad, 1 bad, 2 neither good or bad, 3 good, 4 very good"

#### Explanatory variables and controls:

Formality: "For this job (based on a previous question asking whether the interviewed is working or not), you or your employer make contributions towards pension or retirement"

(3) No - Informal worker (4) Yes - Formal worker)

Sociotropic: "Do you consider that the economic situation of the country is better (2), same (1), or worse (0) than 12 months ago?"

Egotropic: "Do you consider your economic situation is better (2), same (1), or worse (0) than 12 months ago?"

Education: Education in years

Male: (0) Female (1) Hombre

Urban: (0) Rural (1) Urban

Age: Age in years

Skin Color: “[Once you leave the interview, without asking, please use the color pallet and indicate the number que more closely resemble the skin color of the face of the person interviewed]” 0 to 10

Material Wealth: an index made based on 9 items reflecting respondents’ ownership of various retail products. (Television, fridge, phone, smartphone/mobile phone, washer machine, microwave, potable water inside their home, sewerage system inside their home, computer/tablet/iPad).

Partisanship: “Which political party do you sympathize with?”

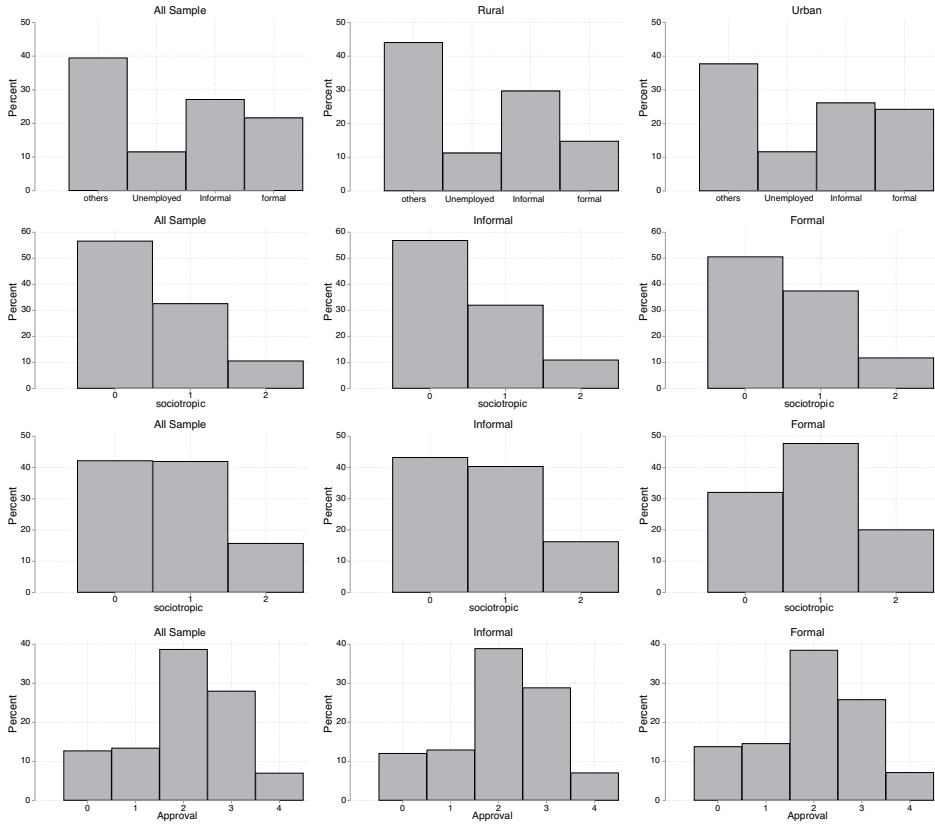
Help: “You or anyone at your households receive periodic help in cash, food, or other products from the government, beyond pensions?”

**Table A1. Descriptive Statistics of Variables**

Variable	Mean	Std. Dev.	Min	Max
Approval	2.031	1.097	0	4
Formality	3.444	0.496	3	4
Sociotropic	0.539	0.679	0	2
Egotropic	0.735	0.714	0	2
Education	10.000	4.322	0	18
Male	0.497	0.500	0	1
Urban	0.726	0.445	0	1
Age	40.116	16.683	16	99
Skin Color	2.926	1.595	0	10
Material Wealth	2.960	1.407	1	5
Partisanship	0.091	0.288	0	1
Help	0.102	0.303	0	1

*Source: own elaboration*

**Figure A1. Distributions**



Source: own elaboration