

Revisiting Egotropic Voting: Evidence from Latin America & Africa

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Abstract

What sort of economic perceptions do voters in the developing world rely on when assessing the performance of the incumbent? Using pooled waves of the Afrobarometer and Latinobarometer, the present study models egotropic and sociotropic attitudes on incumbent vote intention. In attempting to reconcile the various forms of economic voting present in the developing world, the paper tests the applicability of an understudied economic perception: egotropic voting. Results suggest that while the presence of egotropic voting is context-specific, the manner in which voters rely on economic heuristics is largely sociotropic. The findings parallel study of sociotropic voting found in advanced democracies, and further justifies the dominance of sociotropic behavior in economic voting literature.

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In studies of voter behavior, perceptions of the economy are presented in a dichotomous manner emphasizing the character of economic voting. Whether assuming a retrospective or prospective attitude, or an egotropic or sociotropic evaluation, past works in advanced industrial democracies have overwhelmingly demonstrated the dominance of retrospective and sociotropic voting. In the developing world, analysis of economic attitudes is still in its infancy, and although recent scholarships (e.g. Singer and Carlin, 2013) have made theoretical advances into the matter by which voters rely on economic perceptions, the overall literature is still divided with regard to the nature of the economic vote.

Relying on pooled waves of the Latinobarometer and Afrobarometer, I demonstrate that while voters engage in both egotropic and sociotropic voting, the latter by far is the most durable predictor of the economic vote. The results parallel the prominence of sociotropic voting that is found in advanced industrial democracies. Furthermore, in region-specific analyses, political rationalization is found to be a predictor of the incumbent vote in both Latin America and Sub-Saharan Africa.

The rest of the paper is divided into four sections. The next section provides a brief theoretical overview of the egotropic-sociotropic dichotomy in the developing world. The vast variance in scholarly findings suggests that we have yet to see a similar pattern of overwhelming sociotropic voting as we have witnessed in the West. The second section describes the research design phase of the current project. Section three presents the results of the pooled cross-section data. The findings suggest that although

voters in both regions rely on egotropic and sociotropic perceptions, the latter by far is the most prominent. The final section discusses the external validity of the results as well as their implication of the discipline at large.

The Egotropic-Sociotropic Dichotomy

Conception of the egotropic-sociotropic dichotomy in economic attitudes was first introduced in a pioneering work by Campbell et al's (1960) *The American Voter*. The authors suggested that an individual's economic perception could be divided into two "frame of references." While not specifically referring to the traits as egotropic and sociotropic, Campbell et al essentially provide a clear-cut definition of the former as "a person's view of his own economic situation" and the latter as "his view of the business conditions that confront the nation" (Campbell et al 394).

Methodologically, traces of egotropic voting were suggested by macro-level works which pointed towards the association between income and incumbent support (Kramer, 1971; Bloom and Price, 1975; Tufte, 1975). Despite the favorable results, the use of aggregate variables to infer individual perceptions was methodologically troubling. It not only engaged itself in an ecological fallacy, but also assumed a homogenous understanding of the electorate. Progress was made with Kinder and Kiewiet's (1979:1981) micro-level analysis of U.S. Congressional and Presidential elections. Interestingly, the authors suggested that voters by large exhibited sociotropic traits. Their findings were subsequently replicated in other advanced industrial countries (Lewis-Beck, 1983; Reed and Brunk, 1984; Lewis-Beck, 1986; Duch and Stevenson, 2008), and

by the end of the century, aside from several outliers (Kuklinski and West, 1981; Nannestad and Paldam, 1997), the Western electorate was considered sociotropic voters.

Economic Perceptions in Africa and Latin America

Past works on the issue have suggested three particular relationships between economic perceptions and incumbent support. First, solely egotropic perceptions have been found to positively impact incumbent support. Weyland's (1998) work on economic voting in Venezuela concluded that popularity of President Perez was partially influenced by egotropic assessments. Sociotropic evaluations, on the other hand, lacked a significant association in numerous trials. Weyland alluded to the volatile economic cycle as a potential reason for the presence of pocketbook voting. The sole influence of egotropic perceptions on incumbent support suggests that:

H1: Egotropic perceptions (and not sociotropic perceptions) will be positively associated with incumbent vote intention

Alternatively, solely sociotropic perceptions have been found to also influence incumbent support. Lewis-Beck and Ratto's (2013) cross-national analysis found that Latin American voters respond to perceptions of the national economy thus suggesting the presence of sociotropic voting. The results demonstrated that Latin American voters are not so different from voters in developed democracies in that both assume a sociotropic attitude. Their observation however failed to control for the presence of egotropic perceptions. In Africa, Bratton et al.'s (2012) cross-national study concluded that pocketbook perceptions lacked influence on the vote intention for the incumbent party. The evidence in the two cross-national works suggests that:

H2: Sociotropic perceptions (and not egotropic perceptions) will be positively associated with incumbent vote intention

Finally, some works have found the presence of both egotropic and sociotropic voting. In Latin America, Weyand's (2003) subsequent analysis concluded that voters of President Chavez demonstrated both egotropic and sociotropic perceptions. In Mexico, Dominguez and McCann (1995) suggested that while sociotropic perceptions influenced support for the opposition PAN party in 1988, egotropic perceptions accurately lined up with PAN support in elections of 1988 and 1991. However in Argentina, Canton and Jorrat (2002) concluded that sociotropic perceptions fared better than egotropic in accounting for both presidential approval and vote in the 1995 and 1999 elections. Using cross-national data, Singer and Carlin (2013) noted that both egotropic and sociotropic evaluation impacted vote intention in Latin America. Their analysis of economic voting provided a new theoretical avenue for understanding the context under which certain types of economic voting takes place. Paralleling Weyland's (1998) notion of a relationship between pocketbook voting and economic poverty, the authors demonstrated that egotropic voting tended to be more common within less developed countries due to the fact that monetary scarcity amongst the poor tended to create pocketbook perceptions. The presence of both forms of economic voting suggests that:

H3: Both egotropic and sociotropic perceptions will be positively associated with incumbent vote intention

Previous works have demonstrated a variety of economic perceptions affecting incumbent support. That said, some works have concentrated on a single perception

indicator, failing to account for the influence of competing economic attitude variables. Furthermore, the current crop of research tends to evaluate economic perception in a single-country or single-region format. In the next section, I lay out the research design process that will attempt to address under what conditions are egotropic and sociotropic variables present in a cross-regional setting.

Data and Model

The present study relies on the third and fourth wave of the Afrobarometer and the 2005 and 2008 wave of the Latinobarometer, comprising a total of thirty-two countries. The regression equation embodies a typical micro-level vote function, consisting of political identification, economic perceptions and socio-demographic characteristics.

$$\begin{aligned} \textit{Vote} = & \textit{Economic Perceptions} + \textit{political identification} \\ & + \textit{sociodemographic controls} \end{aligned}$$

The measurement of the response variable takes on a hypothetical vote intention scenario. The Afrobarometer and Latinobarometer both provide a voting questionnaire that measures intention to vote. The Afrobarometer specifically asks respondents to assess their vote intention towards presidential elections: *If a presidential election were held tomorrow, which party's candidate would you vote for?* The Latinobarometer fails to specify the electoral institution by asking: *If there were elections tomorrow, which party would you vote for?* For the purpose of maintaining comparability, the vote questionnaire in the Latinobarometer was applied toward presidential elections. The

dependent variable is dichotomous, coded with “1” for respondents who would vote for the incumbent party (and/or alliance), and “0” otherwise.

Both the Afrobarometer and Latinobarometer include items that measure various perceptions of the economy. Specifically, the Afrobarometer and Latinobarometer include questions that measure individual economic perceptions in a *retrospective egotropic*, *retrospective sociotropic*, *prospective egotropic*, and *prospective sociotropic* manner. Table 1 provides an overview of each item. The response item is measured on a five-point scale, ranging from economic conditions are much worse, worse, same, better, or much better. Economic voting posits that positive economic perceptions are associated with intention to vote for the incumbent. Thus, a respondent who perceives the economy as either improving or having been improved is more likely to support the incumbent than one who has a negative evaluation of the economy.

Aside from economic perceptions, several control variables are included in the model in order to properly measure voting behavior. Past literature has demonstrated that party identification is a major determinant of the vote in developed countries (Campbell et al., 1960; Lewis-Beck et al., 2009). Although some developing democracies lack a durable party system, including an indicator of party identification can help us understand the nature of the relationship between political association and the vote. Unfortunately, the Latinobarometer lacks a corresponding question on party identification. Thus, an ideology indicator was substituted to preserve the notion that political identification influences the vote. While the lack of a party identification item prevents one from examining its influence in a pooled model, we will be able to observe its effect in the African dataset.

The party identification indicator was coded as a binary variable with “1” representing identification with the incumbent party and “0” representing identification with non-incumbent parties. The *ideology* indicator consists of a scale measuring a typical left-right ideology spectrum with “0” being left and “10” being right. In Latin America, despite the volatile history of political party platforms, party ideology (across a left-right spectrum) has for the most part remained stable. Thus, ideology is a reasonable proxy for party identification in Latin America, as ideologies of political party platforms closely parallel the left-right ideological spectrum.

Table 1: Perceptions of the Economy questionnaires

Looking back, how do you rate the following compared to twelve months ago: Economic conditions in this country?	Retrospective, Sociotropic	Afrobarometer
Looking back, how do you rate the following compared to twelve months ago: Your living conditions?	Retrospective, Egotropic	Afrobarometer
Looking ahead, do you expect the following to be better or worse: Economic conditions in this country in twelve months time?	Prospective, Sociotropic	Afrobarometer
Looking ahead, do you expect the following to be better or worse: Your living conditions in twelve months time?	Prospective, Egotropic	Afrobarometer
Do you consider the country’s present economic situation to be much better, a little better, about the same, a little worse or much worse than 12 months ago?	Retrospective, Sociotropic	Latinobarometer
Do you consider your economic situation and that of your family to be much better, a little better, about the same, a little worse or much worse than 12 months ago?	Retrospective, Egotropic	Latinobarometer
And over the next 12 months do you think that, in general, the country’s economic situation will be much better, a little better, about the same, a little worse or much worse than now?	Prospective, Sociotropic	Latinobarometer
In the next 12 months, do you think your economic situation and that of your family will be much better, a little better, about the same, a little worse or much worse than now?	Prospective, Egotropic	Latinobarometer

In addition, the model also includes standard controls for sex, age, and education. Sex was coded as a binary variable with a “1” being male and a “0” being female. Age and education were coded with a series of dichotomous covariates with the reference category being sixteen to thirty-five for age, and no education for the education covariate. At the regional level, controlling for ethnicity and rural residency (in Africa) is important towards properly understanding the effects of economic perceptions on the vote. Prior works have demonstrated the saliency of ethnic voting (Posner and Simon, 2002; Youde, 2005; Bratton et al., 2012). Thus, the model controls for ethnic saliency and whether the respondent hails from an urban or rural setting. Ethnic saliency is operationalized by a questionnaire asking respondents to either identify with either their ethnicity, national identity, or both¹. Ethnicity was coded on a five point scale ranging from “-2” to “2”. If the respondent identified solely with the ethnic group a score of -2 would be assigned. If the respondent identified solely with the nationality a score of 2 would be assigned. The coding would ensure that if ethnic voting is a significant determinant of the vote, then the coefficient should be negatively associated with the vote. Rural residency was coded as a binary variable assuming a “1” if the respondent resided in a rural setting and 0 otherwise.

Results

The results in Table 2 substantiate the presence of economic voting in Latin America and Africa. Given the positive coefficients, we can infer that as the

¹ The question is as follows: “Let us suppose that you had to choose between being a [Ghanaian/Kenyan/etc.] and being a _____ [respondent’s identity group]. Which of these two groups do you feel most strongly attached to?” The respondent may choose to identify solely or primarily with the ethnic group, solely or primarily with the nationality or identify equally with both.

Table 2: Cross-Regional Economic Voting

Variables	Full model	Sociotropic Model	Egotropic Model	Retrospective Model	Prospective Model
Retrospective, Sociotropic	.21*** (.01)	.20*** (.01)		.30*** (.01)	
Retrospective, Egotropic	-.03* (.01)		.12*** (.01)	.01 (.01)	
Prospective, Sociotropic	.30*** (.01)	.29*** (.01)			.37*** (.01)
Prospective, Egotropic	-.02 (.01)		.20*** (.01)		-.02 (.01)
Sex	-.07*** (.02)	-.08*** (.02)	-.07*** (.02)	-.07*** (.02)	-.07*** (.02)
Age Category					
36 – 49	.09*** (.02)	.09*** (.02)	.09*** (.02)	.08*** (.02)	.09*** (.02)
50 – 64	.13*** (.03)	.12*** (.03)	.14*** (.03)	.09*** (.03)	.13*** (.12)
65 and above	.07* (.04)	.09** (.04)	.11*** (.04)	.08** (.04)	.08** (.04)
Education					
Informal schooling	.14* (.07)	.14* (.07)	.16** (.07)	.11* (.07)	.11 (.07)
Some/completed primary school	.04 (.04)	.04 (.04)	.05 (.03)	.03 (.03)	.05 (.04)
Some/completed secondary school	.02 (.03)	.01 (.03)	-.01 (.03)	-.03 (.03)	.05 (.03)
Some/completed university	-.29*** (.05)	-.31*** (.05)	-.34*** (.05)	-.36*** (.04)	-.26*** (.05)
Post-graduate	-.58*** (.22)	-.59*** (.21)	-.54** (.21)	-.47** (.21)	-.54** (.22)
N	40,521	41,857	42,259	45,459	40,864
Percentage predicted correctly	59.91%	60.03%	56.09%	57.27%	58.92%
Percentage error reduction	18.65%	18.90%	10.90%	13.18%	16.61%
Log Likelihood	-27,045.82	-27,926.67	-28,861.01	-30,860.35	-27,467.28
LR χ^2	2,074.00***	2,165.37**	852.61***	1,287.66	1,706.17
Pseudo R^2	.037	.037	.015	.02	.03

Standard errors are in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < .10$

degree of economic wellbeing increases, the probability that individuals vote for the incumbent is greater. Looking at the full model we notice that sociotropic evaluations triumph their egotropic counterpart. However, the full model should be interpreted cautiously due to a moderately high correlation between retrospective-sociotropic and retrospective egotropic ($r = .56$) perceptions, and between prospective-sociotropic and prospective-egotropic ($r = .66$) perceptions. It seems that the presence of collinearity in the full model causes egotropic perceptions to take on a negative sign and become insignificant. Despite the presence of collinearity, sociotropic perceptions are found to be statistically significant and in the expected directions. These findings are also substantiated in the sociotropic model with both covariates demonstrating statistical significance in the expected direction. To limit the impact of multicollinearity, we observe the egotropic model which suggests the presence of pocketbook voting. The final two trials assume voters who either base their vote under a retrospective or prospective fashion. Retrospective voters overwhelmingly demonstrate a sociotropic attribute. The same can be said of prospective voters. Thus, the six trials clearly demonstrate the prominence of sociotropic voting, although pocketbook is present when we omit sociotropic perceptions.

Looking at the control variables, we notice that males are less likely to vote for the incumbent than females. This relationship is consistent along the various trials. While age is positively associated with vote for the incumbent, higher education seems to have a negative relationship with incumbent vote intention. Given the dominance of patronage-based voting in the developing world, the inverse relationship between higher education and incumbent vote is not that surprising.

Table 3: Marginal Effects

Variables	Full model	Sociotropic Model	Egotropic Model
Retrospective, Sociotropic	.05*** (.00)	.05*** (.00)	
Retrospective, Egotropic	-.01* (.00)		.03*** (.00)
Prospective, Sociotropic	.07*** (.00)	.07*** (.00)	
Prospective, Egotropic	-.01 (.00)		.05*** (.00)
Sex	-.02*** (.01)	-.02*** (.01)	-.02*** (.00)
Age Category			
36 – 49	.02*** (.01)	.02*** (.01)	.02*** (.01)
50 – 64	.03*** (.01)	.03*** (.01)	.03*** (.01)
65 and above	.02* (.01)	.02** (.01)	.03*** (.01)
Education			
Informal schooling	.03* (.02)	.03* (.02)	.04** (.02)
Some/completed primary school	.01 (.01)	.01 (.01)	.01 (.01)
Some/completed secondary school	.01 (.01)	.00 (.01)	-.00 (.01)
Some/completed university	-.07*** (.01)	-.08*** (.01)	-.08*** (.01)
Post-graduate	-.14*** (.05)	-.14*** (.05)	-.13 *** (.01)
N	40,521	41,857	42,259

Standard errors are in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < .10$

Table 3 presents the marginal effects for the cross-regional sample. For the sociotropic model, a one unit increase in the scale of retrospective, sociotropic evaluations translates into a five percentage point increase in the probability for vote intention for the incumbent, holding all other covariates at their mean. For prospective, sociotropic evaluations, a one unit change in the covariate increases the probability of vote for the incumbent by .07. In the egotropic model, a one unit increase in the scale of retrospective, egotropic evaluations translates into a three percentage point increase in the probability for vote intention for the incumbent, holding all other covariates at their mean. For prospective, egotropic evaluations, a one unit change in the covariate increases the probability of vote for the incumbent by .05.

The results for the remaining control variables are fairly straightforward. It is important to recall that the covariate for both age and education are categorized². The reference category for education is “no education” while for age, the reference is “16 – 35.” The coefficient for age suggests that in comparison to the reference category, there is a diminishing affect between age and incumbent vote intention for individuals 65 and older. The coefficient for sex suggests that females are more likely to vote for the incumbent than males. Specifically, the marginal effects suggest that being a male reduces the probability of voting for the incumbent by two percentage points. With regard to education, we notice that level of education has only a moderate influence on economic voting. The only education coefficients which achieve significances are those with university experience and post-graduate education (as well as informal education).

² Education is categorized in the following manner: 0 = no education; 1 = informal schooling (religious schooling; 2 = some/complete primary school; 3 = some/complete secondary schooling; 4 = some/complete university; 5 = post graduate. Age is categorized in the following manner: 1 = 16-35; 2 = 36-49; 3=50-64; 4= 65 and above.

Table 4: Economic Voting in Latin America

Variables	Sociotropic Model	Marginal Effect	Egotropic Model	Marginal Effect
Retrospective, Sociotropic	.23*** (.02)	.06*** (.00)		
Prospective, Sociotropic	.30*** (.02)	.07*** (.00)		
Retrospective, Egotropic			.16*** (.02)	.04*** (.00)
Prospective, Egotropic			.20*** (.02)	.05*** (.00)
Sex	-.07** (.03)	-.02** (.01)	-.06* (.03)	-.01* (.01)
Age Category				
36 – 49	.03 (.04)	.01 (.01)	.04 (.04)	.01 (.01)
50 – 64	.06 (.04)	.02 (.01)	.11** (.04)	.03** (.01)
65 and above	-.02 (.06)	-.00 (.01)	.05 (.06)	.01 (.01)
Education				
Some/completed primary school	-.05 (.06)	-.01 (.02)	-.01 (.06)	-.00 (.02)
Some/completed secondary school	-.01 (.05)	-.00 (.01)	.06 (.06)	.01 (.01)
Some/completed university	-.29*** (.07)	-.07*** (.02)	-.22*** (.07)	-.05*** (.02)
Ideology	-.03*** (.01)	-.01*** (.00)	-.03*** (.01)	-.01*** (.00)
N	18,237		18,308	
Percentage predicted correctly	61.51%		56.76%	
Percentage error reduction	15.85%		6.43%	
Log Likelihood	-12,049.58		-12,420.73	
LR χ^2	1,080.72***		433.48***	
Pseudo R^2	.04		.02	

Standard errors are in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < .10$

Table 5: Economic Voting in Africa

Variables	Sociotropic Model	Marginal Effect	Egotropic Model	Marginal Effect
Retrospective, Sociotropic	.15*** (.04)	.03*** (.01)		
Prospective, Sociotropic	.21*** (.04)	.05*** (.01)		
Retrospective, Egotropic			.12*** (.04)	.03*** (.01)
Prospective, Egotropic			.14*** (.04)	.03*** (.01)
Sex	.02 (.08)	.005 (.02)	.02 (.08)	.004 (.02)
Age Category				
36 – 49	.18* (.10)	.04* (.02)	.20** (.10)	.04** (.02)
50 – 64	.20 (.13)	.05 (.03)	.22* (.13)	.05* (.03)
65 and above	.31* (.18)	.07* (.04)	.32* (.18)	.07* (.04)
Education				
Informal schooling	.20 (.22)	.04 (.05)	.16 (.22)	.04 (.05)
Some/completed primary school	.08 (.13)	.02 (.03)	.05 (.13)	.01 (.03)
Some/completed secondary school	.08 (.14)	.02 (.03)	.10 (.14)	.02 (.03)
Some/completed university	.07 (.26)	.02 (.06)	.05 (.26)	.01 (.06)
Post-graduate	-.60 (.60)	-.15 (.15)	-.63 (.59)	-.15 (.15)
Party ID	5.97*** (.08)	1.35*** (.02)	5.97*** (.08)	1.35*** (.02)
Rural	.01 (.09)	.003 (.02)	.03 (.09)	.08 (.02)
Ethnicity	.12*** (.04)	.03*** (.01)	.12*** (.04)	.03*** (.01)
N	13,313		13,474	
Percentage predicted correctly	95.30%		95.23%	
Percentage error reduction	88.75%		88.67%	
Log Likelihood	-2,473.99		-2,538.50	
LR χ^2	13,148.18***		13,235.15***	
Pseudo R^2	.73		.72	

Standard errors are in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < .10$

The marginal effects demonstrate that in comparison to the reference category, an individual who has either some or has completed post-secondary education reduces the probability of voting for the incumbent by around eight percentage points. The marginal effect for those who have post-graduate education experience is around -.14.

Region Specific Models

The inclusion of region-specific models allows the use of political controls in order to better understand how economic perceptions affect vote intention. Looking at the economic perception covariates in table 4 and 5, we confirm that the covariates are in the expected direction and are statistically significant. In terms of magnitude, higher marginal effects are found in Latin American voters. In short, the relationship between economic evaluations and incumbent vote intention are stronger in magnitude within the Latin American electorate than the African electorate.

The socio-demographic control variables illustrate further differences between African and Latin American voters. First, while Latin American men are less likely to support the incumbent party, the coefficient for sex in the African model fails to achieve statistical significance. Second, while age in the Latin American model is primarily not significant, in the Africa model older respondents are more likely to intend to vote for the incumbent. Finally, education provides another contrast between African and Latin American voters. Latin American respondents with university experience are less likely to intend to vote for the incumbent. In the Africa model, education fails to achieve statistical significance.

Despite the fact that the Afrobarometer and Latinobarometer lack a common item to measure political allegiance, partisan identification and ideology are measurable proxies to

provide an understanding of how political controls affect incumbent vote intention. In the Latin American context, right-wing ideology is inversely associated with vote intention. Specifically for each unit change towards the right, the odds of intending to vote for the incumbent decreases by one percentage point

The African model includes a greater number of controls, including ethnicity, rural setting and political identification. With regard to ethnic saliency, we see that the coefficient is statistically significant in the expected direction. The positive association between ethnic saliency and incumbent vote intention signals that respondents who consider themselves primarily or completely within their national identity as more likely to intend to vote for the incumbent than those individuals who identify solely or primarily with their ethnic group. Looking at the marginal effects, we see that identifying with one's national identity increases the probability of intend incumbent by three percentage points. The coefficient for rural setting, fails to reach statistical significance. This suggests that residing in a rural area had no influence on likelihood of intending to vote for the incumbent.

Finally, the results suggest that partisan identification has a large effect on vote intention. The covariate for partisan identification is positively associated with vote intention and is statistically significant at the .01 level. The positive association means that individuals associated with the incumbent party were more likely to intend to vote for that party in comparison to respondents affiliated with other parties. Looking at the marginal effect, we see that moving from identification with the non-incumbent to incumbent party (i.e. a change from 0 to 1) increases the probability of intending to vote for the incumbent by one hundred thirty five percentage points, a very large effect. Relatively speaking, the marginal effects are the largest in the present study, suggesting that party identification in Africa is clearly the prominent voter determinant

Discussion

Do voters in Latin America and Africa dependent on egotropic perceptions, sociotropic perceptions, or both? The above findings suggest that despite the presence of egotropic perceptions, the Latin American and African electorate largely relies on sociotropic evaluations when assessing whether to vote for an incumbent. Although egotropic evaluations are present in certain contexts, the durability of sociotropic attitudes is consistently present in various models. That voters rely on sociotropic heuristics further substantiates the prominence of sociotropic voting. It also suggests that voters in the developing act in similar economic fashion as voters in advanced industrial countries when evaluating the incumbent. Despite the dominance of sociotropic voting, egotropic perception do appear to shape voter behavior in an isolated context.

Aside from demonstrating the resilience of sociotropic perceptions, the present study also modeled the impact of political identification with the incumbent vote intention. In the Latin American context, the negative association between right-leaning ideological identification and vote intention implies that an individual who identifies himself or herself with the “left” is more likely to vote for the incumbent. This is of little surprise given the abundance of “left” leaning incumbents in Latin America. Perhaps the most surprising result of African economic voting models is the association between party identification and the vote. The lack of a durable party system in developing countries have been noted by scholars as a reason to approach the study of voting behavior in a different theoretical perspective. However, in the African context we see that party identification is a strong predictor of vote intention.

In the African context, ethnic saliency is negatively associated with vote intention. This is not surprising as Bratton et al. (2012) found that ethnic saliency was negatively associated with intention to vote for the ruling party. Respondents who identified themselves primarily in ethnic

heuristics were less likely to vote for the incumbent. Table 5 confirms Bratton et al.'s results with a positive association between national self-identity and vote for the incumbent. Specifically, the change in probability for intention to vote for one unit change in ethnic saliency is three percentage points.

Despite the presence of egotropic and sociotropic perceptions, and the prominence of the latter, the present study suffers from a methodological shortcoming. The presence of multicollinearity highly limits the suggestive impact of egotropic voting. Unfortunately, omission of an economic perception covariate is not an option. Thus, further data gathering is needed to attempt to decrease and 'control' the impact of collinearity between economic perceptions.

Appendix A: Correlation Matrix

	Vote	Retro-socio	Pro-socio	Retro-ego	Pro-ego	Sex	Age	Education
Vote	1.0000							
Retro-socio	0.1638	1.0000						
Pro-socio	0.1960	0.4130	1.0000					
Retro-ego	0.0931	0.5606	0.3187	1.0000				
Pro-ego	0.1227	0.3017	0.6613	0.3723	1.0000			
Sex	-0.0128	0.0327	0.0157	0.0177	0.0094	1.0000		
Age	0.0146	-0.0264	-0.0328	-0.0535	-0.0874	0.0476	1.0000	
Education	-0.00155	0.0702	0.0195	0.1122	0.0774	0.0496	-0.2212	1.0000

Works Cited

- Bloom, Howard and Douglas Price. 1975. "Voter Response to Short-Run Economic Conditions: The Asymmetric Effect of Prosperity and Recession." *The American Political Science Review*. 69(4): 1240-1254.
- Bratton, Michael, Ravi Bhavnani, and Tse-Hsin. 2012. "Voting Intentions in Africa: Ethnic, Economic or Partisan." *Commonwealth & Comparative Politics*. 50(1): 27-52.
- Campbell, Angus, Philip E. Converse, Warren E. Miller and Donald E Stokes. 1960. *The American Voter*. New York: John Wiley & Sons.
- Canton, Dario and Jorge Jorrot. 2002. "Economic Evaluations, Partisanship and Social Bases of Presidential Voting in Argentina, 1995 and 1999." *International Journal of Public Opinion Research*. 14(4): 413-427.
- Dominguez, Jorge and James McCann. 1995. "Shaping Mexico's Electoral Arena: The Construction of Partisan Cleavages in the 1988 and 1991 National Elections." *The American Political Science Review*. 89(1): 34-48.
- Duch, Raymond M., and Randolph T. Stevenson. 2008. *The economic vote: How political and economic institutions condition election results*. Cambridge University Press.
- Kinder, Donald and D. Roderick Kiewiet. 1979. "Economic Discontent and Political Behavior: The Role of Personal Grievances and Collective Economic Judgments in Congressional Voting." *American Journal of Political Science*. 23(3): 495-527.
- Kinder, Donald and D. Roderick Kiewiet. 1981. "Sociotropic Politics: The American Case." *British Journal of Political Science*. 11(2): 129-161.
- Kramer, Gerald. 1971. "Short-term Fluctuations in U.S. Voting Behavior, 1896-1964." *The American Political Science Review*. 65(1): 131-143.
- Kuklinski, James H. and Darrell M. West. 1981. "Economic Expectations and Voting Behavior in U.S. House and Senate Elections." *The American Political Science Review*. 75(2): 436-447.
- Lewis-Beck, Michael S. 1983. "Economics and the French Voter: A Microanalysis." *The Public Opinion Quarterly*. 47(3): 347-360.
- Lewis-Beck, Michael S. 1986. "Comparative Economic Voting: Britain, France, Germany, Italy." *American Journal of Political Science*. 30(2): 315-346.
- Lewis-Beck, Michael S. and Maria Celeste Ratto. 2013. "Economic Voting in Latin America: A General Model." *Electoral Studies*. 32(3): 489-493.

- Lewis-Beck, Michael S., William G. Jacoby, Helmut Norpoth and Herbert F. Weisberg. 2009. *The American Voter Revisited*. Ann Arbor: University of Michigan Press
- Nannestad, Peter and Martin Paldam. 1997. "From the Pocketbook of the Welfare Man: A Pooled Cross-Section Study of Economic Voting in Denmark." *British Journal of Political Science*. 27(1): 119-136.
- Reed, Steven and Gregory G. Brunk. 1984. "A Test of Two Theories of Economically Motivated Voting: The Case of Japan." *Comparative Politics*. 17(1): 55-66.
- Posner, Daniel and David Simon. 2002. "Economic Conditions and Incumbent Support in Africa's New Democracies: Evidence from Zambia." *Comparative Political Studies*. 35(3): 313-336.
- Singer, Matthew M. and Ryan E. Carlin. 2013. "Context Counts: The Election Cycle, Development and the Nature of Economic Voting." *The Journal of Politics*. 75(3): 730-742.
- Tufte, Edward R. 1975. "Determinants of the outcomes of midterm congressional elections." *American Political Science Review* 69 (3): 812-826.
- Weyland, Kurt. 1998. "Peasants or Bankers in Venezuela? Presidential Popularity and Economic Reform Approval, 1989-1993" *Political Research Quarterly*. 51(2): 341-362.
- Weyland, Kurt. 2003. "Economic Voting Reconsidered: Crisis and Charisma in the Election of Hugo Chavez" *Comparative Political Studies*. 47(7): 822-848.
- Youde, Jeremy. 2005. "Economics and Government Popularity in Ghana." *Electoral Studies*. 24(1): 1-16.