

DO VOTERS RESPOND TO RELATIVE ECONOMIC PERFORMANCE? EVIDENCE FROM SURVEY EXPERIMENTS

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Abstract An emerging literature suggests that economic voting is driven by incumbents' relative performance, that is, how the national economy performed relative to recent past outcomes in the country (domestic comparison) and in a cross-national perspective (international comparison). While scholars have presented macro-level evidence in this direction, to date there has been scant micro-level evidence as to whether voters' evaluations of incumbent competence are shaped by relative performance. This article contributes to the literature by presenting two population-based survey experiments fielded in the United Kingdom and in Istanbul, Turkey. Both British and Turkish voters' evaluations of incumbent competence are affected by information about how well the economy performed in domestic and international comparisons, though Turkish voters seem to react to international performance comparison to a lesser degree than to a domestic one. In both countries highly educated individuals are more responsive to the incumbent's relative international performance. These results provide support for macro-level analyses that highlight the importance of incumbents' relative performance for economic voting.

A key appeal of democratic governance is the accountability of governments to citizens (Dahl 1971). Scholars have noted that evidence for democratic accountability should be most apparent in economic voting—the proposition that voters reward or punish incumbents at the polls for their economic performance, since the economy is typically the most salient and important

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valence issue for voters (Lewis-Beck and Stegmaier 2000). Evidence in support of economic voting has been somewhat mixed, however. Empirical analyses have revealed substantial variability in the relationship between economic outcomes and incumbents' electoral fortunes (Anderson 2007; Kayser 2014).

An emerging literature suggests that economic voting is driven by the *relative* performance of incumbents (e.g., Kayser and Peress 2012; Aytaç 2018), and the failure to account for this might have played a part in the inconsistent evidence for economic voting. The gist of the argument is that since no economic outcome is inherently good or bad, voters need reference points to interpret the state of the economy and to evaluate the incumbent's performance in managing it. Therefore, analyses without a domestically and internationally comparative framework could lead to invalid inferences about economic voting.

This study contributes to the literature by presenting two population-based survey experiments fielded in the United Kingdom and Turkey that seek to address whether voters' evaluations of incumbents' competence in managing the economy are shaped by relative economic performance. Its contributions are threefold. First, while there has been some experimental work on international benchmarking, this study considers both domestic and international comparisons.¹ Second, macro-level observational studies on international benchmarking have focused on either developed or developing countries and reported conflicting results (Kayser and Peress 2012; Campello and Zucco 2016). To be able to speak to this puzzle, I deployed experiments in both a developed and a developing country. Finally, these experiments are closer to theoretical accounts of benchmarking than most existing micro-level studies. I exclusively look at voters' evaluations of incumbent competence rather than any other outcome and do so by providing solely relative performance information in the case of international comparisons.

Findings show that voters do respond to relative performance when they think about the incumbent's competence in managing the economy, providing exogenous micro-level evidence to macro-level analyses of benchmarking. Both British and Turkish voters' evaluations of incumbent competence are affected by how well the economy performed in domestic and international comparisons, though Turkish voters seem to react to international performance comparison to a lesser degree than to domestic comparison. In both countries highly educated individuals are more responsive to the incumbent's relative international performance.

1. Domestic, or historical, comparisons are within-country temporal comparisons of economic outcomes or performance, while international comparisons refer to cross-national comparisons.

Relative Performance and Economic Voting

The importance of relative performance for economic voting can be traced back to [Powell and Whitten \(1993\)](#), who employed measures of relative international performance in their analyses.² In the 2000s, this idea was first picked up by scholars studying political effects of state-level economic conditions relative to the national economy in the United States ([Cohen and King 2004](#); [Ebeid and Rodden 2006](#)). Later, [Kayser and Peress \(2012\)](#) presented the first comprehensive evidence that voters in advanced democracies engage in cross-national benchmarking of incumbents' economic performance. In contrast, [Campello and Zucco \(2016\)](#) found no support for cross-national benchmarking in Latin American elections, suggesting that the electoral impact of relative international performance might vary substantially across countries.

Most recently, I proposed a reference point theory of economic voting that is centered on the relative performance of incumbents ([Aytaç 2018](#)). Given that whether a particular economic outcome corresponds to good or poor performance depends on the reference points voters employ, I argued that a consideration of economic outcomes during the incumbent's term relative to recent past outcomes in the country (domestic comparison) and in a cross-national perspective (international comparison) provides voters with two such reference points. A systematic analysis of 475 elections in 62 countries reveals that measures of both domestic and international relative performance are significant predictors of electoral fortunes of incumbents, independent of election-year performance.

[Aytaç \(2018\)](#) also presented evidence that cross-national benchmarking is not a universal phenomenon but seems limited to countries with highly educated electorates. Though the exact causal mechanism is not specified, individuals with higher levels of education might be more likely to be exposed to relevant information (how other countries' economies are faring) and better able to process it (linking relative international performance to incumbent competence).³ As the average citizen in a developed country is typically more educated than in a developing one, this consideration offers an explanation for the divergent results on cross-national benchmarking in studies focusing on developed countries ([Kayser and Peress 2012](#)) and developing ones ([Campello and Zucco 2016](#)).

These accounts have a rather straightforward implication for voters: their evaluations of incumbent competence should be shaped by relative

2. While this study focuses on economic voting, recent research in public administration has shown that relative performance information can shape citizens' evaluations of public organizations and their services (see, e.g., [Barrows et al. 2016](#); [Olsen 2017](#)).

3. Higher levels of education are positively associated with news consumption ([Dalager 1996](#)) and ability to comprehend and recall information in news stories ([Jerit, Barabas, and Bolsen 2006](#)).

performance. There is scant micro-level evidence in this direction, however, and existing studies focus just on international benchmarking. [Campello and Zucco \(2018\)](#) provided Brazilian voters with information about the nation's economic performance relative to other nations, and report that this had little impact on their evaluations of the president's management of the economy. In contrast, [Hansen, Olsen, and Bech \(2015\)](#) show that, *ceteris paribus*, Danish voters are less favorable of a future, hypothetical economic scenario where "Swedes have become richer than the Danes." [Huang \(2015\)](#) also reports that Chinese citizens' evaluations of their country and its government are affected by their perceptions of foreign socioeconomic conditions. Yet these latter studies do not explicitly focus on the relationship between retrospective economic performance and incumbent competence. In the following, I present a pair of survey experiments that are closer to the theoretical accounts of benchmarking, and which consider the effects of both domestic and international comparisons.

Research Design

I employ population-based survey experiments to explore the individual-level implications of relative economic performance. Specifically, I provide different informational vignettes to experimental groups to alter respondents' decision-making environment when they think about the incumbent's competence. The vignettes convey information about the relative performance of the national economy during the incumbent's term, and the outcome of interest is voters' evaluations of his or her competence in managing the economy. Incumbents who deliver better economic outcomes, in domestic and international comparisons, should receive higher competence ratings from voters, and vice versa.

Because macro-level economic benchmarking studies that focus exclusively on either developed or developing countries have reported divergent results, I conduct experiments in both a developed and a developing country—the United Kingdom and Turkey, respectively. [Powell and Whitten \(1993\)](#) classify the UK as a country with high clarity of responsibility, that is, a country in which voters are likely to assign responsibility for economic outcomes to the incumbent.⁴ And Turkey, like the UK, can also be considered a country with high clarity of responsibility. It is a unitary, centralized state with strong voting cohesion in major parties and a majoritarian policy-making structure in the legislature. While Turkey has recently experienced serious democratic backsliding, at the time of fielding of survey (late 2013) the country's Polity IV regime score was +9 (on a –10 to +10 scale), and there is systematic evidence that

4. The measure of [Powell and Whitten \(1993\)](#) considers factors such as voting cohesion of the major parties, bicameralism, the presence of coalition and minority governments, and the extent to which committees in the legislature accommodate opposition party power-sharing.

economic voting has been a relevant factor in recent Turkish elections (Aytaç 2020).

The British survey experiment was fielded in October 2013 using the online platform of YouGov with a sample of 1,087 individuals who are representative of the adult British population.⁵ The latest UK general election was held in May 2010 when the then-governing Labour Party lost its majority in the parliament, and a Conservative–Liberal Democrat coalition government was formed under the premiership of David Cameron. The outcome of interest is voters' evaluations of Cameron's competence in managing the economy, measured by the following question:

Now thinking about the competence of the Prime Minister David Cameron in managing the economy, how good or bad a job do you think he has done since taking office after the General Election in 2010? 0 corresponds to very bad, 10 corresponds to very good. [0–10 scale follows]

The experimental part of the survey consists of presenting different informational vignettes to respondents before this outcome question (table 1). The first treatment, *Domestic Comparison*, engages in a positive historical comparison of the British economy under the leadership of Cameron vis-à-vis the previous government. The source of information is constructed to be nonpartisan, and the second sentence gives factual information to strengthen the treatment and maximize ecological validity. In the second treatment, *International Comparison*, respondents are presented with information about the relative international performance of the British economy under Cameron, in a similar fashion as in the first treatment. Finally, the experiment also involved a control condition in which no information was presented.

The Turkish survey experiment was part of a face-to-face probability sampling survey fielded in Istanbul in December 2013 with a sample size of 911. With a population around 15 million, Istanbul is the country's largest city and economic and cultural center. A comparison of the available demographic information of the population of Istanbul with that of Turkey reveals no large differences (table A4 in the online appendix), suggesting that Istanbul could be seen as a microcosm of the country. The latest general election in Turkey was held in June 2011, and the ruling party of then-Prime Minister Recep Tayyip Erdoğan had won a third consecutive term in government. The outcome

5. Both the British and Turkish surveys were sponsored by the Whitney and Betty MacMillan Center for International and Area Studies at Yale University, and the research design and survey instruments were approved by the Yale University Human Subject Committee (protocol numbers 1304011842 and 1307012436). YouGov reports the overall response rate for its online panel as 21 percent, and the response rate for the Turkish survey was 42 percent according to AAPOR standards. See the online appendix for further information about the samples and their representativeness.

Table 1. Vignettes in the British survey experiment

Group	Vignette
Domestic comparison	In a recent press conference, the chief economist of the United Nations stated that under the government of David Cameron the British economy performed better than under the previous government. While under the previous government the British economy lost 400,000 jobs, under the government of Cameron 800,000 new jobs were generated.
International comparison	In a recent press conference, the chief economist of the United Nations stated that under the government of David Cameron the British economy performed better than all major European economies. During Cameron's time as Prime Minister, Britain's economic growth outpaced its European neighbours.
Control	[NO VIGNETTE]

question in the Turkish survey is identical to the one in the British survey, and the informational vignettes are similarly constructed (table 2).

A couple of points are worthy to discuss about the informational vignettes. First, the vignettes convey primarily relative performance information (exclusively so for the international comparisons); for example, that the British economy outpaced its European neighbors, without emphasizing absolute performance. This is an important detail because the national economy could be in a recession but still outperform its neighbors or previous periods, and there would be no reason for a respondent to update her evaluation of the incumbent's competence unless she believed relative performance provides valuable information.⁶

Second, a particular concern with experimental studies in general is ecological validity, that is, whether the methods, materials, and settings of the research are similar to a given target environment (Morton and Williams 2010). In the present research, this question corresponds to whether the informational vignettes sufficiently approximate what the respondents would read or hear in the real world (i.e., from newspapers). To address this concern, I constructed the treatments upon checking contemporary news on the economy in each case and presented information that is in line with what people are likely to read or hear. A limitation of the decision to stick to providing truthful

6. Kayser and Leininger (2016), for instance, report a forecast of the 2013 German federal elections based on a model that incorporates only the relative international performance of the German economy (benchmarked against the economies of France, Italy, and the UK). This forecast outperforms models with absolute measures of economic performance even though the German growth ahead of the election was rather sluggish.

Table 2. Vignettes and outcome question in the Turkish survey experiment

Group	Vignette
Domestic comparison	In a recent press conference, expert economists stated that under the governments of Recep Tayyip Erdoğan the Turkish economy performed much better than under previous governments before 2002. The experts stressed that during Erdoğan's time as Prime Minister the Turkish economy grew three-fold, and the inflation rate decreased significantly from its previously high levels.
International comparison	In a recent press conference, expert economists stated that under the governments of Recep Tayyip Erdoğan the Turkish economy performed better than all European economies. During Erdoğan's time as Prime Minister, Turkey's economic growth outpaced European countries, and Turkey moved up from being world's 26th largest economy to the 17th place.
Control	[NO VIGNETTE]
Outcome question	Now thinking about the competence of Prime Minister Recep Tayyip Erdoğan in managing the economy, how good or bad a job do you think he has done during his tenure? 0 corresponds to very bad, 10 corresponds to very good. [0–10 scale follows]

information is that respondents were presented only with positive assessments of the economies in treatment vignettes, given the performance of the economies during the timing of the surveys.

Third, while the nature of the treatments is substantively the same in both countries as to give information about the relative domestic and international performance of the economy, there are some changes in the wordings and targets of comparison. In particular, readers might question why the international comparison in the Turkish case focuses on European economies rather than its neighbors or some developing countries. While I acknowledge this concern, comparisons of the Turkish economy with major European economies feature more prominently in press and politicians' discourse than any other country group or immediate neighbors.⁷ Given this, the benefits of providing respondents with information that they are likely to encounter in their daily lives should outweigh concerns about comparability of economies.

Descriptive statistics of variables used in analyses are reported in [table 3](#).⁸ Balance checks (reported in the [online appendix](#)) of treatment assignment on

7. Although Turkey is not part of the European single market, it is part of the EU customs union, and major European economies are the country's largest trade and investment partners.

8. Variable descriptions and coding procedures are presented in the [online appendix](#).

Table 3. Descriptive statistics of variables used in analyses

Variable	<i>N</i>	Mean	SD	Min.	Max.
British sample					
Competence evaluation	1,038	4.6	2.9	0	10
Female	1,087	0.49	0.50	0	1
Age	1,087	47.9	15.8	18	90
College-educated	1,033	0.32	0.47	0	1
Social grade	1,087	2.2	1.1	1	4
Region	1,085	6.1	3.0	1	11
Income	838	5.2	3.2	1	14
Government partisan	1,087	0.24	0.43	0	1
Turkish sample					
Competence evaluation	899	6.1	3.1	0	10
Female	911	0.50	0.50	0	1
Age	911	39.2	13.7	18	78
College-educated	911	0.11	0.32	0	1
Employed	911	0.44	0.50	0	1
Income	893	8.7	1.6	1	12
Government partisan	866	0.33	0.47	0	1

NOTE.—See the [online appendix](#) for variable descriptions.

these characteristics suggest that randomization was successful. [Figure 1](#) presents the distributions of the dependent variable in the control conditions of both surveys. There is considerable variation in responses, and a sizable number of respondents in the British sample evaluated Cameron's competence at the lowest point in the scale, whereas Turkish respondents' evaluations of Erdoğan's competence are skewed toward higher values. The mean evaluation scores in these control groups for Cameron and Erdoğan are 4.2 and 5.9, respectively.

Analyses

[Table 4](#) presents regression analyses of average treatment effects with and without controls using ordinary least squares (OLS) estimation in the British and Turkish experiments.⁹ There are significant effects of relative economic performance on competence evaluations: positive information about relative domestic and international performance leads respondents to evaluate the incumbent's competence more favorably. In the British sample there is no substantial difference between the effect sizes of domestic and international comparisons, and they are substantively important as well, corresponding to a change in

9. Information about controls and their effects on outcome variables is presented in the [online appendix](#). Directional predictions necessitate the use of one-tailed tests (see [Blalock 1979](#)).

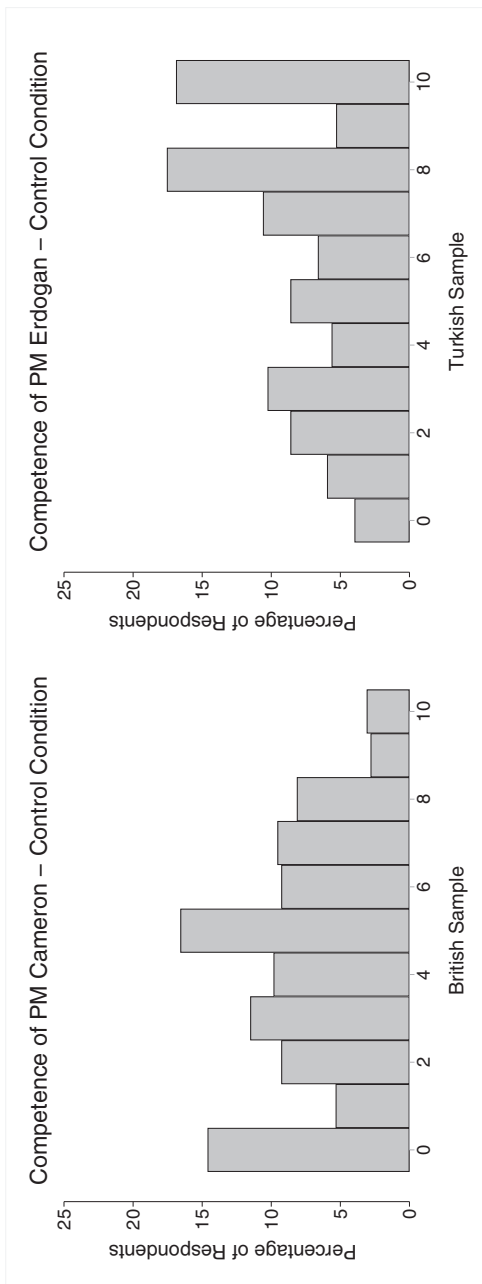


Figure 1. Distribution of responses to outcome questions in the control condition. The figure on the left shows the distribution of British respondents' (only in the control group) evaluations of Prime Minister Cameron's competence in managing the economy on a 0–10 scale. The figure on the right shows the corresponding distribution of Turkish respondents' (control group) evaluations of Prime Minister Erdoğan's competence in managing the economy.

Table 4. Average treatment effects in survey experiments

DV: competence of PM	British experiment			Turkish experiment		
	B	SE	B	SE	B	SE
Domestic comparison	0.54** (0.22)		0.58** (0.22)		0.43* (0.25)	
International comparison	0.67*** (0.22)		0.63** (0.21)		0.32 (0.25)	
Constant	4.24*** (0.15)		3.03*** (0.50)		4.68*** (0.18)	
Controls	NO		YES		NO	
Observations	1,038		766		899	
					YES	
					837	

NOTE.—Coefficients are from linear regression models with robust standard errors in parentheses. Information about the controls is presented in the [online appendix](#).

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (one-tailed tests)

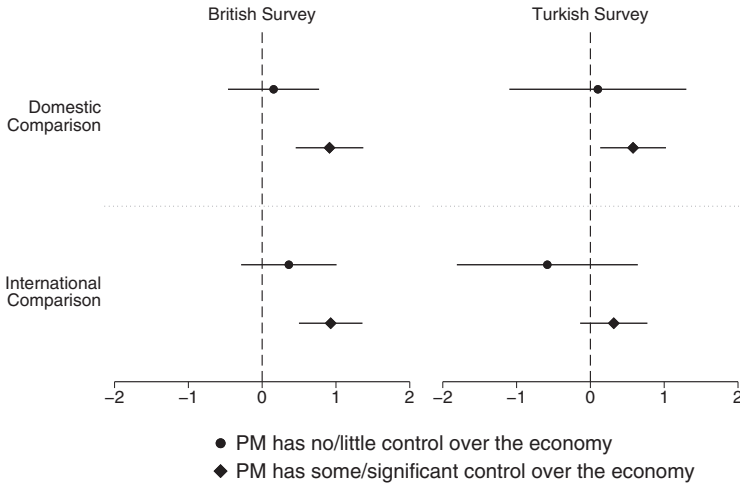


Figure 2. Average treatment effects—broken down by respondents’ views on the incumbent’s responsibility for economic outcomes. Horizontal lines display 90 percent confidence intervals around the estimates. Treatments have no statistically significant effects among individuals who think the prime minister has no or little control over the economy.

the average competence evaluation by about a quarter of its standard deviation. In the Turkish sample the effect of international comparison is weaker than that of the domestic one, and it fails to reach conventional levels of statistical significance. The statistically significant effect of the domestic comparison treatment in the Turkish case corresponds to a change in the average competence evaluation by about a fifth of its standard deviation.

A concern about these results might be whether they are just due to framing effects: rather than linking relative performance with incumbent competence, respondents might simply be reacting to positive framing of the national economy. To address this concern, we can turn to heterogeneous treatment effects with respect to respondents’ perceptions of how much control the incumbent has over the national economy. Some individuals hold the opinion that there is very little an incumbent can do to affect national economic outcomes; for these individuals, relative performance should be uninformative about the incumbent’s competence. Thus, information about relative performance should affect only the evaluations of individuals who think the incumbent has at least some level of control over the economy. In contrast, if the results were driven by framing effects, we would expect no variation in effects across this dimension.

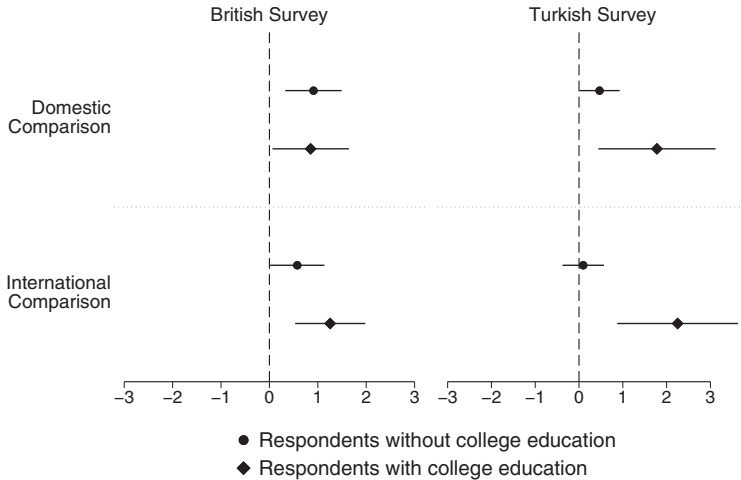


Figure 3. Average treatment effects—broken down by respondents' education levels among those who think the PM has at least some control over the economy. Horizontal lines display 90 percent confidence intervals around the estimates. Respondents with a college education update their evaluations of incumbent competence to a greater degree than those without a college education upon receiving information about the relative international performance of the economy.

In the British sample, while 26 percent of respondents think the prime minister (PM) of the UK has no or little control over the economy, 66 percent hold the opinion that she or he has at least some control. The corresponding figures in the Turkish sample are 12 percent and 81 percent, respectively. In [figure 2](#) we see that in both experiments the treatments have no statistically significant effects among individuals who think the PM has no or little control over the economy. In contrast, among individuals who hold the view that the PM has some or significant control, treatment effects are larger in each case and statistically significant except for the international comparison in the Turkish experiment. Thus, the overall positive results are driven by individuals who think the executive has at least some control over the economy, challenging the framing argument.

Finally, we observe heterogeneous treatment effects of international comparisons across respondents' education levels. Specifically, in both countries respondents with a college education update their competence evaluations to a greater degree than those without a college education upon receiving

information about the relative international performance of the economy (fig. 3).¹⁰ In the Turkish experiment the positive treatment effect among college-educated individuals is less precisely estimated than in the British experiment, due to a much lower proportion of college graduates in the sample (11 percent, versus 32 percent in the British sample). The null effect among the relatively large number of individuals with lower educational levels in the Turkish experiment leads to very weak effects of relative international performance in the overall sample as well.

The mechanism that accounts for this heterogeneity in effects of international benchmarking across education levels warrants further research. A potential explanation might lie in the distinction between exposure to and reception of information—the latter requiring the ability to store, sort, and connect key points of content and their implications in addition to simply being exposed to information (Price and Zaller 1993). And individuals with higher levels of education are shown to be better at reception of information, for example from news stories, than individuals with lower educational levels (Dalager 1996; Jerit, Barabas, and Bolsen 2006). Highly educated individuals in the present samples may simply be better at establishing the link between relative economic performance and incumbent competence upon receiving relevant information, and this task might be more demanding in the case of international comparisons than domestic ones.

Conclusion

Macro-level studies of economic benchmarking suggest that voters' evaluations of incumbent competence are shaped by how well or badly the economy has performed in domestic and international comparisons. This article presented individual-level experimental evidence from two countries in this direction. When presented with information that the economy under the incumbent's watch performed better than under previous incumbents or in cross-national comparisons, both British and Turkish voters updated their competence evaluations positively. Among Turkish respondents the effect of international comparison is less pronounced than that of the domestic comparison. Analyses of heterogeneous treatment effects suggest that the results are unlikely to be driven by framing effects.

In addition, highly educated individuals in both countries react more to the relative international performance of the economy than their less educated fellow citizens when evaluating incumbent competence. It seems that the overall weak level of international benchmarking in the Turkish case is driven by this

10. Following the logic in the previous paragraph, this analysis is confined to only those who think the executive has at least some control over the economy.

unresponsiveness of the large number of less educated individuals in the sample. If this result could be generalized to other developing countries, rather mixed normative implications for economic voting follow. Such a picture would suggest that incumbents in developing democracies are likely to be rewarded or punished at the polls due to exogenous economic shocks, blurring accountability through economic voting.

The limitations of the current study call for further micro-level research on economic benchmarking. The vignettes used here presented only positive information about the incumbent's performance, and there is evidence in the literature that individuals can be more sensitive to negative relative performance than a positive one (e.g., Huang 2015). In addition, the international comparison group in the Turkish vignette refers to European economies, most of which are developed economies. Perhaps Turkish voters would have responded differently to relative international performance if the comparison group involved countries with a development level similar to Turkey. In general, future studies should seek to establish the generalizability of the results by employing different target groups of comparison and contrasting relative performance information in different contexts.

Supplementary Material

SUPPLEMENTARY MATERIAL is freely available online at *Public Opinion Quarterly* online.

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