Elections in the Arab World: Why Do Citizens Turn Out?

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Abstract

This article examines the determinants of voting in competitive authoritarian regimes in the Arab world. In contrast to scholars who view elections in the Arab World purely as patronage contests, we argue that citizens also care about policy outputs and use turnout as a way to signal their approval or disapproval with the regime. We draw on the literature on economic voting in democratic regimes to develop an argument about economic voting under authoritarian conditions, and we propose a mediation model to get at the mechanisms of economic voting. We test our argument with original data based on surveys conducted in seven Arab countries between 2006 and 2009. Our results show that although patronage helps to explain turnout, especially among high-income citizens, policy outcomes are also important in the calculus of voting. Most voters turn out to vote to show approval of the regime and its economic performance.

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Electoral participation is an essential part of the democratic process. Understanding who turns out to vote and why is necessary to determine who has a voice in political affairs. This has motivated scholars to investigate the determinants of electoral participation in Western democratic countries.[1] However, little is known about the determinants of electoral participation in non-democratic settings. As Brownlee (2011) states, "turnout bears on how comparativists interpret elections in authoritarian conditions, but popular participation seldom receives systematic attention" (p. 818). This is surprising given that many non-democracies regularly hold elections that are at least somewhat competitive and have substantial levels of citizen involvement.

Starting in the 1970s, authoritarian leaders in Arab countries like Jordan, Egypt, Morocco, and others undertook a series of liberalizing political reforms, which included the creation of parliaments, the introduction of elections, and the legalization of certain political parties. These reforms facilitated (and even encouraged) citizen political involvement through elections, rallies, and demonstrations. Yet, despite some political openings in the form of limited electoral competition, neither government policies nor incumbency were really at stake in these electoral contests (Gandhi & Lust-Okar, 2009). This presents a puzzle: Why would citizens turn out to vote in elections that may not be free and fair and where, in any event, the results have little impact on the composition or policies of the government?

In response to this puzzle, the literature on voting in the Arab world emphasizes the role of patronage and suggests a path to turnout linked to personal economic circumstance and the distribution of material benefits. According to this body of literature, citizens in authoritarian regimes do not use elections to choose policies or to evaluate government performance (as do citizens in developed democratic countries), but they rather participate in the electoral process in return for private individual goods. We revisit this argument and test it empirically. In line with this literature, we find that some citizens in the Arab world use elections to exchange votes for patronage and that individuals who have used clientelist networks in the past are more likely than others to turn out to vote, especially when these clientelist networks involve government officials.

Yet, our main claim in this article is that there is a second important determinant of turnout. We argue that many citizens in the Arab world also care about policy outcomes and use elections to express their views about the regime and its performance.[2] These voters are not necessarily embedded in clientelist channels (Bellin, 2002; Jamal, 2012; Tsai, 2005). Our argument builds on the literature on retrospective economic voting in democratic contexts.[3] More specifically, we posit that evaluations of the government's economic performance affect the likelihood that an individual will turn out to

vote. Furthermore, we argue that the mechanism linking evaluation of economic performance to the decision to vote includes an overall assessment of trust in the governing regime, the logic being that voting in these competitive authoritarian settings offers a way to signal approval or disapproval with the regime. In sum, one of our main contributions in this article is to show that retrospective evaluations of government economic performance are indeed an important determinant of voting behavior in the Arab world, and thus that citizens are not motivated solely by client-based material incentives.

We investigate these claims with an original data set that pools public opinion surveys conducted in seven countries in the Arab World (Algeria, Bahrain, Jordan, Lebanon, Morocco, Palestine, and Yemen) between 2006 and 2009.[4] Our findings provide insight into the character of elections in the Arab world, as well as into the behavior of voters in competitive authoritarian regimes more generally. As Wright and Stein (2010) point out, "[public] opinion research in non-democratic countries has mostly been limited to single case studies" (p. 5). This article provides one of the few region-wide large *N* analyses of electoral behavior in competitive authoritarian regimes.

The article is organized as follows: The first section "Elections in the Arab World: The Regime Perspective" reviews the literature on elections in the Arab world. The second section "Voting in the Arab World: Theory and Hypotheses" presents our two arguments about individual-level determinants of turnout and specifies the associated testable hypotheses. The third section "Data and Methods" describes the dataset and methods with which we test our hypotheses. The fourth section "Findings about Patronage" and the fifth section "Findings about Economic Voting" present and discuss the results of our analyses. In the section "Conclusion and Implications" we conclude with a review of the findings and their implications for understanding the role of elections in the Arab world and for assessing the stability of the current regimes in Arab countries.

Elections in the Arab World: The Regime Perspective

Despite tentative political openings in a number of Arab countries during the early and mid-1990s, almost all had come to an end as the decade drew to a close. As described by one scholar in 1999, "[t]he political landscape was littered with the remnants of so many of the democratic experiments" (Anderson, 1999, p. 6). This situation continued to characterize the region until the Arab Spring began to unfold in late 2010. Nevertheless, even though there were few meaningful challenges to the prevailing power structure during this period, Yemen, Lebanon, Jordan, Egypt, Algeria, Morocco, and

Bahrain all held regular parliamentary elections. Furthermore, notwithstanding the limited power of parliaments, the elections in many countries were at least minimally competitive, even if they did not push the democracy agenda forward. As described in a recent study of region-wide patterns at the end of the last decade, "[e]lections are now everywhere in the Arab Middle East, but democracy is nowhere. Elections are ubiquitous. But democracy is still awaited" (Sadiki, 2011, p. 61).

The sustained coexistence of authoritarianism and elections that are at least somewhat competitive would appear to be a puzzle, but research on the survival of authoritarianism offers an explanation: It proposes that electoral contests are much more of a mechanism for elite manipulation than a process by which ordinary citizens exercise political influence. This literature argues that elections in authoritarian regimes contribute to entrenched authoritarian rule in two different ways. On one hand, the introduction of elections by authoritarian rulers legitimizes their rule to both domestic and international audiences. On the other hand, electoral contests allow authoritarian rulers to successfully manage opposing as well as other governing and would-be governing elites by including them in the political process (Blaydes, 2011). According to Gandhi and Przeworski (2006), for example, elections in non-democratic settings enable political leaders to form coalitions with other elites, thus reducing the likelihood of opposition contestation. Boix and Svolik (2007) report a similar dynamic.

Studies in the Arab world and other regions also report that authoritarian rulers use elections to further solidify their base of support. For example, Lust-Okar (2006), Posusney (2002), and Blaydes (2006) argue that, in the context of the Arab world, elections help manage potentially competing elites by bringing them into the political process and keeping them accountable to and dependent on the existing regime. Lust-Okar and Jamal (2002) similarly find that authoritarian leaders tend to manipulate elections, so that their outcomes give domestic credibility and legitimacy to those in power. This has enabled Arab regimes, at least until recently, to resist pressures for genuine democracy and retain their power and preeminence. Research in Latin America offers comparable assessments. Magaloni (2006) finds that the long-dominant party in Mexico—the PRI—held elections to demonstrate and reinforce its invincibility and to expose the weakness of the opposition. Geddes (2005) argues that elections help rulers check the influence of other institutions, including the military.

Elections in non-democratic countries are important not only for domestic political purposes but also because they enhance external legitimacy and win support from international backers. Countries that hold competitive elections are more likely to secure support from Western donor countries in the form of

Table 1. Turnout Figures.

Country	*n*	Survey turnout figures[a] (%)	Survey month and year	National parliamentary election
Algeria	1,296	50.9	October 2006	May 2002
Bahrain	424	66.3	March 2009	November 2006
Jordan	1,143	60.4	September 2006	June 2003
Morocco	1,275	58.5	November 2006	September 2002
Lebanon	1,167	63.8	December 2007	May 2005
Palestine	1,267	72.4	June 2006	January 2006
Yemen	688	58.1	November 2007	April 2003
Average turnout		61.4		

Vote as percentage of all respondents (excluding missing cases).
a. Source: Arab Barometer.

financial aid, security guarantees, and favorable trade agreements, and less likely to be the object of international criticism (Levitsky & Way, 2002; Schedler, 2002).

In sum, scholars have mainly focused on the reasons that authoritarian leaders permit and organize elections in the first place, and on the mechanisms by which they use electoral contests to further entrench and legitimize their power. This scholarship, however, has paid less attention to the role that citizens play in these electoral contests. We contend that understanding the attitudes and motives of citizens who turnout in the Arab world can help us to understand more fully the role and significance of elections in authoritarian regimes.

Voting in the Arab World: Theory and Hypotheses

Elections in the Arab world are lively affairs. Citizens and parties take these electoral contests quite seriously. Candidates hold rallies, deliver speeches, distribute goods, post flyers, and visit local constituencies. Many citizens, too, take great interest in campaigns and mobilize friends and family to turn out to vote. Table 1 presents aggregate turnout figures for the seven countries in our data set based on representative national surveys conducted by the Arab Barometer. The table shows the percentage who answered affirmatively when asked whether they voted in the most recent national parliamentary election. Average turnout ranges from a low of 50% in Algeria to a high of 72% in Palestine. These figures suggest that there is significant within-country variation, which raises the question of why some individuals decide to vote, whereas others decide to abstain. We present two sets of arguments in response to this question.

Patronage and Voting

Much of the literature on voting in the Arab world emphasizes the role of patronage and suggests a path to turnout linked to personal economic circumstance and the distribution of material benefits. In a study of Egypt, for example, Blaydes (2008) argues that competitive parliamentary elections "serve as the regime's most important device for the distribution of rents and promotions to important groups within Egypt's politically influential classes" (p. 1). Furthermore, Lust-Okar (2009) argues that elections in the Middle East and North Africa (MENA) involve "competitive clientelism" by which elites distribute state resources to their clients in exchange for support (p. 122). A number of recent articles similarly point to the importance of patronage in understanding electoral behavior in Latin America (Magaloni, 2006; Stokes, 2005) and Africa (Wantchenkon, 2003; Wantchenkon & Vicente, 2009).

Although there is a substantial amount of case study evidence suggesting a link between patronage and turnout, scholars have not systematically tested this link with individual-level data from any Arab country or, more generally, with cross-national data that permit the assessment of region-wide trends. The data set constructed for this study, based on surveys in countries that taken together encompass the diversity of the Arab world's political systems, provides an excellent opportunity to test this important argument at the individual level of analysis and to assess its broader applicability. We thus propose the following hypothesis:

> **Hypothesis 1 (H1):** Individuals who have used clientelist networks in the past are more likely to turn out to vote than are individuals who have never been involved in clientelist networks.

Furthermore, if patronage is indeed central to elections, then individuals who are more easily targeted by the regime for the distribution of benefits should also be more likely to turn out to vote. In other words, if elites seek to exchange patronage for votes, they will want to make sure they target the right individuals in this exchange, those for whom the provision of patronage will indeed increase the likelihood of voting. Several scholars have argued that people with low incomes are more likely to be targeted for patronage because their "votes are more easily bought and their reliance on state patronage is higher" (Blaydes, 2006; Tezcur, 2008, in Gandhi & Lust-Okar, 2009, p. 409). This logic, which our data permit us to test, suggests that participation in clientelist networks is more likely to account for the variance in turning out to vote among low-income individuals than among high-income individuals.

Other scholars make the opposite claim. Ahuja and Chhibber (2012) argue that the poor in India turn out to vote because it is their right, whereas the non-poor turn out to vote either to gain material benefits from the state or to fulfill their duty as citizens. Given that middle- and high-income citizens are better networked and have better connections to politicians and bureaucrats, they are more likely to gain materially from turning out to vote and exchanging their participation for patronage. We evaluate these alternative explanations about the joint effect of wasta and personal economic circumstances with the following two conditional hypotheses:

> **Hypothesis 2a (H2a):** The positive effect of participation in clientelist networks on voting is greater among lower income individuals than among higher income individuals.
> **Hypothesis 2b (H2b):** The positive effect of participation in clientelist networks on voting is greater among higher income individuals than among lower income individuals.

Confirmation of these two hypotheses about patronage will lend empirical support to a causal story about voting in authoritarian regimes that has been offered in studies of elections in the Arab world but which, while persuasive, has not been supported by individual-level data or cross-national region-wide investigations. However, we argue that patronage is not the whole story and that other factors need to be considered as well when seeking to understand why some citizens turn out to vote and others do not. More specifically, we argue that policy matters as well and that decisions about whether to vote are influenced by evaluations of the regime's economic performance.

Evaluation of Government Economic Performance and Voting

Although the literature on patronage and voting has made valuable contributions to understanding voter behavior outside of the democratic and developed world, it has also tended to emphasize voting as an instrumental exchange between elites and voters. The assumption underlying this research is that citizens in democracies care mostly about policy choices or government outputs and thus use elections either to choose among policy alternatives or to reward or punish incumbents based on their performance. In contrast, citizens in authoritarian regimes are said to conceive of elections primarily as a means to extract state resources and not a mechanism by which to also signal policy preferences or performance evaluations. As expressed by Lust-Okar (2006), "[t]he distribution of state resources trumps

by far any role of elections as arenas for contest over the executive or critical policies" (p. 459).

Although patronage is indeed an important element in Arab elections, we contend that it is not the whole story. We think it is unlikely that citizens in Arab countries are motivated solely by the hope of obtaining immediate material benefits from the regime. We argue that citizens in competitive authoritarian regimes also care about overall government performance, especially economic performance, and thus use elections to signal approval (or disapproval) of the regime's positions and performance in very much the same way as citizens in democratic countries.

To explore this proposition more fully, we turn to insights on voting behavior in developed democratic contexts, and specifically to the literature on economic voting. Scholars in this field have long recognized an association between evaluation of the economy and voter choice. One of the key theoretical claims of this literature is that citizens will vote against incumbents if economic conditions are bad, whereas they will tend to support incumbents if they perceive economic conditions to be good. As Tucker (2006) puts it,

> the more dissatisfied an individual is with the state of the economy, the more likely he or she will be to choose to cast a vote in favor of a party that is not in government. Similarly, the more satisfied an individual is with the state of the economy, the more likely he or she will be to choose to cast a vote in favor of an incumbent party as opposed to an unknown "other party." (p. 33)

In other words, " . . . voters hold elected officials responsible for the economy by first observing the state of the economy and then using this information to make their vote choice (Lewis-Beck & Paldam, 2000)" (Wright & Stein, 2010, p. 2).

Much less is known about whether (or how) perceived economic conditions affect electoral behavior in non-democratic contexts. To a certain extent, the conditions for economic voting in non-democratic settings do not exist because there is little opportunity to vote against an incumbent leader. As several scholars have argued, discontent citizens in the Arab world often do not find a viable opposition candidate on the ballot (Brownlee, 2007; Lust-Okar, 2009; Posusney, 2002; Sadiki, 2011). A partial exception in some Arab countries is the presence of a well-organized Islamist opposition party. But, as discussed in more detail below, many voters who are dissatisfied with the status quo may not consider the Islamist's platform an appealing alternative. It is also the case that Islamist parties sometimes prefer to boycott an election rather than bring their supporters to the polls. Small liberal

parties also sometimes field opposition candidates but these parties rarely have a grass-roots organizational base through which to mobilize voters, and in many cases, their leaders are considered to be part of the political class rather than a genuine alternative to the regime in power.

But although citizens may frequently be unable or disinclined to express their opposition by turning out to vote against an incumbent, they do have the option of signaling disapproval of the regime and its performance by staying home. Expressing opposition in this way can be very effective because elites in competitive authoritarian regimes value high voter turnout as a means of legitimating their rule to both domestic and international audiences. This is illustrated by the recent presidential election in Egypt, which had to be extended for an additional day to bolster turnout because, according to news reports, many voters "stayed home due to political apathy, opposition to another military man becoming president, discontent at suppression of freedoms among liberal youth, and calls for a boycott by Islamists" ("Egypt: General al-Sisi Wins," 2014). The Algerian 2007 elections provide another illustration (Tlemcani, 2007), as well as Syria's recent election, which opponents of the incumbent regime urged their supporters to boycott the election ("Syria Opposition Head Warns," 2014).

In light of this situation, it is important that explorations of the relationship between economic voting and electoral behavior in competitive authoritarian regimes give attention to decisions about turnout as well as voter choice. This is the focus of the present investigation. We acknowledge that some disaffected citizens do turn out to vote either attracted by opposition parties or in exchange for patronage, and some may express their discontent by submitting a spoiled or blank ballot. Nevertheless, staying away from the polls is an easy way, and sometimes the safest way, by which citizens can use elections to express political and economic discontent[5]; and we thus expect disaffected citizens to be much more likely than those who are satisfied with the regime to abstain from voting. And indeed, as shown in Figure 1,[6] this is precisely what we see in the Arab Barometer survey data.

Following the logic of our argument, we posit that a positive evaluation of government economic performance will increase the likelihood of voting, whereas a negative evaluation of government economic performance will decrease the likelihood of voting. This is expressed in Hypothesis 3 (H3) below.

H3: Individuals with a positive evaluation of the government's economic performance are more likely to vote than are individuals with a negative evaluation of the government's economic performance.
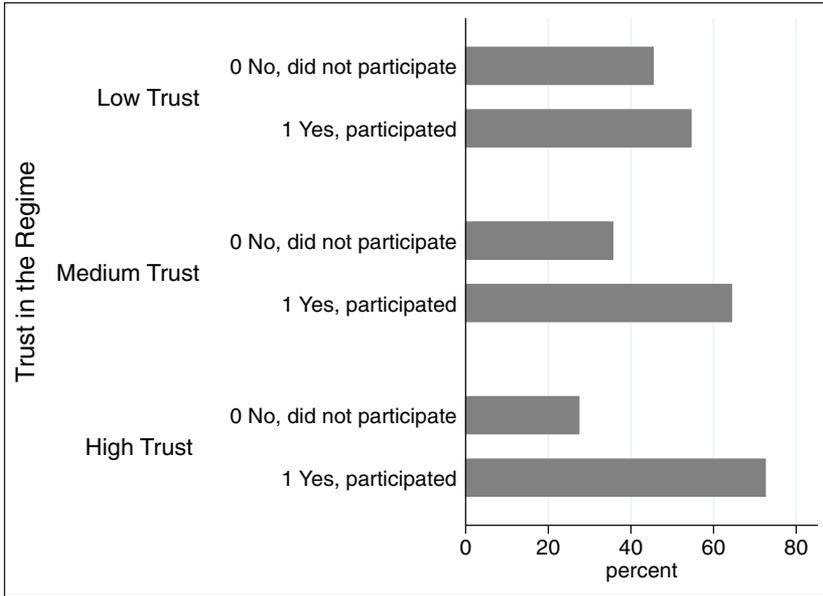
Figure 1. Trust in the regime and turnout.

Furthermore, we expect the connection between evaluations of government economic performance and turnout be mediated by overall trust in the regime. More specifically, we expect that positive or negative evaluations of economic performance will tend to foster corresponding evaluations of the regime as trustworthy and capable; and it is this view—that the regime is or is not worthy of trust that encourages citizens either to participate in or to abstain from the electoral process. Our theory of economic voting in authoritarian regimes thus involves a particular causal pathway leading from an evaluation of government economic performance through an overall evaluation of the regime to the decision to vote or to abstain. This is expressed in the following hypothesis:

> **Hypothesis 4 (H4):** Individuals with a more positive evaluation of the government's economic performance are more likely to have higher levels of trust in the regime, and individuals with higher levels of trust in the regime are more likely to vote.

Turning out to vote signals a generally positive and trusting attitude toward the regime, which itself is linked to a positive evaluation of the government's

economic performance. We do not expect a similar mediation effect in the relationship between patronage and voting. If patronage relationships essentially "buy" voter turnout by providing material incentives, there is no reason to think that those who participate in this exchange will be more likely to view the regime as trustworthy and thus be encouraged for this reason to participate in the electoral process. Rather, we believe most that individuals who engage in clientelist practices do so solely for material gain; they are more likely to vote because they understand and accept the implicit bargain that wasta represents and not because clientelist participation has increased their confidence in the government.

This proposition, expressed in Hypothesis 5 (H5) below, is important for the present analysis because it means, if confirmed, that a pathway leading through overall trust in the regime does indeed begin with an individual's evaluation of economic performance and not with being the recipient of government patronage.

> **H5:** Individuals who have used clientelist networks should not be more likely than individuals who have not used clientelist networks to have a high level of trust in the regime.

In sum, we shall test two distinct arguments. The first emerges from existing studies on elections in competitive authoritarian regimes and considers the individual-level link between patronage and voting. The second builds on the literature on economic voting in democratic contexts and suggests that evaluations of government economic performance also account for variance in the likelihood of voting.

Data and Method

Data for the present analysis are drawn from surveys in seven countries included in the first wave of the Arab Barometer.[7] Although it would be interesting to examine the specificities of voting behavior in each of the seven countries, the goal of the present article is to explore general, region-wide patterns about determinants of voting. Accordingly, we analyze data from the seven surveys in a pooled format. We weight the data to correct for unequal sample sizes across country-surveys.[8] Furthermore, although we are interested in individual-level relationships, it is important to control for country-specific factors that influence individual-level decisions about turning out to vote.[9] We thus run our analyses with country dummies (Algeria is the reference category). Therefore, all regression analyses presented in this article include weights (for unequal sample sizes) and country fixed effects. For robustness, we run the analyses using robust standard errors clustered by country as an alternative to

using countries dummies,[10] and the results remain robust. In addition, we conduct several sensitivity tests to address issues of missing data.[11]

Dependent Variables

The main dependent variable in this study consists of responses to the question: "Did you participate in the last parliamentary election?" This is a dichotomous variable that we call "vote," with 1 indicating the respondent did vote and 0 indicating the respondent did not vote.[12] Although there is a legitimate concern that respondents might over-report voting, particularly in authoritarian regimes such bias in our case appears to be small given the similarity between official turnout figures reported by Institute for Democracy and Electoral Assistance (IDEA)[13] and the figures calculated from the surveys.[14]

H4 involves a relationship in which trust in the regime mediates the connection between evaluation of the government's economic performance and the likelihood of voting. Trust in the regime is thus a dependent variable is some analyses. Our measure of this variable, which we call "trust in the regime," is based on a factor analysis of responses to the following three questions: "I'm going to name a number of institutions. For each one, please tell me how much trust you have in them: Prime Minister; The Courts; Parliament." Possible responses included a great deal of trust, quite a lot of trust, not very much trust, and no trust at all. The analysis yields only one factor and all three items have very high loadings, thereby demonstrating unidimensionality.[15] Higher values indicate greater overall trust in the regime and its institutions.

For robustness purposes, we operationalize trust in the regime in a different way, using a measure we call "electoral legitimacy." This measure captures the degree to which an individual believes that elections in his or her country are free and fair and is based on the following question: "On the whole, how would you rate the freeness and fairness of the last national election held in [date of national election]?" The variable is dichotomous, with 0 indicating not free or fair election and 1 indicating free and fair. As a check for the robustness of our findings, H4 (and also H3) will be retested using this alternative measure of our mediating variable.

Independent Variables

To examine our hypotheses about patronage and voting, we use a question that asks whether the respondent did or did not participate in clientelist networks (*wasta*) during the past 5 years,[16] as well as a follow-up question

asking whether the type of wasta involved the government, the respondent's tribe, or his or her family. We use these questions to create two different measures of clientelist experience. The first variable, "used wasta," is coded 1 if the respondent reported using wasta and 0 otherwise. The second variable, "used government wasta," is coded 1 if the respondent reported that she used wasta involving government officials and 0 if it involved another network or if there was no clientelist participation.

As discussed, some scholars argue that if clientelist networks matter, they should matter most among low-income individuals whereas others contend that it is among high-income voters that participation in patronage networks is most likely to bring voters to the polls. We thus include a measure of an individual's economic situation called "personal economic condition." This measure is based on the following question: "How would you rate the economic situation of your family today?" There are four possible response options: 1 = very bad; 2 = bad; 3 = good; 4 = very good.[17]

Our argument about economic voting involves testing whether trust in the regime is an intervening variable between evaluation of the government's economic performance and the likelihood of voting. Our measure of trust in the regime, which is also a dependent variable, was described above. To operationalize evaluations of the government's economic performance, we use a composite index based on the following three questions: "How well or badly do you think the current government is handling the economy?" "How well or badly do you think the current government is handling creating jobs?" and "How well or badly do you think the current government is handling narrowing the gap between rich and poor?" The response options in each case are 1 = very badly, 2 = badly, 3 = well, and 4 = very well. By summing the responses and dividing by three, we create an index that ranges from 1 to 4.

Controls

We include a set of covariates to account for alternative explanations of both turnout (our primary dependent variable) and trust in the regime (our mediating variable in the economic voting model).

To the extent that opposition candidates with a measure of appeal are sometimes permitted to participate in the elections sanctioned by authoritarian Arab regimes, these candidates are most likely to be affiliated with Islamists political parties. Islamist parties are the best-organized and most ideologically coherent political factions in many Arab countries, and they have frequently made notable gains in competitive elections (Brown, 2012; Gause, 2007; Lust-Okar, 2006; Masoud, 2008; Schedler, 2006; Wickham,

2002). We thus expect support for Islamist candidates or platforms to bring to the polls some citizens who are opposed to the government. However, even some disaffected citizens with a favorable attitude toward political Islam may prefer to signal their opposition to the regime by not voting. They may believe their vote would invite unwanted scrutiny or even sanctions from those in power, or they may believe that their participation would contribute little toward achieving their policy objectives.

Still, the fact that institutionalized opposition, when it exists, in most cases, comes primarily from Islamists movements makes it necessary to control for attitudes toward Islam's place in political affairs. For this purpose, we create a proxy measure, "support for political Islam," constructed from the factor scores obtained from four questions about Islam's political role. Table A2 in the appendix lists these items, their factor loadings, and Cronbach's alphas. The measure is continuous and higher values indicate greater support for Islam playing a prominent role in government and politics.

We also control for socio-demographic factors that scholars of political participation in developed democracies have shown to be related to voting. These controls include education—seven categories, where higher values indicate more education; age, seven categories; gender, 1 = female and 0 = male; and associational activity, which we call "member," 1 = member of a formal organization or group (i.e., trade unions, political parties, civic organizations, churches) and 0 = not a member of any organization or formal group.[18]

Findings About Patronage

Table 2 presents our findings about the impact of involvement in clientelist networks on the likelihood of turning out to vote. The coefficients are logit coefficients with their corresponding standard errors in parentheses. The coefficients for "used government wasta" and for "used wasta" are both positive and significant as expected. Individuals who in the past have used clientelist networks, especially those involving links to the government, such as government officials, members of parliament, and governorate officials, are disproportionately likely to turn out to vote.

For ease of interpretation, as these are logit coefficients, we calculate the predicted probabilities (Table 3).[19] The probability that an individual will turn out to vote if she has not used government wasta in the past is 0.63, whereas the probability that an individual will turn out to vote if she has used government wasta in the past is 0.71. This is an increase of 8.36%, which is significant. There is a similar (slightly lower) increase in the probability of voting

Table 2. The Role of Patronage.

Dependent variable: Vote	Model with government wasta	Model with wasta
Used government wasta	.379*** (.10)	
Used wasta		.276*** (.07)
Personal economic condition	−.144*** (.04)	−.151*** (.04)
Evaluation of economic performance	.221*** (.04)	.225*** (.04)
Support for political Islam	−.018 (.04)	−.017 (.04)
Member	.752*** (.09)	.748*** (.09)
Education	.071*** (.02)	.073*** (.02)
Age	.286*** (.03)	.286*** (.03)
Female	.010 (.06)	.011 (.06)
Jordan	.382*** (.11)	.414*** (.11)
Palestine	.863*** (.11)	.901*** (.11)
Morocco	.397*** (.12)	.399*** (.12)
Lebanon	.451*** (.12)	.497*** (.12)
Bahrain	.410*** (.15)	.469*** (.15)
Yemen	.530*** (.13)	.553*** (.13)
Constant	−1.220*** (.21)	−1.268*** (.21)
No. of cases	5,270	5,270

*$p < .10$. **$p < .05$. ***$p < .01$.

when using wasta (instead of government wasta). This suggests that some forms of clientelism matter more than others for electoral behavior, and that clientelism associated with government officials and institutions is a more important determinant of voting. The reason for this may be that some forms of clientelism involve local-level patronage relationships and, accordingly, do not influence national-level electoral contests as strongly. In any case, both forms of wasta have a significant effect, which lends support to the patronage argument.[20]

Table 4 tests the second part of the patronage argument, which is expressed in H2a and H2b. According to the literature, the use of clientelistic networks is likely to interact with the level of personal income, yet there have been mixed findings about whether wasta matters more for low-income citizens or for high-income citizens. To test these hypotheses, we split the sample between low- and high-income individuals and ran the models in Table 2 for each subset. We find that the coefficients on "used government wasta" and on "used wasta" are

Table 3. Predicted Probabilities of Voting: Patronage Model.

	Minimum to maximum	±*SD*	1 unit
Used government wasta	.0836	.0312	.0836
Used wasta	.0624	.0285	.0624
Evaluation of economic performance	.1472	.0405	.0544
Personal economic condition	−.0995	−.0253	−.0301
Support for political Islam	−.0152	−.0041	−.0041
Age	.3366	.0920	.0714
Member	.1593	.0677	.1593
Education	.0981	.0280	.0173
Female	.0023	.0012	.0023

Holding other variables at their means. Variables not in bold show predicted probabilities from model with "used government wasta."

larger among high-income citizens than among low-income citizens. Among low-income individuals, the effect is not statistically significant.

For ease of interpretation of the logit coefficients and to capture the hypothesized interaction, we calculate the joint predicted probabilities of using wasta (or government wasta) and personal economic condition. The results are shown in Figure 2. The top graph shows the predicted probabilities of voting (*y* axis) for individuals who "used wasta" and for individuals who "did not use wasta" as personal economic conditions change (*x* axis). The bottom graph shows this with "used government wasta." Both graphs clearly show that individuals who use patronage are always more likely to turn out to vote than are individuals who did not use wasta. However, this difference is smaller (and not significant) among low-income citizens, whereas it is larger and significant among high-income individuals.[21]

Finally, H5 predicts that individuals who participate in clientelist networks, and who are more likely as a result to turn out to vote, do so for purely material reasons and not as a consequence of higher levels of trust in the regime. Table 5 provides support for this hypothesis and shows that the effect of patronage on voting is not mediated by trust in the regime. Whereas the use of patronage helps to account for variance in turnout, it does not help to account for variance in level of trust in the regime. Thus, as discussed, it appears that patronage relationships are normally understood solely as instrumental exchanges of benefits and do not signal a positive and trusting attitude toward the regime.

Table 4. Effect of Patronage by Personal Economic Condition.

Dependent variable: Vote	Models with government wasta		Models with wasta	
	Poor	Rich	Poor	Rich
Used government wasta	0.236 (.17)	0.395*** (.13)		
Used wasta			0.189 (.13)	0.255** (.10)
Evaluation of economic performance	0.313*** (.08)	0.181*** (.06)	0.314*** (.08)	0.186*** (.06)
Support for political Islam	−0.030 (.07)	0.023 (.06)	−0.025 (.07)	0.019 (.06)
Member	0.597*** (.17)	0.890*** (.13)	0.598*** (.17)	0.882*** (.13)
Education	0.070* (.04)	0.085*** (.03)	0.071* (.04)	0.087*** (.03)
Age	0.121** (.05)	0.294*** (.04)	0.122** (.05)	0.293*** (.04)
Female	0.023 (.12)	0.058 (.09)	0.025 (.12)	0.054 (.09)
Jordan	0.757*** (.18)	0.164 (.14)	0.776*** (.18)	0.195 (.14)
Palestine	1.143*** (.16)	0.658*** (.15)	1.171*** (.16)	0.691*** (.15)
Morocco	0.473** (.20)	0.344** (.15)	0.472** (.20)	0.349** (.15)
Bahrain	0.396 (.31)	0.329* (.17)	0.432 (.31)	0.385** (.17)
Yemen	0.415* (.22)	0.502*** (.16)	0.438** (.22)	0.519*** (.16)
Constant	−1.345*** (.32)	−1.590*** (.27)	−1.391*** (.33)	−1.642*** (.27)
No. of cases	1,615	2,646	1,615	2,646

Pooled model without Lebanon. Sample weights: Included. Reference category: Algeria.
*$p < .10$. **$p < .05$. ***$p < .01$.

Findings About Economic Voting

We turn now to a test of the hypothesized causal relationship and mechanism linking evaluations of government economic performance to the likelihood of voting. H3 states that there is a positive relationship between positive evaluations of government economic performance and voting, and H4 posits that this positive relationship is mediated by overall trust in the regime as shown graphically in Figure 3. To test these two hypotheses, we run the following three models:

$$\textbf{Vote} = \beta_0 + \beta_c \text{ Evaluation of Economic Performance} + \beta_d \text{ Covariates} + \varepsilon, \tag{1}$$

$$\textbf{Trust in the Regime} = \beta_0 + \beta_a \text{ Evaluation of Economic Performance} + \beta_d \text{ Covariates} + \varepsilon, \tag{2}$$
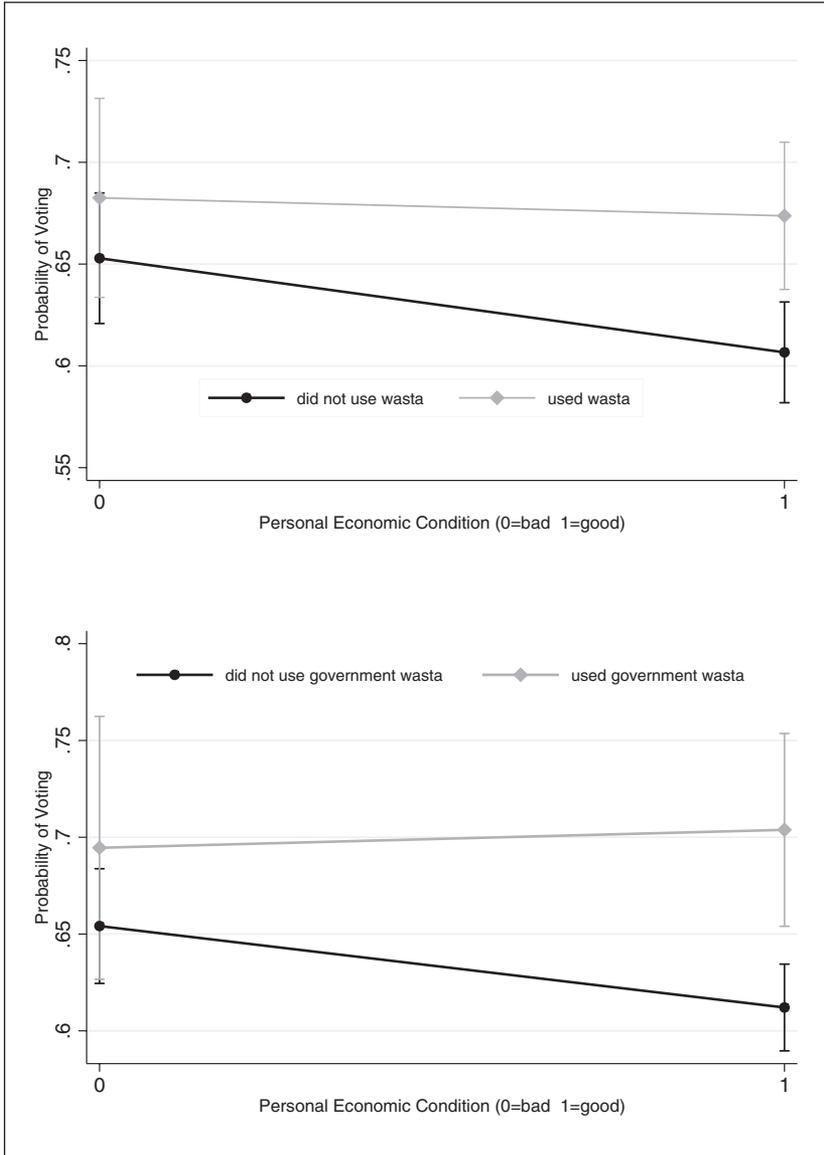
Figure 2. Predicted probabilities of voting by "government wasta" and "personal economic condition".

**Table 5.** Effect of Patronage on "Trust in the Regime" and "Electoral Legitimacy."

Dependent variable	Models with government wasta		Models with wasta	
	Trust in the regime	Electoral legitimacy	Trust in the regime	Electoral legitimacy
Used government wasta	−0.015 (.04)	0.060 (.10)		
Used wasta			−0.051* (.03)	−0.006 (.08)
Personal economic condition	0.144*** (.02)	0.279*** (.05)	0.144*** (.02)	0.278*** (.05)
Evaluation of economic performance	0.531*** (.02)	0.715*** (.05)	0.531*** (.02)	0.716*** (.05)
Support for political Islam	0.042*** (.02)	0.042 (.04)	0.041*** (.02)	0.041 (.04)
Member	0.075** (.03)	0.113 (.09)	0.078** (.03)	0.116 (.09)
Education	−0.019** (.01)	−0.033 (.02)	−0.019** (.01)	−0.032 (.02)
Age	0.016 (.01)	0.006 (.03)	0.015 (.01)	0.005 (.03)
Female	0.084*** (.02)	0.218*** (.07)	0.082*** (.02)	0.215*** (.07)
Jordan	0.611*** (.04)	0.794*** (.12)	0.606*** (.04)	0.795*** (.12)
Palestine	0.680*** (.04)	2.506*** (.14)	0.672*** (.04)	2.504*** (.14)
Morocco	−0.077* (.05)	−0.741*** (.13)	−0.073 (.05)	−0.736*** (.13)
Lebanon	0.242*** (.05)	1.251*** (.13)	0.234*** (.05)	1.250*** (.13)
Bahrain	0.144** (.06)	0.243 (.15)	0.140** (.06)	0.248 (.15)
Yemen	−0.073 (.05)	0.083 (.14)	−0.072 (.05)	0.089 (.14)
Constant	−1.754*** (.08)	−2.348*** (.24)	−1.739*** (.08)	−2.340*** (.24)
No. of cases	5,109	4,742	5,109	4,742

Sample weights: Included; Reference category: Algeria.

*$p < .10$. **$p < .05$. ***$p < .01$.

$$\text{Vote} = \beta_0 + \beta_b \text{ Trust in the Regime} + \beta_{c'} \text{ Evaluation of Economic Performance} + \beta_d \text{ Covariates} + \varepsilon. \tag{3}$$

Table 6 presents the results of these three models. Model 1 tests H3 and shows that positive evaluations of government economic performance are indeed positively and significantly related to the likelihood of voting: The more individuals think that the government has handled the economy well, the more likely they are to vote. To better evaluate these effects, as these are logit coefficients, we turn to predicted probabilities. Table 3 shows that moving from a very bad to a very good assessment of government economic performance increases the probability of turning out to vote 14%. This effect is large, which confirms H3, and most importantly, it is larger than the effect of patronage.
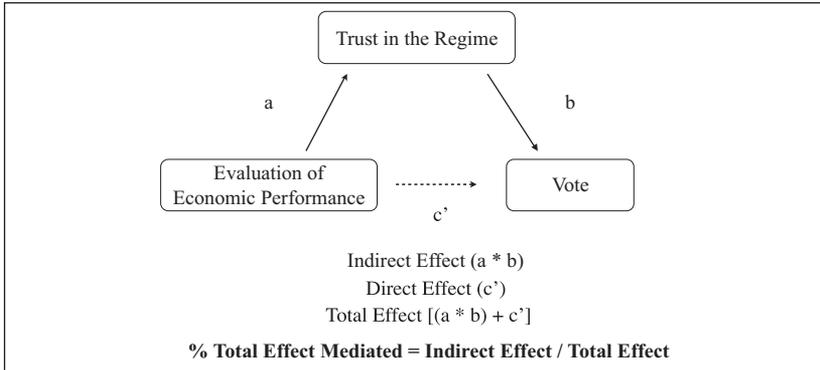
Figure 3. Modeling mediation.

Table 6. Mediation Model A: The Role of Economic Voting.

	Model 1	Model 2	Model 3
Dependent variable	Vote	Trust in the regime	Vote
Evaluation of economic performance	.221*** (.04)	.531*** (.02)	.042 (.05)
Trust in the regime			.332*** (.04)
Used government wasta	.379*** (.10)	−.015 (.04)	.383*** (.10)
Personal economic condition	−.144*** (.04)	.144*** (.02)	−.171*** (.05)
Support for political Islam	−.018 (.04)	.042*** (.02)	−.022 (.04)
Member	.752*** (.09)	.075** (.03)	.729*** (.10)
Education	.071*** (.02)	−.019** (.01)	.080*** (.02)
Age	.286*** (.03)	.016 (.01)	.317*** (.03)
Female	.010 (.06)	.084*** (.02)	−.028 (.07)
Jordan	.382*** (.11)	.611*** (.04)	.128 (.12)
Palestine	.863*** (.11)	.680*** (.04)	.633*** (.12)
Morocco	.397*** (.12)	−.077* (.05)	.326*** (.12)
Lebanon	.451*** (.12)	.242*** (.05)	.351*** (.13)
Bahrain	.410*** (.15)	.144** (.06)	.348** (.16)
Yemen	.530*** (.13)	−.073 (.05)	.568*** (.14)
Constant	−1.220*** (.21)	−1.754*** (.08)	−.712*** (.23)
No. of cases	5,270	5,109	4,864

Sample weights: Included; Reference category: Algeria.
*$p < .10$. **$p < .05$. ***$p < .01$.
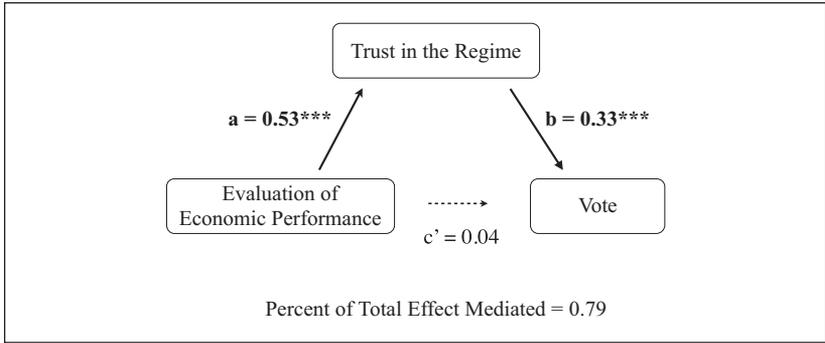
Figure 4. Mediation Model A.

To test H4, we need to show that the effect of economic evaluations on voting is mediated by overall levels of trust in the regime. According to Baron and Kenny (1986) and Judd and Kenny (1981), four conditions need to be met to establish that there is complete mediation. First, the key independent variable, "evaluation of government economic performance," should be significantly correlated with the main outcome variable, "vote," without controlling for the mediator, "trust in the regime." Model 1 in Table 6 shows this to be the case. Second, "evaluation of government economic performance" should be positively and significantly related to the mediator variable, "trust in the regime." Model 2 in Table 6 shows this to be the case. Third, the mediator, "trust in the regime," should be positively related to "vote" controlling for the key independent variable, "evaluation of government economic performance." And fourth, the effect of "evaluation of government economic performance" on "vote" should be close to zero and not significant when controlling for "trust in the regime." Model 3 in Table 6 shows that Conditions 3 and 4 are also met. Figure 4 graphically presents the relevant coefficients from these models in Table 6. The figure shows that paths *a* and *b* are statistically significant and in the hypothesized direction, whereas path *c'* (corresponding to the direct effect) is not significant and the effect is close to 0. This provides a first piece of evidence to support our claim that the relationship between evaluations of economic performance and vote is not direct but rather works through "trust in the regime."

To have a more accurate test of this mediation, however, it is convenient to calculate the indirect effect (which is the multiplication of paths *a* and *b*) and its significance, as well as the total effect and the percentage of the total effect that is mediated. The calculation of these quantities is not straightforward in our case, because our models include dichotomous variables and thus

the scale of coefficients in paths *a, b*, and *c′* are different (path *a* is an ordinary least squares [OLS] coefficient, whereas paths *b* and *c′* are both logit coefficients). According to Kenny (2008), in non-linear mediation models, the coefficients should be rescaled (standardized) before computing the indirect effect and total effects. We do so using the Stata command "binary mediation" with bootstrapping. The standardized indirect effect turns out to be positive and statistically significant (0.07***), whereas the direct effect is very close to zero and not statistically significant (−0.002), confirming again that there is mediation.[22] Finally, to get a sense of the magnitude of the indirect (or mediated) effect, we calculate the percentage of the total effect that is mediated (Preacher & Kelley, 2011).[23] In our model, 79% of the total effect of "evaluation of government economic performance" on "vote" is mediated through "trust in the regime," which confirms that there is practically full mediation.[24] This further confirms that evaluation of government economic performance is one of the most critical factors explaining trust in the regime, which in turn shapes decisions about whether to vote.

For a further assessment of robustness, we retest our economic voting argument (H3 and H4) with a different measure of trust in the regime. More specifically, we rerun the three regression models from Table 6 with trust in the regime measured by "electoral legitimacy." The findings, presented in the Online Appendix in Table 9 and Figure 1,[25] show that the indirect path is significant, whereas the direct path is not significant. The percent of the total effect that is mediated is 51%. This provides additional support for H3 and H4.

Readers might be concerned with issues of endogeneity. An alternative interpretation could be that a more favorable evaluation of government economic performance increases the likelihood of voting, which in turn increases trust in the regime. To test this, we run an alternative mediation model (Table A3) with our original mediation variable (trust in the regime) as the outcome and our original outcome variable (vote) as the mediator. The results show that the relationship between economic evaluations and trust in the regime is not significantly mediated by "vote." Only 1.8% of the total effect of "evaluation of government economic performance" on "trust in the regime" is mediated through "vote." This is very small, especially compared with the magnitude of the effect that is mediated by our original model, which is 79%. Lack of evidence for this alternative mediation model increases confidence in the pathway we have specified.

Finally, we disaggregated our analysis by country to see if the results are driven by a particular country. The country-specific results, reported in Tables 10 to 12 in the online appendix, show that the direct effect of "evaluation of

government economic performance" is positive and significant in all countries except Jordan.[26] More importantly, the mediation effect (H4) holds for five out of the seven countries in our data set, the exceptions being Jordan and Lebanon.[27] Given that the pooled analyses required using the same models for all countries, it is noteworthy and significant that the model has explanatory power in a substantial number of Arab countries with very diverse political systems and societal attributes.[28]

Conclusion and Implications

This article provides a comprehensive individual-level analysis of voter behavior in the Arab world. It thus increases our understanding of the reasons that ordinary citizens do or do not vote in non-democratic Arab countries. First, our analysis offers new evidence and a deeper individual-level analysis of the link between patronage and voting. Furthermore, it demonstrates that the effect of patronage on voting is stronger among high-income individuals, presumably because these individuals are better connected to the state and thus stand to gain substantially from trading their electoral support. This opens the door to rethinking the role of patronage and the arguments about its effectiveness among low-income individuals. Our analysis also shows that the effect on voting is much greater if the patronage involved an official government connection. Finally, the finding that individuals who use patronage are not more likely to support the regime lends additional support to our view that patronage only involves a material bargain.

Second, our analysis demonstrates that voters in the Arab world are not motivated solely by patronage, as is often portrayed; they also care about government performance, especially related to economic matters. Citizen evaluations of the government's economic performance have a profound effect on decisions about voting. More specifically, we find that positive evaluations of the government's economic performance make citizens more likely to turn out to vote. Furthermore, our analysis shows that the mechanism by which this takes places runs through an overall evaluation of the regime; positive evaluations of economic performance lead individuals to have more positive overall evaluations of the regime, which in turn increases the likelihood of voting. The finding of this mediated relationship makes an important contribution to the literature on sociotropic economic voting in the Arab world and the evaluation of authoritarian Arab regimes.

This investigation also has implications for the recent and increasingly problematic democratizing trend in a number of Arab countries. Trust in the regime and satisfactory government performance are among the

requirements for a sustained and eventually consolidated democratic transition, and our analysis shows that neither dispensing patronage nor mobilizing voters is sufficient to produce these civic orientations. This means that regimes seeking legitimacy and wishing to move their societies along a democratic path cannot rely exclusively on the distribution of patronage or bringing voters to the polls. Our data clarify the way that patronage and elections should be understood making clear what they contribute, and more accurately what they do not, contribute to fostering the meaningful citizen engagement and support that democratization requires. Although the economic needs and associated instabilities of transitioning Arab societies are by no means unknown, our analysis offers additional evidence of the need to create more favorable economic conditions and exposes some of the mechanisms by which perceptions of economic performance influence the degree to which ordinary men and women trust their government and consider it legitimate.

Finally, our findings suggest paths for future research. Our study establishes that both patronage and performance assessments account for variance in voter turnout in the Arab World, but it does not explore whether or when one of the two motives matters most or how they may interact. Furthermore, although we offer suggestions about some of the country-specific conditions under which our theoretical insights about voter turnout may have less explanatory power, there is a need to dig deeper into cross-national variation in pursuit of a fuller understanding of the associated pathways, mechanisms, and conditionalities. Research on these questions, although beyond the scope of the present study, will build on the findings presented here and carry forward the effort to lay the foundation for a theory of voting behavior in Arab countries and competitive authoritarian settings more generally.

Appendix

Table A1. Factor Loadings and Cronbach's Alpha for Items of "Trust in the Regime."

Items	Factor loadings	Alpha
Trust in the Prime Minister	0.85	0.68
Trust in the Courts	0.83	0.71
Trust in Parliament	0.82	0.73
Scale reliability coefficient (Cronbach's Alpha)		**0.78**

Note. A reliability coefficient [(Cronbach Apha)] of 0.7 or higher is considered "acceptable" in most social science research situations (http://www.ats.ucla.edu/stat/spss/faq/alpha.html).

Table A2. Factor Loadings and Cronbach's Alpha on Items for "Support for Political Islam."

Items	Factor loadings	Alpha
It would be good if more people w/ strong religious beliefs held public office	0.88	0.64
Men of religion should have influence over the decisions of government	0.87	0.65
The government should implement only laws of sharia	0.76	0.81
Scale reliability coefficient (Cronbach's Alpha)		**0.78**

Note. A reliability coefficient [(Cronbach Apha)] of 0.7 or higher is considered "acceptable" in most social science research situations (http://www.ats.ucla.edu/stat/spss/faq/alpha.html).

Table A3. Alternative Mediation Model.

Dependent variable	Trust in the regime	Vote	Trust in the regime
Evaluation of Economic Performance	.531*** (.02)	.221*** (.04)	.523*** (.02)
Vote			.217*** (.03)
Used Government Wasta	−.015 (.04)	.379*** (.10)	−.038 (.04)
Personal Economic Condition	.144*** (.02)	−.144*** (.04)	.142*** (.02)
Support for Political Islam	.042*** (.02)	−.018 (.04)	.038** (.02)
Member	.075** (.03)	.752*** (.09)	.051 (.03)
Education	−.019** (.01)	.071*** (.02)	−.020** (.01)
Age	.016 (.01)	.286*** (.03)	.001 (.01)
Female	.084*** (.02)	.010 (.06)	.091*** (.03)
Jordan	.611*** (.04)	.382*** (.11)	.613*** (.04)
Palestine	.680*** (.04)	.863*** (.11)	.648*** (.04)
Morocco	−.077* (.05)	.397*** (.12)	−.072 (.05)
Lebanon	.242*** (.05)	.451*** (.12)	.217*** (.05)
Bahrain	.144** (.06)	.410*** (.15)	.126** (.06)
Yemen	−.073 (.05)	.530*** (.13)	−.089* (.05)
Constant	−1.754*** (.08)	−1.220*** (.21)	−1.809*** (.08)
No. of cases	5,109	5,270	4,864

Sample Weights: Included; Reference Category: Algeria.
*$p < .10$. **$p < .05$. ***$p < .01$.

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Authors' Note

Declaration of Conflicting Interests

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Notes

1. The literature on turnout in Western democracies points to a multiplicity of factors to account for variance in participation. The Socio-Economic Status (SES) model (Rosenstone & Hanson, 1993; Verba, Schlozman, & Brad, 1995) from the Columbia School states that higher socio-economic status (defined by education, income, social class, employment) increases the likelihood of participation. Alternatively, the Michigan school introduced a set of psychological elements into the equation (Campbell, Converse, Miller, & Stokes, 1960, Chapter 3), mainly a long-standing psychological attachment to one of the two parties (in the United States; Bartels, 1998; Miller, 1991). Still other explanations emphasize the importance of a democratic political culture (Dalton, 2000; Inglehart & Welzel, 2003; Pharr & Putnam, 2000; Verba et al., 1995).

2. The literature on voting behavior also considers other factors unrelated to patronage that motivate participation (see Gandhi & Lust-Okar, 2009; Greene, 2007; Magaloni, 2006; Malesky & Schuler, 2008; Masoud, 2008; van de Walle, 2006; Wang, 2008).

3. Retrospective economic voting is different from policy voting (Fiorina, 1981). Policy voting is prospective in nature—it involves choosing among future policy alternatives or policy platforms—whereas retrospective economic voting involves an evaluation of past government performance. We think policy voting is less likely in authoritarian regimes given the lack of credible opposition

with differing policy agendas. Alternatively, we think retrospective evaluations of government performance are likely and have in fact been ignored in the literature on voting in authoritarian regimes.

4. These surveys were conducted as part of the Arab Barometer. A survey was also conducted in Kuwait in 2006, but we have decided not to include it in our analyses for two reasons: First, we discovered a significant number of duplicate entries and this both reduced the *N* and raised doubts about the overall quality of the data and second, only Kuwaiti men were permitted to vote at the time of the survey, which reduced the number of usable respondents even further ($N = 103$). Nevertheless, we rerun our analyses including Kuwait (after eliminating the duplicates) and the results hold.

5. There are instances, however, in which evaluations of regime performance do affect voter choice, not just turn out. The best example is the Palestinian election of January 2006 in which many voters registered their discontent with the performance of the dominant Fatah faction by giving their votes to Hamas. In this particular case, individuals that did not trust the regime were almost as likely to turn out to vote as those who trusted the regime (71% and 75%, respectively), which means that turnout was not a particularly strong signal of approval for the regime in this particular national election.

6. This figure includes Palestine. Excluding Palestine shows even a clearer distinction between low trust, medium trust, and high trust voters on electoral participation.

7. These seven countries encompass most of the political, economic, and demographic diversity of the Arab world.

8. The weight applied to each survey is $(1 / N) \times 1,000$, where $N =$ sample size of the survey (see Eifert, Miguel, & Posner, 2010; Karp & Banducci, 2008; Jamal & Nooruddin, 2010, for a similar use of weights in a pooled analysis with several country-level surveys). The surveys conducted in each country are based on large, probability-based representative national samples, so we did not use within country-weights. For a detailed explanation of sampling procedures, see the online appendix. The response rate in these countries was on average 85%, with no country falling below 80%.

9. An important body of literature (Blais, 2006; Karp & Banducci, 2008; Jackman & Miller, 1995) suggests that country-level institutional arrangements and conditions, such as electoral system, registration requirements, ethnic fractionalization, and level of economic development, help to explain variance in individual-level electoral behavior, including voter turnout.

10. See Table 13 in the online appendix.

11. Although the total number of observations in our data set is 7,260, our analyses have a smaller number of observations due to list-wise deletion based on missing values for some variables. The main variables in our models all have little missing data. For example, "government wasta" is missing around 3.5% of the observations, "vote" around 6.6%, and "evaluation of government economic performance" around 2.9%. This rate of missing data for our key variables is not

worrisome; however, one of our control variables "support for political Islam" has about 15% missing cases. To ensure that these missing cases do not bias our results, we run our base model of turnout without this and other controls. Table 14 in the online appendix presents several versions of the main model of turnout without certain control variables and our main results and conclusions remain unchanged.

12. All questions about voting refer to the most recent national parliamentary election. This consistency is important given that voting behavior might vary across election type (presidential vs. parliamentary).

13. See http://www.idea.int/vt/

14. Although it is likely that there is at least some voter over-reporting in our surveys, an examination of our data and also of findings from prior research suggest that it is neither likely to be high nor likely to introduce significant distortions into our findings. First, in two of the surveys, the percentage of respondents who reported voting is actually slightly below the aggregate turnout reported by Institute for Democracy and Electoral Assistance (IDEA), which indicates that over-reporting is probably limited. Second, Karp and Brockington (2005) have argued that over-reporting is much more likely to be problematic in countries and elections with high levels of turnout, whereas the countries in our surveys do not have very high levels of turnout, especially in parliamentary elections, which is our focus (see Birch, 2010, for comparative figures on turnout in democratic and non-democratic regimes). Finally, if non-voters report voting because they are following a social norm, then we should be able to capture this effect by controlling for education because better-educated individuals tend to be more concerned about socially desirability pertaining to elections.

15. Table A1 in the appendix presents the factor loadings and Cronbach's alpha for these three items.

16. The exact wording of the question is the following: "During the past 5 years, have you ever used wasta to achieve something personal, family related, or a neighborhood problem?"

17. Some country surveys in our data set include an objective measure of family income. We have not used this, however, because the response rate is extremely low, averaging 19.3% across all countries.

18. We did not include an urban/rural variable because this measure was not collected. Table 1 in the online appendix reports descriptive statistics for all variables.

19. Table 3 shows the change in the probability of voting for each independent variable. Note that "government wasta" and "wasta" are introduced in the models separately. The first column shows the change in the probability of voting when the independent variable varies from its minimum to its maximum. The second column shows the change in the probability of voting when the independent variable varies one standard deviation. And the third column shows the change in probability with one unit increase in the independent variable.

20. We ran the two models of patronage disaggregated by country to check whether certain countries are driving the pooled results (see Tables 2 and 3 in the online

appendix). The tables show that "used government wasta" and "wasta" are positively related to turnout in all countries (with the exception of Bahrain for the effect of "wasta," which is negative but extremely small). The effect of patronage is thus very consistent across countries.

21. The models in Table 4 and the graphs in Figure 2 are based on pooled analyses that exclude Lebanon (Table 8 in the online appendix shows the models including Lebanon). As shown in Tables 4 to 7 in the online appendix, we ran these models for each country to look for outliers and discovered that Lebanon was distorting the results of the pooled analysis. In Lebanon, the use of both "wasta" and "government wasta" is more important for low-income citizens than for high-income citizens, and the difference is large and statistically significant to a degree that obscures a trend in the opposite direction for the other countries. Our best guess is that Lebanon is different because of strong competition and mobilization along sectarian lines. Given the overlap between the country's demographic composition, partisan landscape, and coalition politics, leaders of Lebanon's confessional communities depend on getting as many of their constituents as possible to the polls. Unlike incumbent leaders in other countries, they are thus more likely to direct patronage to rank and file voters and less likely to give priority to extending their influence by rewarding affluent supporters, who share their interest in maximizing turnout, or trying to co-opt influential individuals outside their sectarian political domain. For additional discussion of the Lebanese case, see Cammett and Issar (2010).

22. It is important to note that the size of the indirect coefficient in mediation analysis tends to be small because it is the product of two coefficients (coefficients in paths *a* and *b*). This can be misleading, however, because even small effects can be important in mediation analysis (MacKinnon, 2008).

23. In the past 2 years, Stata has published two user-written packages that tackle the issue of mediation in non-linear models: "mediation" (Hicks & Tingley, 2011) and "binary mediation" (Ender, n.d.). Both packages are appropriate for non-linear models and calculate the correct (standardized) indirect, direct, and total effects with their corresponding standard errors (and confidence intervals). We use the former because it allows for the inclusion of weights. Note that the mediation package implements the procedures described in Imai, Keele, and Tingley (2010) and Imai, Keele, and Yamamoto (2010). For robustness, we also run our models with Ender's package, which allows the use of bootstrapped standard errors but does not allow for weights. The results are very similar.

24. There are cases in which there is partial mediation, meaning that some of the effect is direct and some is indirect. In our case, most of the effect is indirect or mediated.

25. Note that Model 1 is omitted from Table 9 in the online appendix, because it is the same Model 1 as in Table 6.

26. In Palestine, it is positive and not significant, but a slightly different coding of "evaluation of government economic performance" does yield a significant coefficient.

27. The mediation model works for Algeria, Morocco, Yemen, Palestine, and Bahrain. In the case of Bahrain, one of the relevant coefficients in Model 3 is very close to significance, and in the case of Palestine, the model works if "evaluation of government economic performance" is coded slightly differently.

28. We think the mediation model may work less well in Lebanon for the reasons associated with sectarian politics discussed in Note 21. One possible factor in the Jordanian case is the demographic divide between East Bankers and Jordanian citizens of Palestinian origin. Country-specific research will be needed to shed light on the reasons some countries are outliers and to test the suggestion that our model is less useful in explaining voter turnout in countries with significant politically salient demographic or sectarian divisions.

References

Ahuja, A., & Chhibber, P. (2012). Why the poor vote in India: "If I don't vote, I am dead to the state." *Studies in Comparative International Development, 47*, 389-410.

Anderson, L. (1999). Politics in the Middle East: Opportunities and limits in the quest for theory. In M. Tessler, J. Nachtwey, & A. Banda (Eds.), *Area studies and social science: Strategies for understanding Middle East politics* (pp.1-10). Bloomington: Indiana University Press.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.

Bartels, L. (1998). Electoral continuity and change. *Electoral Studies, 17*, 301-326.

Bellin, E. (2002). *Stalled democracy: Capital, labor and the paradox of state-sponsored development*. Ithaca, NY: Cornell University Press.

Birch, S. (2010). Perceptions of electoral fairness and voter turnout. *Comparative Political Studies, 43*, 1601-1622.

Blais, A. (2006). What affects voter turnout? *Annual Review of Political Science, 9*, 111-125.

Blaydes, L. (2006, August 31-September 3). *Who votes in authoritarian elections and why? Political mobilization, turnout, and spoiled ballots in contemporary Egypt*. Presented at the annual meeting of the American Political Science Association, Philadelphia, PA.

Blaydes, L. (2008, April). *Authoritarian elections and elite management: Theory and evidence from Egypt*. Prepared for delivery at Princeton University Conference on Dictatorships.

Blaydes, L. (2011). *Elections and distributive politics in Mubarak's Egypt*. Cambridge, UK: Cambridge University Press.

Boix, C., & Svolik, M. (2007, May). *Non-tyrannical autocracies*. Presented at the UCLA Comparative Politics Seminar, Los Angeles.

Brown, N. (2012). *When victory is not an option: Islamists movements in Arab politics*. Ithaca, NY: Cornell University Press.

Brownlee, J. (2007). *Authoritarianism in an age of democratization*. Cambridge, UK: Cambridge University Press.

Brownlee, J. (2011). Executive elections in the Arab world: When and how do they matter. *Comparative Political Studies, 44*, 807-828.

Cammett, M., & Issar, S. (2010). Bricks and mortar clientelism: Sectarianism and the logic of welfare allocation in Lebanon. *World Politics, 62*, 381-421.

Campbell, A., Converse, P., Miller, W., & Stokes, D. (1960). *The American voter*. New York, NY: John Wiley.

Dalton, R. (2000). Citizen attitudes and political behavior. *Comparative Political Studies, 33*, 912-940.

Egypt: General al-Sisi wins the poll in a landslide. (2014, May 30). *MENA Post*. Retrieved from http://www.mena-post.com/2014/05/30/egypt-general-al-sisi-wins-the-poll-in-a-landside/

Eifert, B., Miguel, E., & Posner, D. N. (2010). Political competition and ethnic identification in Africa. *American Journal of Political Science, 54*, 494-510.

Ender, P. B. (n.d.). Statistical computing and consulting, UCLA academic technology services, ender@ucla.edu. Retrieved from http://statistics.ats.ucla.edu/stat/stata/faq/binary_mediation.htm.

Fiorina, M. (1981). *Retrospective voting in American national elections*. New Haven, CT: Yale University Press.

Gandhi, J., & Lust-Okar, E. (2009). Elections under authoritarianism. *Annual Review of Political Science, 12*, 403-422.

Gandhi, J., & Przeworski, A. (2006). Cooperation, cooptation, and rebellion under dictatorships. *Economics & Politics, 18*, 1-26.

Gause, G. (2007). Bahrain parliamentary election results: 25 November and 2 December 2006. *International Journal of Middle East Studies, 39*, 170-171.

Geddes, B. (2005, September 1-4). *Why parties and elections in authoritarian regimes?* Presented at the annual meeting of the American Political Science Association, Washington, DC.

Greene, K. F. (2007). *Why dominant parties lose: Mexicos democratization in comparative perspective*. Cambridge, UK: Cambridge University Press.

Hicks, R., & Tingley, D. (2011). Causal mediation analysis. *The Stata Journal, 4*, 1-5.

Imai, K., Keele, L., & Tingley, D. (2010). A general approach to causal mediation analysis. *Psychological Methods, 15*, 309-334.

Imai, K., Keele, L., & Yamamoto, T. (2010). Identification, inference, and sensitivity analysis for causal mediation effects. *Statistical Sciences, 25*(1), 51-71.

Inglehart, R., & Welzel, C. (2003). Political culture and democracy: Analyzing cross-level linkages. *Comparative Politics, 36*, 61-79.

Jackman, R. W., & Miller, R. A. (1995). Voter turnout in the industrial democracies during the 1980s. *Comparative Political Studies, 27*, 467-492.

Jamal, A. (2012). *Of empires and citizens*. Princeton, NJ: Princeton University Press.

Jamal, A., & Nooruddin, I. (2010). The democratic utility of trust. *The Journal of Politics, 72*, 45-59.

Judd, C. M., & Kenny, D. A. (1981). Process analysis: Estimating mediation in treatment evaluations. *Evaluation Review, 5*, 602-619.

Karp, J. A., & Banducci, S. A. (2008). Political efficacy and participation in twenty-seven democracies: How electoral systems shape political behavior. *British Journal of Political Science, 38*, 311-334.

Karp, J. A., & Brockington, D. (2005). Social desirability and response validity: A comparative analysis of overreporting voter turnout in five countries. *The Journal of Politics, 67*, 825-840.

Kenny, D. A. (2008). *Mediation with dichotomous outcomes*. Retrieved from http://davidakenny.net/cm/mediate.htm

Levitsky, S., & Way, L. (2002). The rise of competitive authoritarianism. *Journal of Democracy, 13*(2), 51-66.

Lust-Okar, E. (2006). Elections under authoritarianism: Preliminary lessons from Jordan. *Democratization, 13*, 456-471.

Lust-Okar, E. (2009). Competitive clientelism in the Middle East. *Journal of Democracy, 20*(3), 122-135.

Lust-Okar, E., & Jamal, A. (2002). Rulers and rules: Reassessing electoral laws and political liberalization in the Middle East. *Comparative Political Studies, 35*, 337-370.

MacKinnon, D. P. (2008). *Introduction to statistical mediation analysis*. New York, NY: Lawrence Erlbaum.

Magaloni, B. (2006). *Voting for autocracy: The politics of party hegemony and its demise*. Cambridge, UK: Cambridge University Press.

Malesky, E., & Schuler, P. (2008, August 28). *Why do single-party regimes hold elections? An analysis of candidate-level data in Vietnam's 2007 National Assembly contest*. Presented at the annual meeting of the American Political Science Association, Boston, MA.

Masoud, T. (2008). *Why Islam wins: Electoral ecologies and economics of political Islam in contemporary Egypt* (Doctoral dissertation). Political Science, Yale University, New Haven, CT.

Miller, W. E. (1991). Party identification, realignment, and party voting: Back to the basics. *American Political Science Review, 85*, 557-568.

Pharr, S., & Putnam, R. (2000). *Disaffected democracies*. Princeton, NJ: Princeton University Press.

Posusney, M. P. (2002). Multi-party elections in the Arab world: Institutional engineering and oppositional strategies. *Studies in Comparative International Development, 36*, 34-62.

Preacher, K. J., & Kelley, K. (2011). Reporting effect size for mediation. *Psychological Methods, 16*, 93-115.

Rosenstone, S., & Hanson, J. M. (1993). *Mobilization, participation, and democracy in America*. New York, NY: Macmillan.

Sadiki, L. (2011). *Rethinking Arab democratization: Elections without democracy*. Oxford, UK: Oxford University Press.

Schedler, A. (2002). Elections without democracy: The menu of manipulation. *Journal of Democracy, 13*(2), 36-50.

Schedler, A. (Ed.). (2006). *Electoral authoritarianism: The dynamics of unfree competition*. Boulder, CO & London, UK: Lynne Rienner.

Stokes, S. (2005). Perverse accountability: A formal model of machine politics with evidence from Argentina. *American Political Science Review, 99*, 315-325.

Syria opposition head warns of series of bombings during election. (2014, June 2). *Al Arabiya*. Retrieved from http://english.alarabiya.net/en/News/middle-east/2014/06/02/Syria-opposition-head-warns-of-series-of-bombings-during-election.html

Tessler, M., Jamal, A., Bedaida, A., Abderebbi, M., Shikaki, K., Fares, B., & Ghanim, A.-N. (2010). *Arab-barometer: Public opinion survey conducted in Algeria, Morocco, Jordan, Lebanon, Palestine, and Yemen, 2006–2007* (Technical report ICPSR2581-v1). Ann Arbor, MI: Inter-University Consortium for Political and Social Research [distributor]. doi:10.3886/ICPSR26581.v1

Tlemcani, R. (2007, May 29). Electoral authoritarianism. *Al Ahram Weekly*. Retrieved from http://carnegieendowment.org/2007/05/29/electoral-authoritarianism.

Tsai, K. S. (2005). Capitalists without a class: Political diversity among private entrepreneurs. *Comparative Political Studies, 38*, 1130-1158.

Tucker, J. A. (2006). *Regional economic voting: Russia, Poland, Hungary, Slovakia and the Czech republic 1990-1999*. Cambridge, UK: Cambridge University Press.

van de Walle, N. (2006). Tipping games? When do opposition parties coalesce? In A. Schedler (Ed.), *Electoral authoritarianism: The dynamics of unfree competition* (pp. 77-94). Boulder, CO: Lynne Rienner.

Verba, S., Schlozman, K., & Brad, H. (1995). *Voice and equality: Civic voluntarism in American politics*. Cambridge, MA: Harvard University Press.

Wang, S. (2008). *The role of local elections in authoritarian regimes: The case of China's village elections* (Doctoral dissertation). Political Science, Yale University, New Haven, CT.

Wantchenkon, L. (2003). Clientelism and voting behavior: Evidence from a field experiment in Benin. *World Politics, 55*, 399-422.

Wantchenkon, L., & Vicente, P. (2009). Clientelism and vote buying: Lessons from field experiments in West Africa. *Oxford Review of Economic Policy, 25*, 292-305.

Wickham, C. (2002). *Mobilizing Islam: Religion, activism and political change in Egypt*. New York, NY: Columbia University Press.

Wright, J., & Stein, E. (2010, September 4). *Economic outcomes and support for authoritarian incumbents: Results from survey data*. Presented at the annual meeting of the American Political Science Association, Washington, DC.

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