Bread, Justice, or Opportunity? The Determinants of the Arab Awakening Protests

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Summary. — What were the structural determinants of the recent Arab Awakening protests that engulfed the Arab world? We examine the economic and political grievances along with political opportunities. Time-series analysis of nonviolent and violent protests in 18 Arab-majority countries shows that “bread,” “justice,” and political opportunities mattered. State terror and political openness had the strongest effects. Cell phones facilitated nonviolent protest while mineral rents and monarchies discouraged violent protest. We find no support for a youth bulge or an effect of development. These protests diffused from Egypt and Tunisia with positive spillover for nonviolent protest and negative spillover from violent protest.

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1. INTRODUCTION

On December 17, 2010, the self-immolation by Mjhaled Bouazizi, a local street vendor in Tunisia outraged by police corruption, ignited a wave of protests that spread throughout most of the Middle East/North Africa region. Initially dubbed an “Arab Spring,” and then an “Arab Winter” as protests persisted and violence grew, these uprisings are more correctly labeled an “Arab Awakening.” Indeed, these protests led to leadership changes, governmental reforms, and a range of political, social, and economic changes that continue to reverberate today. What seemed to be an isolated act of individual defiance became a cause célébre that generated widespread protest throughout the Arab states. In Tunisia, Egypt, Libya, and Yemen, long-standing rulers were deposed. In Bahrain, cross-sectarian civil rights protests mobilized almost a fourth of the total population, threatening to topple the al-Khalifa monarchy, which was saved by the military intervention of the Gulf Cooperation Council. In Jordan, Kuwait, and Morocco, major protests spurred the sitting monarchs to grant liberalizing reforms, giving the opposition more voice and granting parliament more power. In still others (e.g., Oman, Saudi Arabia, Qatar), protests were limited or non-existent but the threat and regional diffusion of the protests led to preemptive governmental measures to contain and repress potential dissent.

These sweeping and ongoing dramatic changes in the Arab World have been described as “the most important transitions of the early twenty-first century” (Amin et al., 2012). These protests and the conflicts and changes they set in motion constitute an important international event that warrants attention. While there is an apparent agreement on some of the stylized facts (Nabli, 2012) describing these monumental events (the popular basis of protest, their largely informal organization, abrupt, socially contagious, and social media assisted mobilization), the socioeconomic and political causes of these events have received little analysis. Middle East/North Africa specialists and media commentators claim that the main slogan of the protestors in Tahrir Square, in Cairo, Egypt, during the 18 days preceding the ouster of Mubarak: “Bread, Liberty, and Social Justice,” captures the major grievances underlying the protests. Our concern is whether structurally rooted economic and political grievances explain the number of these Awakening protests. Or did political reforms and openings create opportunities for protest and political expression? Often erroneously dubbed the “Twitter” or “Facebook revolution” (Aouragh & Alexander, 2011; Lim, 2012; Wolfsfeld, Segrey, & Sheafer, 2013), did the growth of the new media contribute to these protests? We address this by using time-series regression to analyze annual counts of nonviolent and violent protest reported in Reuters newswire stories in 18 Arab-majority countries during 2006–11. We begin our analysis with 2006 because this marks the beginning of a new wave of political activism following the Kafaya (“Enough”) movement and the 2005 Presidential election in Egypt, which was the first election in which multiple candidates were listed in the ballot. 2011 marks the peak of the protests, which either subsided or ushered in more violent conflicts as in Syria and Libya.

2. EXPLANATIONS OF THE ARAB AWAKENING

Existing discussions have largely traced these protests to underlying economic and political grievances. Several have emphasized economic grievances, pointing to widespread unemployment, sharp price increases in basic commodities, and growing economic inequality and disparities. Drukan (2011) argues that “questions of democracy, liberty, and freedom of expression were of little interest to the majority of the population,” that the Arab revolt is an “economical (sic) based decision.” Korotayev and Zinkina (2011), in their study of the Egyptian revolution of 2010–11, emphasize the spike in food prices as “destabilizing” the Egyptian sociopolitical system” while Breisinger, Ecker, and Al-Rifai (2011) point to the doubling of food prices that occurred during 2000–10 in conjunction with persisting poverty and nutrition problems. Campante and Chor (2012) argue that a “youth bulge” coupled with the rapid growth of schooling and higher education...
unmatched by comparable growth of employment opportunities triggered these protests. Singerman (2013) contends that this “youth bulge” and resulting youth unemployment interacted with strong norms supporting universal marriage, creating a crisis of “waithood” in which young adults are blocked from making the transition to marriage and adulthood, turning to protest to vent their frustrations. Ross (2008, 2012) invokes the “oil curse,” arguing that economic dependence on oil and natural gas production creates unemployment and major social disparities and inequalities that fuel economic grievances leading to protest, insurgency, and civil war. At the same time, he also notes that the wealthy oil states have sufficient coercive and cooptative resources to repress and control dissent, which should reduce these protests.

Another line of argument has focused on political grievances, especially those stemming from the “democracy deficit” of longstanding authoritarian rule, widespread governmental corruption, limited opportunities for participation in civil and political life, a failing justice system, and an oppressive security apparatus well-known for torture, arbitrary arrest, and other human rights abuses. Noting that the Arab states constitute the world’s largest set of authoritarian regimes and have a record of poor governmental performance and human rights abuses (Bellin, 2012; Hinnebusch, 2006), the Project on Middle East Political Science (2012) contends that this “democracy deficit” was the major force behind the protests.

A third less discussed argument focuses on political opportunities, arguing that greater political openness in these regimes led to more protests. Defining political opportunities in terms of “consistent dimensions of the political environment … that provide incentives for collective action by affecting people’s expectations for success” (Tarrow, 2011, p. 77), the core idea is that people respond to these perceptions with collective action. Pressured by international democracy promotion efforts, several of the Arab regimes adopted reforms and other measures, such as the multi-candidate Presidential election in Egypt in 2005. Starting with the United Nations Development Programme (2002), the UNDP launched a Democracy Assistance program and, following the Iraq invasion, the U.S. used democracy promotion and “bottom-up” approaches to promote civic organizing and political participation in several of the Arab states (Campbell, 2010; Snider & Faris, 2011), which were reinforced by the EU and several member states (Burnell & Youngs, 2010). International democracy promotion legitimized local demands for greater political and civil rights and created openings in several of these regimes that may have facilitated these protests.

A related argument focuses on the institutional controls of monarchies and relative weakness of “sultanistic” or neo-patrimonial regimes (Goldstone, 2011). Several note that the monarchies experienced fewer protests, especially violent challenges against these regimes. Some contend that monarchies have greater maneuvering room, can appeal to popular legitimacy, and typically confront a divided opposition that is tribally organized (Barany, 2012). Hence divide and conquer tactics are often effective. Yom and Gause (2012) add that some monarchies developed cross-cutting popular coalitions based on economic payments and policy guarantees to particular social groups. Oil wealth often reinforces this by providing the financing for welfare programs, public jobs, and state contracts as well as creating an internal security apparatus to repress dissent. In the Awakening protests, these oil rents were not limited to the wealthy oil monarchies in the Persian Gulf.

After the protests escalated in February 2011, the Gulf Cooperation Council (Saudi Arabia, Kuwait, Qatar, and the UAE) pledged $20 billion to stabilize Bahrain and Oman and gave Jordan and Morocco access to a $5 billion fund to counter the protests (Yom & Gause, 2012, p. 83). By contrast, the neo-patrimonial regimes in Egypt, Tunisia, Syria, Libya, and Yemen continued to rely on personal and tribal loyalties, intense repression and poorly funded welfare programs. When former regime insiders found themselves marginalized by patrimonial leaders, divisions in the regime opened the door to protest (Goldstone, 2011).

A fourth argument focuses on the growth of the new communications media, especially the spread of cell phones, access to the internet, and social media. On the heels of the dramatic growth of satellite television that undermined the media monopoly of several Arab states (Lynch, 2007), these new decentralized forms of communication created a vehicle through which protestors could organize, coordinate, and circulate their messages. One view is that the new media empower citizens in non-democracies and allow dissidents to develop new strategies and campaigns (Gladwell & Shirky, 2011). Others contend that the internet provides a false sense of participation and gives the state a way to monitor and police activists (He & Warren, 2011). Several have documented the extensive use of the internet, cell phones, and social media by political activists in the June 2009 protests in Iran and in Egypt during the Kafya movement (2004–05) and again during the 2010–11 Awakening protests (Aouragh & Alexander, 2011; Lim, 2012). But does this individual-level evidence mean that at the aggregate country-level increased new media penetration led to increased protest?

Using a protest intensity index, constructed from keyword searching of Google for reports of large protests (1,000+ participants) during the eight days of what others sources indicate were the most intense Awakening protests, Wolfsfeld et al. (2013) find a negative association between the penetration of Facebook, Twitter, and the internet and Awakening protests. Instead they find that protests led to social media penetration. While their protest scale is highly questionable since it relies on a poorly justified list of the most intense 8 days of protest in 2011, this study does raise questions about the aggregate impact of the new social media.

In the analysis below, we examine these four explanations using annual cross-sectional pooled time-series methods applied to the count of political protests in 18 Arab-majority countries during 2006–11. We next turn to our method for measuring the Awakening protests.

3. CAPTURING AWAKENING PROTESTS

To measure the Awakening protests, we content coded all news stories with contentious events in the Reuters international newswire archive available through Factiva online. Reuters is the world’s largest English-language newswire and, as such, is less inhibited by news space constraints than traditional newspapers. A newswire story is typically one or two paragraphs which are often used by journalists for their fuller stories or reports. Reuters has a report bureau in all of the Arab countries and relies on local reporters to generate a continuous daily flow of political reportage. Studies have found that news reports are more complete than other mass media and, for protests, typically provide reliable reports on the basics (actor, event form, and target) of protest events (Earl, Martin, McCarthy, & Soule, 2004). Compared to state-owned media, which have until the last decade dominated the Arab World, international news wires are more independent from local governments and hence more likely
to report potentially “embarrassing” news. International relations scholars have found Reuters to be the best single news source (Gerner, Schrodt, Francisco, & Weddle, 1994; King & Lowe, 2003) and, while no single source reports all the protests that occurred, Reuters provides a consistent source of news coverage for constructing measures across countries and time.

The key question is whether our protest counts are at random or exhibit selection bias. While this cannot be definitively resolved, we used two checks to assess this risk. First, we compared our protest counts against those for the seven North African Arab states in the Social Conflict in Africa database (SCAD, Hendix & Salehyan, 2012). This project uses multiple news sources, including local media, which should provide a more comprehensive picture. Our annual protest counts were consistently higher than those in SCAD and were strongly correlated positively with the SCAD counts. Second, we introduced a control in the statistical models discussed below for the total number of Reuters news stories that make any mention of each country–year in our analysis. In effect, this controls for the total Reuters news coverage for each country–year. This “news flow” control was statistically significant only in the models for nonviolent protest, suggesting that more news coverage leads to more reports of nonviolent protest but does not influence reports of violent protest. More important, it did not alter any of our statistical results below, suggesting that our results are not due to differences in Reuters coverage.

In our coding, we used a battery of 47 keywords (e.g., “protest,” “strike,” “March,” “riot,” etc.) to identify news stories that were then coded for protest events and coercive policing activities. We used a lead coder with a second coder cross-check to resolve final coding.

4. HOW MANY PROTESTS?

The majority of the Arab states experienced a major upsurge in 2010–11. Figures 1a–c and 2a–c chart the annual per capita counts of nonviolent and violent protests in the 18 Arab-majority states Algeria, Bahrain, Egypt, Jordan, Kuwait, Iraq, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, Sudan, and Yemen) plus the Palestinian territories (West Bank and Gaza treated together as a single unit) from January 1, 2006 to December 31, 2011. Table 1 charts the number of protests per million for the entire time period. We distinguish between nonviolent and violent protests, based on the assumption that the former indicates collective actions seeking reforms or anti-regime sentiments or retaliatory violence against other protestors or the police. For nonviolent protest, we sum all demonstrations, strikes, marches, picketing, and other protests that lacked reported violence by the protestors. For violent protests, we sum all riots, uprisings, terrorist and guerrilla armed attacks and protests where the protestors are reported as engaging in violence. Our aim is to see whether these broad types of protest are driven by the same factors.

All except for seven—Algeria, Iraq, Lebanon, Qatar, the Palestinian territories, Saudi Arabia, and the UAE—experienced an Awakening upsurge in 2010–11. Four of these (Algeria, Iraq, Lebanon, and the Palestinian territories) experienced mostly violent protest and three (Qatar, Saudi Arabia, and the UAE) were Persian Gulf oil monarchies with virtually no protest. The four with the greatest violent protest displayed a different time cycle. Lebanon, for example, experienced the Cedar Revolution in 2005–08, which led to high rates of violent protest and a gradual decline in protest by 2010–11. In the Palestinian territories, continued violent clash with Israeli actors coupled with El Fatah vs. Hamas violence stemming from the 2006 Palestinian election which was won by Hamas led to a high rate of violence and declining protest that spiked slightly in 2011. Iraq experienced an ongoing low level of violent protests throughout the entire period associated with the allied occupation and the sectarian power struggles in the country. For the most part, these protests were largely contentious about longstanding issues and were not linked to the Awakening.

In terms of per capita counts, Egypt does not stand out, despite the large number of protests that occurred in 2010 and 2011. Because of its large population (over 85 million), its per capita counts are relatively modest. In fact, the count of Egyptian protests per capita more than tripled in 2011, relative to the previous five years. Ultimately, the protests exerted enough pressure to force long-time president Hosni Mubarak out of office. Mubarak’s ouster had a profound effect on protests in other parts of the region, telegraphing that these protests could produce significant political change. Below we look at its role as a focal point for protest diffusion, along with the role of the Tunisian protests.

Tunisia, while lacking the regional influence and historical significance of Egypt, served as the proverbial spark for the Arab Awakening. As one of the more affluent and educated...
Arab countries, it was looked to for guidance by many. For that reason, protests in Tunisia likely encouraged protests in other parts of the region. Prior to 2010, events in Tunisia were quite modest, before increasing in 2010 and ballooning in 2011. Faced with this increasing civil unrest and concerned about his personal security, longtime President Ben Ali was ushered out of office by protestors in only 14 days. The removal of Ben Ali and Mubarak from office signaled to protestors throughout the region that true political change was a possibility.

Other states in North Africa experienced significant Awakening spikes as well. Libya was the most notable case. Like Egypt and Tunisia, Libyan protests led to a regime change. Protests increased nearly tenfold in Libya from 2006 to 2011, resulting in the violent removal of long-time ruler Muammar Gaddafi. Mauritania, Morocco, and Sudan also experienced modest upticks in protest in 2011. While Morocco was able to avoid a government overhaul, the King instituted a series of reforms to create head off the opposition. Protests in Mauritania, elevated in 2008, declined in 2009 before rising again in 2010 and peaking in 2011. However, little in the way of reform resulted. In Sudan, protest events more than doubled from 2010 to 2011, while violent events more than halved, resulting in an overall decline in the total number of events. The amount of violence was elevated in previous years, corresponding to the country’s ethnic divide and the battle between Arabs and non-Arabs over control of oil and land.

As discussed, several Persian Gulf oil monarchies—Qatar, Saudi Arabia, the UAE—experienced very few protests (none were reported in Qatar). Oil wealth may have created coercive and cooptative controls that minimized dissent. Kuwait, on the other hand, saw a significant spike in protests, mostly nonviolent, in 2011. Another round of reforms by the Emir coupled with new patronage distributions quickly stemmed the tide of protest. Two other Gulf oil monarchies, Bahrain and Oman, experienced major upsurges in 2011. In Oman, there were virtually no protests until January 2011. In Bahrain, the protests engaged over a fifth of the total population, which were initially organized across sectarian lines and eventually demanded a transformation of the regime that was suppressed by a harsh crackdown and military intervention by Saudi Arabia. Unlike the other Persian monarchies, Bahrain lacked significant oil wealth and the Sunni regime lacked coalitional ties to the Shiite majority, leaving the regime vulnerable to revolt. Yemen likewise lacks significant oil wealth. Ruled for 33 years by Ali Abdullah Saleh, it experienced a small number of protests until the sudden explosion in 2011. Persistent large protests and a failed assassination attempt on President Saleh led to a leadership transition brokered by the Gulf Cooperation Council in early 2012.

In the Fertile Crescent region, both Jordanians and Syrians took to the streets in 2011. In Jordan, the protests were overwhelmingly nonviolent, and the monarchy was quick to promote reform, the King sacking four prime ministers in a little over a year and effectively containing most of the unrest. Syrian anti-government protests were initially nonviolent but met by fierce repression and gruesome torture of children that triggered outrage and a violent upsurge that eventually led to the civil war that currently engulfs the country.

It is important here to differentiate between countries that had high violence counts linked to sectarian violence between Sunnis and Shias (Iraq, Bahrain, and Lebanon), from those where the protest was directed at an external force (Israeli targets in the case of Palestinian protests), and those in which the protests were internally directed at governmental reform or regime change. Significantly, the three countries with the largest share of pre-Awakening violent protest (Iraq, Lebanon, and the Palestinian territories) also experienced some uptick
in nonviolent protests in 2011. Yemen is the only country where protest was overwhelmingly violent that also had a major upsurge of nonviolent protest in 2011 (Figure 1c).

Next we discuss the differences between nonviolent and violent protests per capita presented in Table 1. Violent protests are over three times as likely as nonviolent protests, displaying a country-year mean of 23.59 events compared to 7.61 events per country-year for nonviolent protests. While this is heavily skewed by Iraq, which experienced a peak of 475 violent protests in 2007 and 423 in 2006, this dominance of violence prevails for several countries, notably Algeria, Iraq, Lebanon, Palestine, and Yemen. Nonviolent protest predominated in Bahrain, Jordan, and Morocco while a rough balance held in Egypt, Kuwait, Libya, Mauritania, Saudi Arabia, Syria, Sudan, Tunisia, and the UAE. Qatar showed no reported protests of either type, while Saudi Arabia and the UAE also scored particularly low. Indeed, both averaged less than one violent and one nonviolent event per capita a year. Overall, the highest counts per capita were in Bahrain, Iraq, Lebanon, and Palestine. Of the four, only Bahrain’s protests were largely nonviolent, outnumbering violent protests by almost three to one.

In Iraq, Lebanon, and Palestine, the ratio is highly skewed in the opposite direction. What factors contributed to these events? We next turn to our method for analyzing these protest counts.

5. METHODS AND DATA

To analyzing the determinants of these protests, we used pooled cross-sectional time-series regression with a negative binomial model (Cameron & Trivedi, 1998) applied to the annual country count of nonviolent and violent protest events. We analyze separately nonviolent and violent protests to see if they have different determinants. Negative binomial is a form of poisson regression, which is corrected for overdispersion. For data such as counts, where zero is the smallest value and counts range upward, it is preferable to OLS. As is common with count data, both dependent measures are overdispersed, which is addressed by using a negative binomial adjustment, adding a stochastic component to the model (Land, McCall, & Nagin, 1996). We use the `xtnbreg` procedure with random effects (RE) in Stata 10.

Panel data have the problem that units are not truly independent, violating a central assumption of OLS. There are two primary ways to correct for the serial and cross-sectional dependence of units: fixed and random effects. Fixed effects has the drawback that unit constants cannot be included. Random effects is designed to overcome two limitations of fixed effects. First, by not including dummy variables for each case, random effects saves on degrees of freedom. This provides a more efficient estimator of the coefficients than does fixed effects. Second, random effects can estimate the coefficients on time-invariant variables (i.e., monarchical regimes) (Johnston & DiNardo, 1997).

Serial autocorrelation is always a concern with panel data. Serial autocorrelation can bias the standard errors, leading to a model that is less efficient (Drukker, 2003). To test for serial autocorrelation, we use the Woodridge, 2002 Test, which is appropriate for random effects models. Because the Wooldridge test makes fewer assumptions than other tests of serial autocorrelation, it tends to be more robust. The Wooldridge Test indicates the absence of first-order serial autocorrelation in our data ($F = 1.139; \ p = .3016$). Independent variables are lagged 1 year throughout to create temporal order, creating an $N$ of 90 (i.e., 18 countries * 5 years).

(a) Dependent variables

As discussed, our two protest measures are derived from content coding all Reuters newswire stories released between January 1, 2006 and December 31, 2011 as provided in the FACTIVA news archive (global.factiva.com). The result is a unique dataset that captures the breadth of protests throughout the region. Nonviolent protest includes all demonstrations, rallies, protest marches, strikes, and boycotts without mention of violence by protestors. Violent protest includes all riots and protests that involve violent attacks by protestors against the police, other protestors or other groups, individuals and institutions, as well as terrorist attacks, bombings, and the like. Nonviolent protests are mildly skewed with a country-year mean of 7.61 events and standard deviation of 13.37 events. Violent protests are even more skewed with a mean of 23.59 country-year events and a standard deviation of 64.49.

(b) Independent variables

Our primary focus is the effects of economic and political grievances behind these protests. We also want to know if political opportunities and the growth of new, more advanced communications facilitated these protests. Drawing on our earlier theoretical discussion, we operationalize economic and political grievances with the measures discussed below. We also control for geographic diffusion using two measures: (1) the mean of all nonviolent or violent protests in all geographically contiguous countries; and (2) the sum of nonviolent and violent protests in Egypt and Tunisia, which were reputedly the leaders of the 2010–11 Awakening protest wave, Egypt may be particularly important because it has historically been seen as the leading site for Arab political advocacy. Tunisia likewise may be important because the first Awakening protests and governmental transition took place inside its borders. We also test whether Egypt alone or Egypt and Tunisia combined is a stronger source of protest diffusion.

A major economic challenge confronting these Arab states is a growing young population which is often poorly integrated into the labor market and social institutions. Youth unemployment is rampant throughout the region, ranging up to 20–25% according to official estimates and is likely double these official estimates. While youth unemployment measures are not available for sufficient country-years to be analyzable, this “youth bulge” can be estimated by the share of youth relative to adult population. Past work has often used the share of those between 15 and 24 years of age relative to total population, but Urdal (2006) argues that the appropriate metric is the youth cohort (i.e., 15–24 year olds) relative to adult population (i.e., those 15 or more years of age). Campane and Chor (2012) contend that the relevant cohort is the young adults 25–39 years of age who may not be integrated into adult roles due to cohort size. This fits Singerman’s (2007, 2013) thesis of “waithood” in which young adults facing unemployment and strong norms supporting universal marriage are unable to make the transition to full adulthood. We test these various age cohort metrics using United Nations Population Division (2012) population age estimates. Our final analysis includes a merging of these various metrics, focusing on the percent of the adult population between the ages of 15 and 29. Truncating at 24 may not accurately capture the nature of youth in many of these nations. These Arab states are relatively youthful with nearly 45% of the adult population between the ages of 15 and 29. We test all three measures.
A second challenge has been the price spike in food and other basic consumer goods. The 2006–2011 years witnessed a major increase in global food prices, which more than doubled (see http://www.fao.org/worldfoodsituation/foodprices-index/en/). These Arab states are heavily dependent on imported food, meaning that they bore the full brunt of this world price rise. We use the annual consumer price index (CPI) to tap this increase in basic consumer goods prices (World Bank, 2013). The average annual CPI is 124 (2005 = 100), ranging from 95 to 204. An overall upward trend is apparent for these countries as a whole, but is dramatically so for several states, such as Egypt, Iraq, Jordan, Kuwait, Libya, Mauritania, Oman, Qatar, Saudi Arabia, Sudan, Syria, and Yemen.

A third economic challenge is development. Despite significant economic growth in the region, poverty and challenges to human well-being persist. While countries like Kuwait and Qatar have enormous wealth and little poverty (at least among citizens), others like Egypt (26% of the population) and Yemen (45.2%) have considerably less wealth and widespread poverty. We opted to use child mortality as a reflection of the standard of living and level of human development. Child mortality (number of deaths per thousand before they reach the age of five) reflects the well-being of the poorer sectors of the population and the infrastructure, public services (especially in the medical sector), education of the mothers, and income level among other factors. Among the major vital statistics, it is among the more robust measures and is preferable to infant mortality (World Bank, 2014). The value of rents from the production of oil and natural gas defined as the difference between the average price of a commodity and the average cost of producing it, normalized over GDP (World Bank, 2013), and is effective. We use a dummy variable (1 = yes; 0 = no) to represent these rents relative to the size of the economy (World Bank, 2013). Oil and gas rents are significant in several Arab states, and represent half or more of GDP in such countries as Iraq, Kuwait, Libya, Oman, and Saudi Arabia. Do these rents contribute to economic grievances and hence increase protest? Or, due to strengthening these states, do they allow protest to be controlled (i.e., reduced)?

“Justice” involves a range of governmental performance problems ranging from political terror and repression by the state to the general lack of political democracy. An important question is whether a government uses arbitrary arrest, imprisonment, and torture against political activists and citizens, thereby creating political grievances that fuel intense dissent. We use Wood and Gibney (2010) Political Terror Scale, which integrates U.S. State Department and Amnesty International reports along with additional sources to construct a summary annual measure of political terror that ranges from 1 = low to 5 = widespread and intensive terror. The greater this political terror, the greater the likelihood of perceived political injustices and hence protest. Political terror ranks fairly high with an annual mean of 3 on a 5-point scale. The more repressive states are Algeria, Iraq, Sudan, Syria, and Yemen.

A second argument is about the maneuvering room, legitimacy, and divided oppositions confronting monarchies. The King can appoint a new prime minister and transfer blame to an outgoing executive or institute temporizing reforms, granting rights and privileges that are later revoked. While the legitimacy of monarchs is impossible to directly measure, its promotion is a central focus of monarchial activities and the training for rulership. Monarchs typically confront divided oppositions, especially tribal groups where divide and conquer is effective. We use a dummy variable (1 = yes; 0 = no) to represent monarchical governments (Hadenius, Teorell, & Wahlman, 2012). Eight of our countries are monarchies, all of which persist throughout the period.

A potential confounding question is the overlap between oil wealth and monarchies. Yom and Gause (2012) argue that oil wealth, including that distributed by the Gulf Cooperation Council (GCC) in 2011, provides the ability to buy loyalty and repress dissent. Six of the 8 monarchies are at least intermediate level oil states where petroleum exports make up a third or more of GDP. We test this in two ways: (1) stepping the monarchy dummy in alternately with oil rents to see if

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement and source</th>
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<tbody>
<tr>
<td>Egypt &amp; Tunisia Nonviolent Events</td>
<td>Number of nonviolent demonstrations and strikes in Egypt and Tunisia per annum (Reuters Newswire, 2006–10)</td>
</tr>
<tr>
<td>Egypt &amp; Tunisia Violent Events</td>
<td>Number of riots, clashes between protestors and the police or other protestors, and other violent attacks by protestors in Egypt and Tunisia per annum (Reuters Newswire, 2005–10)</td>
</tr>
<tr>
<td>Young Adult Bulge</td>
<td>Percent of the adult population between the ages of 15 and 29 (United Nations Population Division, 2012)</td>
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<tr>
<td>Consumer Price Index</td>
<td>Annual increase in price of basic consumer goods and services (2005 = 100) (World Bank, 2013)</td>
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<tr>
<td>Child Mortality Rate</td>
<td>Number of child deaths per thousand before they reach the age of five (World Bank, 2014)</td>
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<tr>
<td>Oil &amp; Gas Rents/GDP</td>
<td>The value of rents from the production of oil and natural gas defined as the difference between the average price of a commodity and the average cost of producing it, normalized over GDP (World Bank, 2013)</td>
</tr>
<tr>
<td>Political Terror</td>
<td>Level of physical integrity rights violations based on state violence, political assets, and torture (1–5). Higher scores indicate greater political terror (Gibney, Cornett, Wood &amp; Haschke, 2013)</td>
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<tr>
<td>Monarchy</td>
<td>Dummy variable coded 1 if a nation is a monarchy, 0 = no (Hadenius et al., 2012)</td>
</tr>
<tr>
<td>Political Openness</td>
<td>Mean of political rights and civil liberties (1–7). Higher scores indicate more freedom (Freedom House, 2013)</td>
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<tr>
<td>Cell phones/100</td>
<td>Number of cell phones per 100 individuals (World Bank, 2013)</td>
</tr>
<tr>
<td>Coercive policing</td>
<td>Police violence directed at citizen protests, including arrests, raids, detentions, clashes, crackdowns, and disappearances (Reuters Newswire 2006–10)</td>
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these compete; and (2) removing 2011 from our time-series to see indirectly whether the period of this GCC fiscal transfer was critical to any monarchy effect.

A core argument is the general “democracy deficit,” that limited democracy creates frustrations for a public eager for greater political voice. We measure this by using the Freedom House (2013) measures for political rights and civil liberties, which are both measured by a 7-point scale. We reverse the original (which is scored 1 = high, 7 = low) and take the mean of these two items. The prediction is that less democracy creates political opportunities/facilitation, and Model 3 a combined model.

Tables 4 and 5 present the multivariate results of regressing these measures on nonviolent and violent protests from 2006 to 2011. Both tables follow an identical three model sequence, Model 1 showing diffusion measures based on: (1) the mean of the protest counts for all geographically contiguous countries (i.e., shared borders); and (2) the sum of protests in Egypt and Tunisia (summed as well as treated separately). We split both of these measures into nonviolent and violent protests. The first metric simply takes the country mean of all protests in the prior year in all geographically contiguous countries. If there was geographic diffusion, these protests (nonviolent and violent) should have produced greater protest in neighboring countries. The second taps the idea that Egypt and Tunisia were the first and most influential countries in the Awakening protests, leading to protests in other countries. Contiguous and Egyptian/Tunisian nonviolent and violent protests have means of 75 and 18, 45, and 34 events, respectively, and are skewed (Table 2).

6. RESULTS

Table 3 shows the means, standard deviations, minimum and maximum values for all the variables in our analysis. We exclude the Palestinian territories from further analysis due to missing data on almost all independent variables. Table 6 provides a correlation matrix of all of our independent variables, indicating a few possible sources of multicollinearity. We use a correlation above .6 as a source of concern. Monarchies are negatively related to political terror \( r = -0.63 \), indicating that non-monarchies are more likely to use terror as a tool of control. Cell phone penetration is negatively related to political terror \( r = -0.60 \) but positively related to monarchies \( r = 0.66 \), posing an interesting pattern for the political factors that may influence protest. Finally, coercive policing is positively related to political terror \( r = 0.62 \), indicating their possible overlap. In our equations below, we step these variables in step by step and report any problems with flipped signs or unstable results.
separately are also statistically significant, the sum of the two countries together has stronger effects. We therefore show the sum of the two combined and control for this diffusion effect in all of our models.

Model 1 tests the "bread" idea. The young adult measure (i.e., 15–29/adult population) is not statistically significant for either nonviolent or violent protest. We also tested the other youth cohort measures (i.e., 15–24 and 25–39/adult and over total population) but none of these were statistically significant either. This suggests that the economic squeeze felt by young adults was not a key factor in fomenting unrest in the region, counter to popular ideas. Although it would be desirable to measure youth unemployment, this measure is not available in sufficient countries.

The consumer price index is positive and significant for both forms of protest, indicating that inflation is a significant factor behind these protests. The same is true for child mortality, suggesting that challenges to human well-being played a significant role in the uprising. Oil rents are negative and statistically significant for nonviolent protest but do not affect violent protest. This suggests that oil wealth allows these states coopt and control nonviolent protests, but these controls are not effective on violent protests. Given the lack of a correlation with political terror and political openness, both the facilitative role of political opportunities and cell phone penetration is relevant only to nonviolent protest. Monarchies reduce violent protest but do not affect nonviolent protest. The same is true for child mortality, suggesting that challenges to human well-being played a significant role in the uprising. Oil rents are negative and statistically significant for nonviolent protest but do not affect violent protest. This suggests that oil wealth allows these states coopt and control nonviolent protests, but these controls are not effective on violent protests. Given the lack of a correlation with political terror and political openness, both the facilitative role of political opportunities and cell phone penetration is relevant only to nonviolent protest. Monarchies reduce violent protest but do not affect nonviolent protest.

Model 2 controls for "justice" and political opportunity/facilitation factors. Political terror increases the count of both forms of protest, supporting the idea that state repression creates intense grievances that lead to protest. Monarchies reduce violent protest but are no different with regard to nonviolent protests. Political openness is positive and statistically significant for both forms of protest, supporting the political opportunity thesis and arguing against the "democratic deficit" idea. Cell phone density is positive and statistically significant for nonviolent and violent protest. Internet rates had the same effect, but because it was highly correlated with cell phones \((r = 0.80)\), we included only the cell phone effect. Both perform

the same in this and the subsequent combined model. This supports the idea that communications infrastructure contributed to these protests. Finally, coercive policing has positive and statistically significant effects on both forms of protest at the two-tailed test level, fitting the positive acceleration thesis. We also tested the quadratic but the squared term was never statistically significant. Given the moderately high correlations between monarchies, political terror, cell phones, and coercive policing, we tested this equation by stepping these variables in one-by-one. We found no signs of colinearity and all results remained as in Model 2.

Model 3 shows a combined model. Most of our results stand as before but a few disappear. Two of our measures of economic grievances—the consumer price index and child mortality—lose statistical significance in predicting both types of protest. In other words, economic grievances are overall less important than political grievances, working against the "bread" thesis. Oil and gas rents remain negative for nonviolent protest but become positive and statistically significant for violent protest. This suggests that oil wealth allows states to buy off nonviolent protest but generates intense grievances that spur violent challenges to the state.

These combined equations provide strong support for political grievances generated through political terror and the facilitative role of political opportunities and cell phone penetration. Political terror and political openness both contribute positively to both forms of protest while cell phone penetration is relevant only to nonviolent protest. Monarchical rule reduces violent protest but does not affect nonviolent protest. Is this last due to oil wealth, as some contend? To evaluate this, we stepped out oil rents but the negative monarchical effect persisted. Since oil rents are monarchical rule are uncorrelated \((-0.06)\), it seems unlikely that oil rents are responsible for this effect.

To evaluate the relative effects of these controls, we used the Incidence Rate Ratios (IRRs), which are on the right of the standard errors in Model 3. We show IRRs only for the statistically significant factors. For IRRs, 1.0 is the base with values above 1.0 indicating a stronger positive effect and those below 1.0 a negative effect. IRRs indicate the expected rate of change for each additional one-unit increase in an independent

<table>
<thead>
<tr>
<th>Model 1a: bread</th>
<th>Model 2: justice</th>
<th>Model 3: combined</th>
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<tbody>
<tr>
<td><strong>Coefficient</strong></td>
<td><strong>Std. error</strong></td>
<td><strong>Coefficient</strong></td>
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<td>Egypt &amp; Tunisia nonviolent events ((t - 1))</td>
<td>0.05***</td>
<td>0.02</td>
</tr>
<tr>
<td>Egypt &amp; Tunisia violent events ((t - 1))</td>
<td>-0.10**</td>
<td>0.04</td>
</tr>
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<td>Youth bulge ((t - 1))</td>
<td>-0.07</td>
<td>0.05</td>
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<tr>
<td>Consumer price index ((t - 1))</td>
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<td>0.01</td>
</tr>
<tr>
<td>Child mortality rate ((t - 1))</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>Oil &amp; gas rents/GDP ((t - 1))</td>
<td>-0.01**</td>
<td>0.01</td>
</tr>
<tr>
<td>Political terror ((t - 1))</td>
<td>1.01***</td>
<td>0.20</td>
</tr>
<tr>
<td>Monarchy = 1 ((t - 1))</td>
<td>-0.67</td>
<td>0.45</td>
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<tr>
<td>Political openness ((t - 1))</td>
<td>0.81***</td>
<td>0.21</td>
</tr>
<tr>
<td>Cell phones/100 ((t - 1))</td>
<td>0.02***</td>
<td>0.00</td>
</tr>
<tr>
<td>Coercive policing ((t - 1))</td>
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<td>0.01</td>
</tr>
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<td>AIC/BIC</td>
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<td>484.88/509.88</td>
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<td>Wald (\chi^2)</td>
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<td>(N)</td>
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\(* p < .05.\)

\(\** p < .01.\)

\(\*** p < .001\) (two-tailed tests).
variable (holding all other variables in the model constant). Political terror is the strongest factor in predicting both types of protest, generating a 2.23 factor for nonviolent protest and a 2.14-factor increase for violent protest. Political openness is second in importance, generating a 1.92-factor increase in nonviolent protest and, for violent protest, a 2.04-factor increase. For violent protest, the negative effect of monarchial regimes is third, creating a .711 (1-.289)-factor increase. All other statistically significant measures for nonviolent protest are relatively modest in their factor effects, ranging between .92 (Egypt and Tunisia violent events) and 1.01 (coercive policing, cell phones, oil rents). Overall, political terror and political openness are the two most consistent, strongest predictors for both types of protest.

Is it plausible to have both political terror and political openness working positively to produce protest? As Tarrow (2011) argues, political threats such as political terror may operate alongside political opportunities that make success appear more likely. Threats and opportunities are not the simple opposites of each other but two variables that may operate at the same time. Dissidents often respond to both the intense grievances flowing from threats and the perception that their actions are likely to succeed.

### 7. CONCLUSIONS

The Arab Awakening protests were largely driven by political grievances associated with political terror, the political opportunities afforded by political rights and civil liberties, and the growth of the new decentralized media. The strongest predictor was political terror, which spurred both nonviolent and violent protest. Commentators often correctly describe these Arab states as among the most repressive regimes in the world. Certainly their human rights records as gauged by the use of political arrests, torture, and arbitrary imprisonment are highly problematic. At the same time, political openings in several of these states created opportunities for protest. Perhaps this reform process, which helped engender the Awakening protests, will continue and generate more open and responsive governments. Alternatively, we may see a see-saw in which new restrictions are imposed. Existing discussions of the Awakening have largely neglected the question of political openness, which as we have seen is one of the more important factors affecting these protests. How much were these due to international democracy promotion? We have not directly addressed this but it is plausible that this was an important factor. The U.S. and EU states invested significant international political capital in promoting these measures and these policies became targets of harsh criticism by many of the autocrats in the region. Further work needs to assess how important this was in the growth of the Awakening protests.

What is the importance of the monarchy effect? Monarchies were less likely to experience violent protest but could not reduce nonviolent protests. This was not due to oil wealth, which might provide the ability to “buy off” and repress dissent. Nor was it due to the willingness to use political terror, which was used primarily by the non-monarchies. We suspect this is largely due to the institutional structure of these regimes but further work is needed to examine this. Since the monarchies typically reinforced and promoted tribal organization, which is based on the same ideas about neopatrimonial authority, this meant that they confronted a divided, competitive opposition that is less likely to organize a challenge against the state.

We found only limited support for the “bread” explanations of these protests. While consumer inflation and child mortality were significant predictors in a simpler “bread” equation, they both lost statistical significance once political variables were introduced. While these economic problems remain an important source of grievances in everyday life in these countries, their systematic relationship to the incidence of protest is limited. Overall, our results show that political grievances and opportunities plus the growth of the new media were more important to these protests.

In our analysis, nonviolent and violent protests share several common determinants but are different. Nonviolent events in Egypt and Tunisia stimulated the spread of nonviolent protests throughout the region but did not contribute to violent protests. Violent protests worked negatively, discouraging the further spread of both types of protest. Cell phone penetration contributed to nonviolent protest but did not facilitate violent protest. Monarchies can contain violent protest but this does not matter for nonviolent protest. Further work is...
needed to clarify why, but case studies suggest that it is a combination of perceived legitimacy, maneuvering room and confronting divided oppositions that allow monarchies to contain violent challenges (Barany, 2012; Goldstone, 2011).

What are the implications for the ongoing political conflicts and changes in the Arab world? Many of the factors that drove these protests persist in the post-Awakening period. Inflation, poor economic performance, police violence, torture, and arbitrary justice remain problems despite some leadership changes and political reforms. There is also greater political openness, which we have seen contributed to these protests, and the communications revolution persists, facilitating popular organizing. Major economic challenges remain with economic performance by most measures being worse in the post-Awakening period than before. Nor has “justice” improved dramatically. Nowhere is this more evident than in places like Egypt, or Syria, where violence and instability have become the order of the day. Likewise, in nations such as Libya or Yemen, which lack stable governments, conflict persists. It is yet unclear what governmental structures and personnel will fill the power vacuum, and, once that void is filled, will they possess the capacity to quell unrest.

It is also evident that sectarian divisions between Sunni and Shia played a significant role in the protests in several countries. Iraq, Bahrain, and Lebanon have experienced major inter-sectarian protest that has bordered on civil war. Our tries. Iraq, Bahrain, and Lebanon have experienced major


REFERENCES

Table 6. Correlation matrix of all variables

<table>
<thead>
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<th></th>
<th>1</th>
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