The Social-Economic Situation of Middle East Youth on the Eve of the Arab Spring

December 8-9, 2012
Beirut, Lebanon

Workshop Discussion Paper

Inequality, Exclusion, and Dissent: Implications for Youth in the Arab World

Raj Desai

Workshop Organizers

Oilatech™ ملتك
Young People...Enterprise...Employment...

Middle East Youth Initiative
مبادرة شباب الشرق الأوسط

Host

AUB 1866 American University of Beirut الجامعة الأميركية في بيروت
Issam Fares Institute for Public Policy and International Affairs

PRELIMINARY DRAFT—NOT FOR CITATION

Inequality, Exclusion, and Dissent

Support for Regimes in Developing Countries

Raj M. Desai[†] **Anders Olofsgård**[‡] **Tarik M. Yousef**[§]

December 2012

Abstract

Poverty is associated with political conflict in developing countries, but evidence of individual grievances translating into dissent among the poor is mixed. We analyze survey data from 40 developing nations to understand the determinants radicalism, support for violence, and participation in legal anti-regime actions as petitions, demonstrations, and strikes. In particular, we examine the role of perceived political and economic inequities. Our findings suggest that individuals who feel marginalized tend to harbor extremist resentments against the government, but they are generally less likely to join collective political movements that aim to instigate regime changes. This potentially explains the commonly-observed pattern in low- and middle-income countries whereby marginalized groups, despite their political attitudes and high-levels of community engagement, are more difficult to mobilize in nation-wide movements. We also find that arenas for active political participation (beyond voting) are more likely to be dominated by upper-middle income groups who are committed, ultimately, to preserving the status quo. Suppressing these forms of political action may thus be counterproductive, if it pushes these groups towards more radical preferences. Finally, our findings suggest that the poor, in developing nations, may be caught in a vicious circle of self-exclusion and greater marginalization.

Prepared for the *Workshop on the Social-Economic Situation of Middle East Youth on the Eve of the Arab Spring*, December 8 – 9, 2012, Beirut, Lebanon. Previous drafts were delivered in seminars at Georgetown University, Cambridge University, the Stockholm School of Economics, and at annual meetings of the American Political Science Association and the Economic Research Forum. Veronika Penciakova provided invaluable research assistance.

[†] Edmund A. Walsh School of Foreign Service, Georgetown University, and the Brookings Institution. E-mail: desair@georgetown.edu.

[‡] Stockholm Institute for Transition Economics. E-mail: afo2@georgetown.edu.

[§] Silatech. E-mail: tyousef@silatech.com.

Introduction

In the continuum of political mobilization, from expressions of preferences through anonymous voting to petition-signing and demonstrations to acts of anti-regime violence, differing claims have been offered as to the effect of socioeconomic status on participation. On one side, rationalist perspectives argue that individual acts of political mobilization are fundamentally based on information, individual expectations of success, along with opportunities for collective action. In contrast, "grievance"-based arguments suggest that alienation, perceived inequities, and other frustrations among populations increase the likelihood of broader mobilization and conflict.

Evidence for both sets of claims is mixed. Moreover, the evidence is characterized by a paradox: while marginalized groups are known to participate in acts of violent rebellion, they tend to remain bystanders in other aspects of civic and political life. In this paper we attempt to resolve this puzzle by showing that the relationship between socio-economic status and political action depends critically on the nature of anti-regime political behavior. Using a simple game-theoretic model, we argue that if citizens' participation in escalating political actions in order to signal preferences for changes in policies or in regime, the credibility of those signals will depend on the opportunity cost incurred by mobilizing. Thus the costliest political actions—actions that entail significant risks of repression, violent response by authorities, stigmatization, or other punishment that forces participants to forgo income—signal the clearest demands for regime change; if political action carries low opportunity cost it will be less informative of participants' valuation of regime change.

It follows that marginalized groups—those with low income, low education, and low employment—who face a low opportunity cost of participating in anti-regime actions will have little reason to mobilize despite their grievances since their mobilization will not send credible signals of discontent. A low opportunity cost of mobilizing thus has the somewhat paradoxical effect of prompting self-exclusion. We hypothesize that, even in the presence of strong anti-incumbent or anti-regime preferences, marginalized groups will be less be likely to engage in anti-regime actions because of the low-credibility signal of these types of actions.

We then introduce the possibility of more radical and/or violent action. As this is riskier action (regime reprisals being more likely) it also constitutes a more costly signal for participants. In equilibrium, violent action requires two conditions, a high value placed on regime change by participants, and for less costly actions to lack credibility. Consequently, we expect that marginalized groups will be more likely to support these violent actions than less marginalized groups, who are better able to mobilize in ways that carry lower opportunity costs.

We focus, in particular, on the role of economic and political marginalization which, intuitively, should generate anti-regime attitudes. The question, however, is in the manner with which those attitudes map to concrete actions. Citizens have, generally speaking, several options: at one end, actions within the existing legal order; at the other, open revolt. We examine the determinants of three categories of political mobilization in the developing world: (1) participation in anti-governmental actions (excluding voting); (2) radicalization and support for revolutionary change; (3) support for violence against the state. Using *World Values Survey* data we examine the sources of anti-regime

behavior among approximately 44,000 individuals in over 40 lower- and middle-income countries, identifying whether the factors that drive more extreme forms of mobilization also determine other modes of political action.

Our results suggest that marginalization breeds both radicalization *and* exclusion, particularly among the poorest. We find that individuals who are dissatisfied with the political and economic inequities are more likely to nurture revolutionary preferences, and are more likely to support violent action against incumbent governments. But they are also less likely to be politically engaged. If true, this would suggest that the poor in developing nations may be caught in a vicious cycle of increasing alienation, whereby the gap between their allegiances to their government and that of their better-off counterparts grows ever wider. Our analysis is organized as follows. In Section 2 we discuss related literature, and in Section 3 we present a game-theoretic model. Section 5 describes the data, and motivates our empirical strategy. Section 6 presents our results, and we conclude in Section 6.

The Political Economy of Dissent

Theories of Mobilization

Political participation can take many different forms, ranging from voting and campaign activism, to demonstrations and strikes to riots and revolutions (Verba, Nie and Kim 1971, Barnes and Kaase, 1979). A street protest, for example, may aim at overthrowing the regime, or just as well serve as a peaceful means to communicate an opinion (Norris, Walgrave and Aelst, 2005).What then determines how individuals and groups chose to express their political opinion? In particular, what drives certain groups

to engage in actions such as boycotts, demonstrations and petitions, and what makes others willing to engage in even more costly actions such as violent street protests, riots or revolutions? At the micro level, scholars within psychology, political science and sociology have linked individual activism to both attitudinal orientations and socio-economic factors.

Perspectives on political mobilization can be grouped into two categories. First, rational-actor perspectives suggest that the degree of mobilization will depend on individuals' expectations of private benefit; often this private benefit is negligible when the "pivot" likelihood—the possibility that a single action will change a political outcome—is low. These perspectives could be applied to voting or political violence. In classic voting models, this implies that turnout will dwindle if the probability of casting a decisive vote is low (Downs 1957; Riker and Ordeshook 1968; Levine and Palfrey 2007). Boycotts and strikes are no different than voting or campaign activism, they are all just different modes of political activity within the existing system (Inglehart 1997, Norris 2002). Politically active groups simply chose the mode of expression that they deem to be most effective at the time. It follows that groups most likely to turn out to vote and engage in political parties should also be most likely to turn up for demonstrations and strikes (Norris 2002). With respect to acts of collective political violence, this logic points to the role of individual incentives (to surmount coordination costs), opportunities for rebellion, and expectations of gains from violence (Collier and Hoeffler 2004; Fearon and Laitin 2003).

A second set of arguments is based on the assumption that widespread social discontent, hardship, or inequality triggers groups to mobilize. These grievances appear

in models of "expressive" voting by which citizens vote as a means of signaling their preferences rather than expecting to influence an outcome (Brennan and Hamlin 1998; Feddersen, Gailmard, and Sandroni 2009). In analyses of violent mobilization, grievance-based arguments feature prominently in "relative-deprivation" theories in which both non-violent and violent activities depend primarily on the degree of anti-state sentiments (Gurr 1970). Frustration with the existing political system, and skepticism towards the ability to initiate change from within, leads to activities that challenge the legitimacy of the current political order. Protests, violent or not, are seen as a threat to political stability, and the ones most likely to engage in any kind of activities are economically and socially weak groups angered by their marginalization.

Poverty and Anti-Regime Political Action

Over 70% of the more than one billion persons living on less than $1 per day are currently in a civil war or have recently been through one (Collier 2007). Statistically, a low-per capita income is one of the more robust determinants of the risk of internal conflict (Elbadawi and Sambanis 2001; Collier and Hoeffler 1998; Rice 2006). Conflicts, once begun, perpetuate destitution by worsening food security, destroying assets (Humphreys and Weinstein 2006), spreading disease (Pedersen 2002) and degrading the environment (Dudley et al. 2002).

Yet sub-national, household, and individual-level evidence of the connection between poverty and violence is often mixed, or at odds with cross-national evidence. District-level evidence, for example, shows a positive connection between community poverty and the likelihood of conflict in Uganda (Deininger 2003) and in the Philippines

(Malapit, Clemente, and Yunzal 2003); evidence from Colombia (Sánchez and Chacón 2003) and from Indonesia (Barron, Kaiser, and Pradhan 2004), however, show no such connection. An events-analysis of Indonesia, by contrast, finds an inverted-U shaped relationship between income levels and violence, with rising incomes increasing the likelihood of violence but lowering the likelihood as communities increase income levels beyond a certain threshold (Tadjoeddin and Murshed 2007). Analyses of terrorist events, finally, show little connection between individual poverty and participation in terrorism (Krueger and Maleckova 2003; Piazza 2006).

Meanwhile, when it comes to more common (legal, non-violent) forms of political participation—voting, petitioning, joining interest groups, etc.—the evidence is equally mixed. Cross-national studies of developing countries once found support for the "modernization thesis" that those of higher socioeconomic status are more likely to be politically engaged (Powell 1982; Huntington and Nelson 1976; Lipset, Seong, and Torres 1993). More recent evidence finds that many developing countries still conform to this expectation (Blais 2000). Other surveys of participation in developing countries, by contrast, find that participation is often greater among poorer households. Survey evidence from several countries in Latin America, for example, finds that poverty is positively related to partisan activism (Booth and Seligson 2006). Similarly, in India civic participation among disadvantaged households is greater than that of richer households (Diwakar 2008; Besley, Pande, and Rao 2005).

What then, are the factors that shape individuals' willingness to participate in acts of protest or violence? The distinction between "preferences" and "opportunities" is crucial since that which determines attitudes may not motivate action against regimes

(Hirshleifer 1993). Anti-governmental political actions—which are generally risky—do not necessarily follow discontent. First, grievances and perceived inequities or "deprivation" alone, of course, are unlikely to destabilize or threaten governments. Second, evidence from studies of regime durability and transition shows the myriad ways in which groups that are more likely to act upon their discontent can be selectively pacified (Bueno de Mesquita et al. 2003). Anti-poverty programs have often lavished benefits on politically relevant groups rather than the poorest (Schady 2000; Diaz-Cayeros and Magaloni 2003)). Rentier states have used natural-resource revenues to fund social programs targeted to key constituencies (Aslaksen and Torvik 2006; Chaudhry 1997). And these generous social expenditures and public employment opportunities have tended to create and reinforce allegiances to the state that have proven deeply resilient (Yousef 2004).

The cross-national evidence of strong, causal links between economic deprivation and political turmoil are at odds with some community- and individual-level data. In particular, little is known about the link between attitudes and actions, and the circumstances by which marginalization leads to legal or extra-legal (and violent) responses. Opinion/values surveys can illuminate the conditions under which endemic discontent produces anti-regime sentiments, and when these sentiments lead to individual acts of resistance. Better theory is needed to tell us when protests are more likely to turn violent, and which groups are more likely to use violence for political reasons.

Political Action as Costly Behavior: A Game-Theoretic Model

An incumbent politician faces a continuum of voters of measure N. Incumbents face a binary decision whether to invest in a project that has some private value for a subset of voters ($N_1 < N$). Formally, the incumbent's strategy is $\gamma \in \{0,1\}$ where 1 implies investment that increases the incumbent's political support within group 1, but that involves foregone investment in something of higher private value to the incumbent. The incumbent's utility is

$$Pr(reelection) \times \theta - \gamma C_p,$$

where γ is an indicator function taking on the value of 1 if the incumbent invests and 0 otherwise, where C_p is the incumbent's cost of investing, and where θ represents the rents from retaining office.

Group 1 voters face two decisions: (i) whether to vote for the incumbent (*vs*. an exogenous opponent); and (ii) whether to undertake an additional political action towards that end. We assume further that voter choices are a function of the incumbent's relative (voter-specific) popularity (which increases if the project is implemented), general popularity, and ideology. If the incumbent invests, group 1 voters obtain the additional utility of u, and therefore we let the increase in relative popularity that comes from investment to be u.[5] Individual i's relative ideological preference for the opponent is β_i, and z is a common popularity shock. The variable β^1 is distributed uniformly across the subgroup with support between [-kε, kε]. This implies that some members of group 1 have an ideological preference for the incumbent (those with β_i in the [-kε, 0) range), and some for the opponent (those with β_i in the (0, kε] range). The variable z is drawn at

[5] To focus on the incumbent's binary investment decision we keep other public policies fixed and normalize voters' relative utility along the public policy dimension from the political opponent to 0.

random from a uniform distribution with support between [-1, 1]. This popularity shock captures factors that affect the relative attractiveness of the incumbent in the eyes of all voters. It is assumed that the realization of this variable is unknown to the incumbent, implying that the incumbent does not know with certainty whether a particular policy will win reelection.

A group 1 member will vote for the incumbent if and only if

$$\gamma u + z \geq \beta_i$$

Meanwhile, group 2 voters face a similar decision, with the exception that they do not receive additional utility from the project.[6] Their voting decision is formalized as

$$z \geq \beta_i,$$

but here we assume that β^2 is distributed uniformly across [-ε, ε]. The parameter k from above thus captures the difference in the variance of the distribution of preferences between group 1 and group 2.

The second choice that members of group 1 face is whether to undertake political action prior to the incumbent's investment decision. The value that members of group 1 assign to the project (u) is private information and therefore the purpose of political action is to send a signal of that valuation to the incumbent; the credibility of that signal will depend fundamentally on the cost of that action borne by the group 1 member. We define the groups' strategies as binary decisions $\rho \in \{0,1\}$, where 1 indicates action that carries a cost $c \in R^+$. The incumbent's prior belief is that u comes from a uniform distribution with support between $[0, \bar{u}]$, but the incumbent updates beliefs based on the group strategy $E[u|\rho] \equiv \hat{u}$.

[6] We implicitly assume here that the voting behavior of members of group 2 is not affected by having to contribute to the financing of the project. This is most plausibly thought of as a model of concentrated benefits and dispersed costs.

The timing of the sequential game is as follows. First group members jointly determine whether to take political action or not.[7] Then the incumbent updates beliefs about u based on the group's action and makes the decision whether to commit to the project or not. Elections subsequently take place and all voters vote sincerely on the candidate they prefer. If the incumbent is reelected the project is realized.

Defining the equilibrium

To characterize the equilibrium, we first need to derive the incumbent's expected probability of winning reelection, and how that probability depends on whether an investment takes place. We can rewrite the condition in equation 2, adjusting for the fact that the incumbent only has an expectation of the value of u, as

$$\beta_i \leq \gamma\hat{u} + z.$$

It follows from the distribution of β that the expected share of group 1 members voting for the incumbent is:

$$\frac{\gamma\hat{u} + z + k\varepsilon}{2k\varepsilon}.$$

Similarly, the expected share of group 2 members voting for the incumbent will be:

$$\frac{z + \varepsilon}{2\varepsilon}.$$

This yields the total expected vote share for the incumbent:

$$\left(\frac{N_1}{N}\right)\frac{\gamma\hat{u} + z + k\varepsilon}{2k\varepsilon} + \left(\frac{N_2}{N}\right)\frac{z + \varepsilon}{2\varepsilon}.$$

[7] We are ignoring problems of free riding in our formal representation. It is sometimes assumed that poorer socio-economic groups suffer from an inability to solve collective action problems, but the rational for that assumption is never formalized. It is also very hard to empirically test such a proposition. Our impression is that the observation that poorer socio-economic groups sometimes seem less likely to jointly take action has been used as "evidence" for a free riding problem, even though no evidence of the specific mechanism is put forward. Our model offers an alternative explanation, with some theoretical foundations.

The expected probability that the incumbent wins reelection is given by the probability that this vote share exceeds one half, or

$$z \geq -\frac{N_1}{(N_2 k + N_1)} \gamma \hat{u}$$

Given the distribution of z, the expected probability of winning reelection can now be written as

$$\frac{1}{2} + \frac{N_1}{2(N_2 k + N_1)} \gamma \hat{u}.$$

We can now define our equilibrium as follows: there exists a perfect Bayesian equilibrium (PBE) with the following set of strategies and beliefs:

1. Member i of group 1 votes for the incumbent if and only if

$$\beta_i \leq \gamma u + z.$$

2. Member i of group 2 votes for the incumbent if and only if

$$\beta_i \leq z.$$

3. The incumbent invests in the project if it increases the incumbent's expected utility.

$$\gamma = \left\{ \begin{array}{l|c} 1 & if \ \frac{N_1}{2(N_2 k + N_1)} \hat{u}\theta \geq C_p \\ 0 & otherwise \end{array} \right\}$$

4. The incumbent updates beliefs according to

$$\hat{u} = \left\{ \begin{array}{l|l} \frac{(c + \bar{u})}{2} & if \ \rho = 1 \\ \frac{\bar{u}}{2} & if \ \rho = 0 \end{array} \right\}$$

5. Members of group 1 take political action if and only if it increases their utility.[8]

$$\rho = \left\{ \begin{matrix} 1 \\ \\ 0 \end{matrix} \middle| \begin{matrix} if\ u > c \geq \dfrac{4C_p(N_2k + N_1)}{N_1\theta} - \bar{u} \\ \\ otherwise \end{matrix} \right\}$$

To see that this is an equilibrium note first of all that the incumbent is always better off investing in the project if the cost of the project is lower than rents from reelection, multiplied by the increase in the expected probability of reelection that comes with the investment (part 3 above). It will only be in the interest of members of group 1 to take action, moreover, if the cost of political action is lower than the value of the project, and if political action makes the incumbent commit to the project (part 5 above). Finally, the updated beliefs in part 4 are consistent with the strategies. Only voters with valuations of the project above the costs of political action will take action, whereas no political action can be consistent with any voter depending on the cost of political action.

The equilibrium defined above can be considered partially separating. For parameter values such that $c \geq \frac{4C_p(N_2k+N_1)}{N_1\theta} - \bar{u}$, voters that value investments above some critical value will take political action whereas others will not. However, for $c < \frac{4C_p(N_2k+N_1)}{N_1\theta} - \bar{u}$ no individuals will take political action regardless of how highly they value the project. Naively one would assume that groups with lower costs always are more likely to engage in political action; the opposite effect in equilibrium occurs because the chief purpose of taking action is to signal to the incumbent that the project is of high value to the group, and the more costly it is to engage, the more credible is the

[8] We are throughout assuming that the incumbent would not commit to the project in the absence of any political action, i.e. that $\frac{N_1}{(N_2k+N_1)}\frac{\bar{u}\theta}{2} < C_p$. If this were not true, the incumbent should already have made the commitment without any pressure from members of group 1.

signal. Technically, the incumbent will rule out any realizations of project value below the cost of action, i.e. the prior distribution is truncated to the left. It follows that the incumbent's updated expected valuation increases the higher the cost of political action, and with a higher expected valuation the incumbent expects to win more votes by committing to the project. In particular, only with a high enough expected valuation will the incumbent's expected benefit from committing to the project exceed the cost. Groups with low costs will therefore not engage because they know they are not going to get the incumbent to commit to the project.

With different specifications of beliefs, it is possible to define a pooling equilibrium in which all types chose the same strategy for all parameter values. For example, if the incumbent believes that no political action is consistent with any type of voter, whereas political action implies the lowest valuation type, then the incumbent will never respond by investing in the project in response to political action. It follows that group 1 members will never take political action so strategies and beliefs are consistent in equilibrium. Such an equilibrium, however, relies on implausible out-of-equilibrium beliefs. The intuitive criterion can be used to rule out an equilibrium in which a player of type u can do better by deviating from the equilibrium as long as other players of the game assign zero probability to such a deviation coming from types for which the deviation is equilibrium dominated. In this case, taking political action is equilibrium dominated for those with $u < c$, and as we have seen above, if the incumbent believes political action implies that $u \geq c$ then those types indeed are better off deviating and taking costly political action, as long as $c \geq \frac{4C_p(N_2k+N_1)}{N_1\theta} - \bar{u}$. Hence, as is common in

signaling games, we can rule out completely pooling equilibriums using the intuitive criterion and instead focus attention on the equilibrium specified above.

Violence

We introduce an additional, high-cost means of signaling discontent in which participants face significant risks of injury or even death. Redefine the group's strategy as $\rho \in \{0,1,2\}$, where action 1 carries the cost $c_1 \in R^+$ and action 2 carries the cost $c_2 \in R^+$, and $c_1 < c_2$. The equilibrium of this extended game differs from that in the previous section only in terms of beliefs and in the political actions of group 1 members:

$$\hat{u} = \left\{ \begin{array}{l|l} \frac{(c_2 + \bar{u})}{2} & if\ \rho = 2 \\ \frac{(c_1 + \bar{u})}{2} & if\ \rho = 1 \\ \frac{\bar{u}}{2} & if\ \rho = 0 \end{array} \right\},$$

and

$$\rho = \left\{ \begin{array}{l|l} 2 & if\ u > c_2 \geq \frac{4C_p(N_2 k + N_1)}{N_1 \theta} - \bar{u}\ > c_1 \\ 1 & if\ u > c_1 \geq \frac{4C_p(N_2 k + N_1)}{N_1 \theta} - \bar{u} \\ 0 & otherwise \end{array} \right\}.$$

Those with sufficiently high opportunity costs will have no incentive to change behavior with the introduction of a new instrument for signaling. Demonstrations and strikes are sufficient to instigate change. The difference will be in groups for which demonstrations and strikes are not costly enough to generate change. If these groups

place a high enough valuation on the project it will be worthwhile to engage in violent protests. In other words, the groups most likely to turn to violent protests are economically marginalized groups with high valuations of the project.

Data and Methods

The previous section emphasized two central hypotheses: (i) the marginalized will be less likely to engage in political activities; and (ii) the marginalized should be more supportive of more costly, violent, means of political action.[9] We rely on data from the *World Values Survey* (WVS), an international survey of attitudes towards political and cultural issues across 80 countries conducted in five waves between 1981 and 2008. The WVS is constructed of representative national samples of the populations in these countries, but our primary interest is not in the country-level means or other indices. Rather, we are interested in individual-specific motivations, and therefore use individual responses in our analysis. We focus on three main dependent variables: a range of actual (self-reported) political activities, radicalization (namely, the preference for "revolution"), and support for violence against the government. In addition, we restrict our sample to approximately 40 lower- and middle-income countries.

[9] There are also some additional results from the model that we do not have the data to test for, and therefore do not emphasize here. The parameter k captures the variance of the valence distribution within group 1 relative to group 2. As k is increasing the variance is increasing, which also implies that the density at any given point is decreasing (since this is a uniform distribution). It follows that implementing the project will gain fewer votes if k is high (because fewer voters are in the range of the support for which the project is enough to change voting behavior) and consequently a group with a high k is less likely to take political action. This result suggests that groups of "swing" voters are more likely to take political action than groups of "core" voters. Also, the larger the number of voters in group 1, the more voters can be persuaded to vote for the incumbent in response to a commitment to the project. A larger group of voters, either because the size of the group is large or because the group has high voter turnout, is thus associated with a lower cost threshold for taking political action, so political action becomes more likely.

The problems of comparability when respondents are asked to use ordinal response categories are well known. Different respondents may interpret subjective questions in different ways based on unobservable characteristics. Ordinal scales, moreover, may mean different things to different respondents based on idiosyncratic factors such as mood or overall optimism. Individual-level perceptions would similarly be affected by measurement error where identical individuals may have unequal probabilities of answering questions about their own political preferences in the same way. Additionally, the measurement error in subjective responses may be correlated with a wide variety of individual characteristics and behaviors (Bertrand and Mullainathan 2001; King and Wand 2007).

"Anchoring vignettes" or other hypothetical questions to establish baselines that could normally correct survey responses for inter-personal incomparability, however, are not included in the WVS. Consequently, we attempt to correct our specifications in the following manner: in all estimations, we include a "bias" proxy. We derive that proxy by regressing a "life satisfaction" response variable (coded from 1, "dissatisfied" to 10, "satisfied") against a "freedom of choice and control" response variable (also coded from 1 to 10 in terms of degree of control respondents report to have over their lives), along with country- and time-fixed effects, and taking into account population-sampling weights. The residuals from this equation reasonably approximate an individual's personal "bias"—i.e., the level of dissatisfaction that cannot be explained by one's feeling of autonomy.[10]

[10] We estimated results using a variety of different derivations of bias—for example, including income deciles, responses to questions on financial satisfaction, etc. Our results are unaffected by the inclusion of these economic-condition variables. We feel that the satisfaction-agency/autonomy gap is a better proxy for bias than a life satisfaction-financial satisfaction gap (the correlation between life satisfaction and

Our basic specifications take the following form:

$$Q_{ict} = F\left(\hat{\beta}_y y_{ict}, \hat{\beta}_w \mathbf{w}_{ict}, \hat{\beta}_x \mathbf{x}_{ict}, \hat{\beta}_\phi \phi_i, \eta_t, \mu_c\right),$$

where Q is the political attitude or action of interest for individual i living in country c in year t, y is a measure of individual income, **w** is the set of individual "grievances" based on a rating of the policy-making effectiveness of the incumbent government, **x** is a vector of individual demographic characteristics, ϕ is the individual-specific systematic bias, η and μ are time- and country-fixed effects, respectively.

For our first outcome of interest we construct an index of political action based on responses to five different questions asked as follows:

> *I'm going to read out some different forms of political action that people can take, and I'd like you to tell me, for each one, whether you have actually done any of these things, whether you might do it or would never, under any circumstances, do it: (A) signing a petition; (B) joining in boycotts; (C) attending lawful demonstrations; (D) joining unofficial strikes; (E) occupying buildings or factories.*

We code responses 0, 1, or 2 depending upon whether respondents have not engaged in these actions (0), would consider them (1) or have committed any of these actions (2). The methodology followed by some other researchers is simply to sum up the number of acts respondents said they have actually committed (Inglehart 1997; Norris 2002). Given that these actions differ in terms of the effort and risks involved, and to put extra weight on actions that signal stronger convictions, in addition to examining these outcomes separately we construct a simple "political action index" as A + 2×B + 3×C + 4×D + 5×E, yielding a value that ranges between 0 and 15. Second, we construct a weighted index based on

---

financial satisfaction is over 0.60 in our sample). The derivation of bias also includes sampling weights (see below).

principal components analysis. In reality, both approaches yield similar results, and both are closely related to a simple sum of the five components.[11]

For the second of our dependent variables, the individual preference for revolution, we rely on the following WVS question:

> *On this card are three basic kinds of attitudes concerning the society we live in. Please choose the one which best describes your own opinion: (1) The entire way our society is organized must be radically changed by revolutionary action; (2) Our society must be gradually improved by reforms; (3) Our present society must be valiantly defended against all subversive forces.*

We code this 1 if the respondent chooses the first answer, 0 otherwise. For the third dependent variable—individual support for violence—WVS asks:

> *Could you please tell me if you agree strongly, agree, disagree, or disagree strongly with the following statement: "Using violence to pursue political goals is never justified."*

Responses range from 1 (agree strongly) to 4 (disagree strongly). We use the full range of responses in ordered logit regressions (rescaled so that the highest value represents maximum support for violence).[12] We use the WVS approximation of individual wealth, based on country-specific correspondence between reported income and income deciles. There are no questions in the WVS, unfortunately, that can measure individual or household wealth in other ways—for example, questions about consumption patterns, food, shelter, access

[11] Analysis of the WVS has shown that the five components of political action form a single dimension. Previous factor analysis has shown that only one factor emerges with an eigenvalue greater than 1, and all five components are loaded strongly on that single factor (Dalton and van Sickle 2005). We combine the five components across five survey rounds into a single factor:

	Factor Loadings
Signed a petition	0.414
Joined a boycott	0.481
Lawful demonstration	0.479
Unofficial strikes	0.453
Occupying buildings	0.403
Eigenvalue	2.744
% Variance	0.549

[12] We also use logit regressions as a robustness check, coding this variable 1 if the respondent chooses 4, 0 otherwise.

to services, etc., making it impossible to generate a "lived poverty" index as others have done (e.g., see Bratton 2006).

To construct indices of individual ratings of governmental policymaking effectiveness, we rely on two separate variables. First, we construct a "Political rating" score based on respondents' rating of the political system on a scale of 1 (worst) to 10 (best). We subtract the rating of the system "as it was ten years before" from the current rating to obtain this score. Second, we use respondent answers on inequality of incomes—where individuals are asked to place their views on a scale of 1 (agreement with the statement "incomes should be made more equal") to 10 (agreement with the statement "we need larger income differences as incentives for individual effort"). We rescale our Inequality measure such that the higher the value, the more dissatisfaction with inequality in the country. The perception of economic inequality is the most comprehensive indicator of the perceptions regarding overall economic management.[13]

Among the demographic characteristics we include are: employment status, size of town in which the respondent lives, gender (male = 1), age, and education. In addition to country- and year-fixed effects, we include population-sampling weights and standard errors clustered by country in all estimations. Country-specific stratification methods, over- and under-representation of sub-samples, and non-response all require that sample weights be included in all estimations to derive unbiased population means and correct

[13] The WVS does include questions on "opportunities to escape from poverty," but these questions were included in very few survey rounds in developing countries. Other questions focus more explicitly on individual preferences for economic policy (e.g., whether the respondent believes in greater or lesser government intervention in the economy) than on systemic economic performance.

standard errors.[14] Summary statistics for all variables from the *World Values Survey* can be found in table 1.

Results

Political Behavior

Our principal aim is to explain the propensity to engage in (non-violent) political action. Table 2 shows basic estimations of the five different types of political activities with increasing cost (signing petitions, joining boycotts, demonstrating, participating in strikes, and occupying buildings or factories), along with the two different political action indices. The results are generally consistent across outcome variables. We find strong support for the link between levels of marginalization and political engagement. Richer, better-educated, employed men in urban settings are more likely to partake in explicitly political acts. Moreover, grievances are no basis for political action. Those who are unhappy with the direction of governmental performance are less, not more, likely to participate in political actions, while those who are unhappy with economic inequities are similarly less likely to do so. These effects are consistent with the model outlined previously; those who are marginalized tend to exclude themselves from political life even if those who are marginalized are discontent. An important exception to this broader relationship is that youth are more likely to participate in anti-governmental political actions than older individuals.

[14] Note that WVS response rates vary greatly. In addition, the WVS tended to over-sample upper-middle income groups in developing countries. To correct for the sample design and the response rate, sample weights were constructed with specific criteria for each country—essentially, the inverse of the probability that an individual is a member of the sample population (see, e.g., Inglehart, Basáñez, Diéz-Medrano, Halman and Luikx 2004).

For a more complete look at the effects of the covariates on political action we rely on quantile regression—estimating a series of functions where percentiles of the conditional distribution of the political action index are expressed as functions of observed covariates. Quantile regression affords a more complete picture of the shape of the distribution of the outcome of interest (Koenker and Hallock 2001). We replicate the equation from column (7) in table 1. The results are shown in figure 1. Each graph plots the estimates of different coefficients for percentiles of the political action index ranging from 0.5 to 0.95. The dependent variable is the principal-component weighted political action score. For each covariate, these estimates may be interpreted as the estimated impact of a one-unit change in the covariate on political action given the level of political activity, and holding all other covariates fixed. The shaded areas represent 95% confidence intervals for the quantile regression estimates. The solid lines show the ordinary least-squares (OLS) estimate of the conditional mean effect, while the dotted lines represent the usual 95% confidence band for OLS estimates. Most of the covariate plots show greater dispersion of the effects among the highest percentiles—i.e., among the most politically active individuals.

Income decile has an increasing effect on political action in the lower end of the distribution, but becomes negative after the 75^{th} percentile. Poverty actually increases political activity among those who are the most politically active. The effect of perceptions of governmental effectiveness increase then falls to zero towards the higher percentiles. Perceived economic inequities are a mirror-image to governmental performance, suggesting that economic injustices galvanize the already-mobilized even more. The effects of employment and urban location are positive but widely dispersed

among the better-mobilized. Age reduces proclivities towards political activity, but the effect diminishes among the upper end of the distribution. Gender and education have consistent, increasing effects. Our quantile regression shows diminishing effects of most covariates on the upper percentiles of the politically active. For the more mobilized, personal wealth and grievances matter less than for the least mobilized.

Analyses of Europe, the US, and Latin America have shown that the impacts of inequality on political attitudes, for example, depend crucially on income levels (Alesina, Di Tella, and MacCulloch 2004; Graham and Felton 2005). Table 3 presents regressions of the principal component-weighted political action index by income quintile (1 being the poorest, 5 being the richest 20%). The results from these estimations are broadly consistent with those from the table 2, namely, that marginalized groups are less active even within quintiles, and that grievances do not translate into action. The effects of economic grievances—proxied by unemployment and preferences for redistribution—however, appear to be concentrated among the middle quintiles, which is consistent with the hypothesis that the most and least aggrieved groups both face obstacles to political action. For the richest, the opportunity cost outweighs the signaling benefits of costly political action; for the poorest, a low opportunity cost weakens the credibility of any political action.

Radicalism and Violence

In table 4 we turn to estimates of the preference for revolution. WVS data on revolutionary "tastes," in other research, has been considered a useful proxy for instability (MacCulloch and Pezzini 2002). Perceptions of deteriorating governmental

performance increase the preference for revolt. Similarly, we see that the politically and economically alienated are also more disposed towards the use of violence against the government in developing nations. We also see evidence supporting the view that less educated, unemployed, young males are natural groups to be mobilized into violence.

Notably, income levels do not have any significant effect among individuals, either in support for radicalism or support for political violence. Consistent with our model, simple nonparametric analyses reveals an inverse-U shaped relationship between income and support for violence in developing countries. Figure 2 shows partial-residual plots of support for violence against income deciles, generated as follows. We estimate the full ordered-logit specification as in column (4) in table 4 to generate standard (non-bootstrapped) errors of the linear prediction. We then run local-polynomial regressions of these residuals on income deciles. The results quantify the isolated effect of income levels on support for violence. The effect increases through the bottom five income deciles and diminishes thereafter.

Quintile Differences

We perform one additional test of our hypotheses regarding marginalization, grievance, and political mobilization. A weakness of the regressions presented above is that there is no measureable exogenous variation that would allow is to identify the effects of marginalization and grievance on various political outcomes. Indeed, in the absence of valid instruments, such variation is difficult to find in the context of a values-based survey.

Therefore we construct a quasi-panel consisting of country-quintile-differences for our variables of interest, and estimate the following equation:

$$P_{i,t,5} - P_{i,t,q} = \beta_0 + \beta_1 \left(\mathbf{X}_{i,t,5} - \mathbf{X}_{i,t,q} \right) + \mu_i + \nu_q + \varepsilon_{i,t,q}$$

where P is the political outcome, and X is a vector of covariates for country *i* in survey year *t*, and where we take, for all variables that enter the regression, the difference between the sample mean for the 5th (highest) and the *q*th income quintiles (i = 1, 2, 3, 4). Thus we have a panel of quintile-differences by country and survey year for all variables, yielding N × 4 × T observations for N countries and T survey years.

For our dependent variables, we simply calculate the percentages of the within-quintile sample that report having undertaken a specific political action, or supporting "revolutionary change" or anti-government violence, then take the difference between the 5th and the 4th quintile, the 5th and the 3rd quintile, and so on. We do the same when calculating quintile differences for percentages of respondent unemployed. For the respondents' political ratings, age, and education we calculate averages by income quintile then take similar quintile differences between the top quintile and the 4th, 3rd, 2nd, and 1st quintiles. We drop gender and location variables as there is no variation across quintiles for these.

Finally, instead of using inequality and WVS income measures, however, we calculate for each country and survey year in the WVS actual mean income levels by quintile using the Living Standards Measurement Surveys (LSMS) conducted by the World Bank and maintained within the World Bank's *POVCAL* database. Our resulting panel, therefore, exclusively focuses on gaps between rich and poor—gaps in income,

education, age, employment, and gaps in the degree of political grievances, alongside gaps in the degree of mobilization and support for extreme political action.

These quintile-difference regressions are presented in Table 5. The results show that gaps in income correspond to gaps in the levels of political mobilization between rich and poor—that the rich are relatively more mobilized than the poor as a group. But several findings are also broadly supportive of the view that, more than the level of absolute marginalization, marginalization relative to the richest groups can have an impact on mobilization.

We see that, for low-cost actions such as petition-signing, marginalization has a negative effect on the degree of mobilization. Where the richest are better educated, older, and more employed than the non-rich, for example, the gap between the level of petition-signing among the rich and poor is also wider. However, this pattern is reversed for costlier actions beyond petition signing. For these actions, the relative disadvantage of the non-rich compared to the rich increases the likelihood that the non-rich will be more mobilized, and that the non-rich will support radicalism.

Conclusions

Political action against the state depends not only merely on preferences but also on perceived opportunities. What can be won? What are the chances of success? And what are the risks involved in the event of failure? The political lives of the marginalized depend not simply on perceived or actual grievances, but on the possession of resources needed to convert those demands into concrete action: income, education, and urban residency seem to be critical factors in acquiring these resources. Acts of dissent and

protest, ironically, appear to be the province of those who support the overall polity, its government, and its modes of economic management, rather than of citizens at the periphery. Indeed, this is consistent with the common bias towards more politically-engaged citizens found in matters of government spending and public service-delivery (Banerjee, Iyer, and Somanathan 2007). Better-off citizens not only tend to engage more in ordinary political activities, they are also more likely to threaten its collapse.

A central claim of research on state fragility is that poverty is associated with political conflict and a fundamental assumption underlying these arguments is that the various pathologies of poverty—exclusion, alienation, discontent, and deprivation—make citizens prime recruits for anti-government groups and lead affected citizens to participate in acts of political violence. The evidence, however, is characterized by a paradox: while most of the world's poorest live in conflict-ridden societies and while substantial cross-country evidence shows a robust relationship between income levels and conflict, micro-level evidence from districts, households, and individuals indicates that while the poorest are often participants in collective political violence, they are the least mobilized .

Extremism in developing countries seems largely motivated by discontent with the political system and a lack of economic equity. From our examination of political action—both violent and non-violent—we observe that the poor generally shy away from most political engagements. Violence for political ends does have its supporters among those who perceive malevolence on the part of their governments, or among those who complain about economic inequities. But "support" is not action. Controlling for other

factors, the economically and politically marginalized, while susceptible to the appeals of radicalism, also avoid anti-governmental politics.

Overall, we find evidence from survey data that economic and political discontent breeds radicalism and, at the same time, exclusion. Thus we have the vicious cycle of legitimation: alienation leads to self-exclusion, self-exclusion further marginalizes vulnerable groups from access to and representation in policymaking, disenfranchisement stacks the deck in favor of influential (better off) groups, which reinforces perceptions of inequality and political failure leading to even more radical political attitudes. It is thus the better-off who see the opportunities in political action to initiate change, even if it is the less well-off and marginalized citizens who have the strongest preferences for change.

How can these findings be squared with evidence that poorer communities (e.g., in India, and in some Latin American countries) are more politically active? One possibility is that political action in poor communities is oriented primarily towards the maintenance of patron-client ties. In communities where public service delivery is spotty, local brokers, *caudillos*, zamindars, etc., may provide certain services to local residents in return for securing support for particular parties. Indeed much of the evidence from Latin America suggests that the poor are more active in political parties, rather than in protest participation. A second, related possibility is that poor communities are characterized by greater fragmentation or polarization than richer communities. Consequently, political action is directed in support of politicians more likely to provide goods to particular groups. There is evidence from India, for example, of politicians distributing public goods towards the social groups to which they belong (Banerjee and

Pande 2007). In both cases, increased political activity at the community or village-level would not necessarily translate into a willingness to engage in anti-governmental dissent.

Overall the picture that emerges from developing nations is different than the conventional wisdom from richer countries, where the presumption is that urban-dwellers and the unemployed are the core constituencies of left-wing political movements. The situation is more complicated in poorer countries, possibly due to the strong ties of populist parties to rural areas and labor movements in these countries (see, e.g., Stokes 2001; Murillo 2000).

Understanding better the relationship between alienation and action requires a more complete picture of the effects household income and demographic factors, as well as the dynamics of group relations, on political behavior beyond voting—something that cannot, at the present, be done for more than a handful of developing countries given the data requirements. Complementing cross-country analyses to understand how economic conditions and different political preferences influence conflict is a potentially fruitful agenda for future data-collection and research.

Finally, of particular importance would be to identify the role of political institutions and economic policies for fostering inclusion. Common approaches are not without their pitfalls. Free and periodic multi-party elections give marginalized groups a potential voice, risk becoming captured by better-organized groups. Public policies in the form of public good provision, food subsidies, and cash transfers can also foster inclusion both directly (if groups observe that they can benefit from political participation) as well as indirectly by providing resources for education, but these types of programs require certain governmental capacities for effective targeting and for relatively high returns to

education. Decentralization of policy making, minority quotas, and community-based developmental interventions carry the potential to increase the incentives to limit self-exclusion, but these outcomes can be heterogeneous across different groups. These interactions between the poor, non-poor, and public officials as well as the calculations involved in the provision of policies aimed at fostering inclusion require further investigation and analysis. From our perspective a central obstacle to these approaches is not that program designers lack knowledge, managerial skill, or fiscal resources, but that politicians face strong incentives to use redistributive programs for partisan purposes, many of which require the continued political marginalization of the poor.

References

Alesina, Alberto, Rafael Di Tella, and Robert MacCulloch (2004). "Inequality and Happiness: Are Europeans and Americans Different?" *Journal of Public Economics* 88 (9-10): 2009-42.

Aslaksen, Silje , and Ragnar Torvik (2006). "A Theory of Civil Conflict and Democracy in Rentier States*." *Scandinavian Journal of Economics* 108 (4): 571-85.

Banerjee, Abhijit, Lakshmi Iyer, and Rohini Somanathan (2007). "Public Action for Public Goods." Working Paper 12911. Cambridge, MA: National Bureau of Economic Research.

Banerjee, Abhijit, and Rohini Pande (2007). "Parochial Politics: Ethnic Preferences and Politician Corruption." CEPR Discussion Paper 6381. London: Centre for Economic Policy Research.

Barron, Patrick, Kai-Alexander Kaiser, and Menno Pradhan (2004). "Local Conflict in Indonesia : Measuring Incidence and Identifying Patterns." Policy Research Working Paper 3384. Washington, D.C.: World Bank.

Bertrand, Marianne, and Sendhil Mullainathan (2001). "Do People Mean What They Say? Implications for Subjective Survey Data." *American Economic Review* 91 (2): 67-72.

Besley, Timothy, Rohini Pande, and Vijayendra Rao (2005). "Participatory Democracy in Action: Survey Evidence from South India." *Journal of the European Economic Association* 3 (2-3): 648-57.

Blais, André (2000). *To Vote or Not to Vote? The Merits and Limits of Rational Choice Theory*. Pittsburgh, PA: University of Pittsburgh Press.

Booth, John A., and Mitchell Seligson. (2006). "Inequality and Democracy in Latin America: Individual and Contextual Effects of Wealth on Political Participation." Presented at the Prepared for presentation at the Duke University Workshop on Poverty and Democracy, Durham, NC.

Bratton, Michael (2006). "Poor People and Democratic Citizenship in Africa." Afrobarometer Working Paper 56. Cape Town: IDASA.

Bueno de Mesquita, Bruce*, et al.* (2003). *The Logic of Political Survival*. Cambridge, MA: MIT Press.

Chaudhry, Kiren Aziz (1997). *The Price of Wealth: Economies and Institutions in the Middle East*. Ithaca: Cornell University Press.

Collier, Paul, and Anke Hoeffler (1998). "On Economic Causes of Civil War." *Oxford Economic Papers* 50 (4): 563-73.

Dalton, Russell J., and Alix van Sickle (2005). "The Resource, Structural, and Cultural Bases of Protest." Center for the Study of Democracy, University of California, Irvine, CA.

Deininger, Klaus (2003). "Causes and Consequences of Civil Strife: Micro-Level Evidence from Uganda." *Oxford Economic Papers* 55 (4): 579-606.

Diaz-Cayeros, Alberto, and Beatriz Magaloni (2003). "The Politics of Public Spending: The Programa Nacional De Solidaridad (Pronasol) in Mexico." Background paper to the *World Development Report 2004*. Washington, DC: World Bank.

Diwakar, Rekha (2008). "Voter Turnout in the Indian States: An Empirical Analysis." *Journal of Elections, Public Opinion & Parties* 18 (1): 75 - 100.

Dudley, Joseph P*, et al.* (2002). "Effects of War and Civil Strife on Wildlife and Wildlife Habitats." *Conservation Biology* 16 (2): 319-29.

Elbadawi, Ibrahim, and Nicholas Sambanis (2001). "How Much War Will We See? Estimating the Incidence of Civil War in 161 Countries." Policy Research Working Paper 2533. Washington, DC: World Bank.

Graham, Carol, and Andrew Felton (2005). "Does Inequality Matter to Individual Welfare? An Initial Exploration Based on Happiness Surveys from Latin America." Center on Social and Economic Dynamics Working Paper 38. Washington, DC: Brooking Institution/Johns Hopkins University.

Hirshleifer, Jack (1993). "Cooperation, Conflict, and All That." Working Paper 695. Los Angeles, CA: UCLA Department of Economics.

Humphreys, Macartan, and Jeremy M. Weinstein (2006). "Handling and Manhandling Civilians in Civil War." *American Political Science Review* 100 (3): 429-47.

Huntington, Samuel P., and Joan M. Nelson (1976). *No Easy Choice: Political Participation in Developing Countries*. Cambridge, Mass.: Harvard University Press.

Inglehart, Ronald (1997). *Modernization and Postmodernization : Cultural, Economic, and Political Change in 43 Societies*. Princeton, N.J.: Princeton University Press.

Inglehart, Ronald*, et al.*, eds. (2004). *Human Beliefs and Values : A Cross-Cultural Sourcebook Based on the 1999-2002 Values Surveys*. 1st ed. México: Siglo XXI.

King, Gary, and Jonathan Wand (2007). "Comparing Incomparable Survey Responses: Evaluating and Selecting Anchoring Vignettes." Political Analysis (15): 46-66.

Koenker, Roger, and Kevin F. Hallock (2001). "Quantile Regression." *Journal of Economic Perspectives* 15 (4): 143-56.

Krueger, Alan B., and Jitka Maleckova (2003). "Education, Poverty and Terrorism: Is There a Causal Connection?" *Journal of Economic Perspectives* 17 (4): 119-44.

Levi, Margaret (2006). "Why We Need a New Theory of Government." *Perspectives on Politics* 4 (1): 5-19.

Lipset, Seymour Martin, Kyoung-Ryung Seong, and John Charles Torres Torres (1993). "A Comparative Analysis of the Social Requisites of Democracy." *International Social Science Journal* 136 155-75.

MacCulloch, Robert, and Silvia Pezzini (2002). "The Role of Freedom, Growth and Religion in the Taste for Revolution." Development Economics Paper. Suntory and Toyota International Centres for Economics and Related Disciplines, London.

Malapit, Hazel Jean L., Tina S. Clemente, and Cristina Yunzal. (2003). "Does Violent Conflict Make Chronic Poverty More Likely? The Mindanao Experience." Presented at the "Staying Poor: Chronic Poverty and Development Policy" Conference, Manchester.

Murillo, M. Victoria (2000). "From Populism to Neoliberalism: Labor Unions and Market Reforms in Latin America." *World Politics* 52 (2): 135-74.

Norris, Pippa (2002). *Democratic Phoenix : Reinventing Political Activism*. New York, NY: Cambridge University Press.

Pedersen, Duncan (2002). "Political Violence, Ethnic Conflict, and Contemporary Wars: Broad Implications for Health and Social Well-Being." *Social Science & Medicine* 55 (2): 175-90.

Piazza, James A. (2006). "Rooted in Poverty?: Terrorism, Poor Economic Development, and Social Cleavages." *Terrorism and Political Violence* 18 (1): 159 - 77.

Powell, G. Bingham (1982). *Contemporary Democracies: Participation, Stability, and Violence*. Cambridge, Mass.: Harvard University Press.

Rice, Susan E (2006). "The Threat of Global Poverty." *The National Interest* 83: 76-82.

Sánchez, Fabio, and Mario Chacón (2003). "Conflict, State and Decentralisation: From Social Progress to an Armed Dispute for Local Control, 1974-2002." Crisis States Programme Working Paper 70. London: Development Studies Institute.

Schady, Norbert Rüdiger (2000). "Political Economy of Expenditures by the Peruvian Social Fund (Foncodes) 1991-1995." *American Political Science Review* 94 (2): 289-304.

Stokes, Susan C. (2001). "Economic Reform and Public Opinion in Fujimori's Peru." In *Public Support for Market Reforms in New Democracies*, ed. Susan C. Stokes. Cambridge: Cambridge University Press.

Tadjoeddin, Mohammad Zulfan, and Syed Mansoob Murshed (2007). "Socio-Economic Determinants of Everyday Violence in Indonesia: An Empirical Investigation of Javanese Districts, 1994-2003." *Journal of Peace Research* 44 (6): 689-709.

Yousef, Tarik M. (2004). "Development, Growth and Policy Reform in the Middle East and North Africa since 1950." *Journal Of Economic Perspectives* 18 (3): 91-116.

Table 1: Summary Statistics, Main Variables

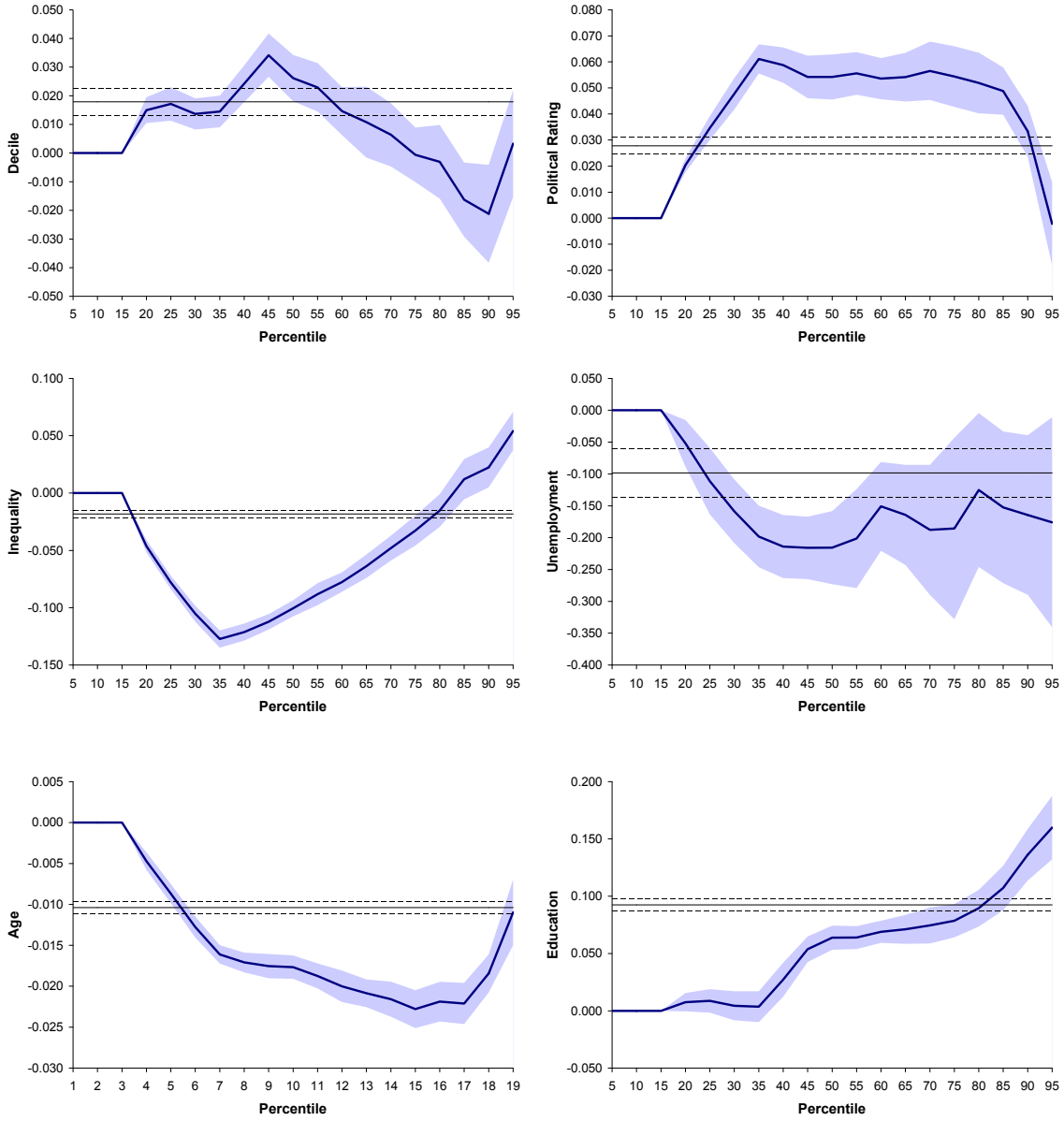
Variable	N	Mean	Std. Dev.	Min	Max	Countries
Political rating	40,754	-0.80	3.43	-9.00	9.00	42
Inequality	40,754	5.28	2.95	1.00	10.00	42
Decile	40,754	4.78	2.59	1.00	10.00	42
Unemployment	40,754	0.09	0.29	0.00	1.00	42
Location	40,754	4.82	2.50	1.00	8.00	42
Male	40,754	0.49	0.50	0.00	1.00	42
Age	40,754	43.39	16.06	15.00	98.00	42
Education	40,754	4.66	2.19	1.00	8.00	42
Bias	40,754	-0.41	2.32	-7.03	5.58	42

Table 2: Types of Political Action, Basic Regressions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Petition	**Boycott**	**Demonstration**	**Strike**	**Occupation**	**Political Action Index (Additive)**	**Political Action Index (PC)**
Political rating	0.011***	0.009**	0.009*	0.004**	0.001	0.077**	0.017***
	(0.003)	(0.003)	(0.005)	(0.002)	(0.001)	(0.032)	(0.006)
Inequality	-0.005**	0.000	-0.006**	-0.001	0.001	-0.023	-0.007
	(0.002)	(0.003)	(0.003)	(0.002)	(0.001)	(0.023)	(0.004)
Decile	0.019***	0.010***	0.009**	0.004*	-0.000	0.085**	0.024***
	(0.004)	(0.003)	(0.004)	(0.002)	(0.002)	(0.031)	(0.004)
Unemployment	-0.056**	0.002	-0.020	-0.000	0.013	-0.049	-0.043*
	(0.022)	(0.008)	(0.013)	(0.011)	(0.013)	(0.129)	(0.022)
Location	0.007	0.001	0.011***	0.006**	0.001	0.077*	0.014**
	(0.004)	(0.004)	(0.004)	(0.003)	(0.002)	(0.039)	(0.006)
Male	0.101***	0.133***	0.140***	0.101***	0.071***	1.572***	0.246***
	(0.012)	(0.010)	(0.012)	(0.007)	(0.006)	(0.078)	(0.016)
Age	0.000	-0.002***	-0.001	-0.003***	-0.002***	-0.031***	-0.003***
	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)	(0.005)	(0.001)
Education	0.055***	0.028***	0.039***	0.013***	0.002	0.296***	0.072***
	(0.004)	(0.004)	(0.004)	(0.003)	(0.002)	(0.032)	(0.006)
Bias	-0.005*	-0.011***	-0.011***	-0.010***	-0.006***	-0.126***	-0.017***
	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.024)	(0.004)
N	37918	37340	38207	37574	37401	33731	33731
R-sq.	0.156	0.110	0.082	0.085	0.078	0.106	0.136

Notes: All estimations include intercepts, country and time dummies (not reported), and are weighted by population-sample weights. Standard errors clustered by country are in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Figure 1: Determinants of Political Action, Quantile Regressions



Notes: Graphs show coefficients for covariates in regression from table 2, column (7) by sample percentiles based on quantile regressions with bootstrapped confidence intervals.

Table 3: Preferences for Political Action by Income Quintile

	Q1	Q2	Q3	Q4	Q5
Political Change	0.016***	0.015***	0.018***	0.011	0.019
	(0.006)	(0.005)	(0.006)	(0.009)	(0.013)
Inequality	-0.001	-0.003	-0.015***	-0.014*	-0.015
	(0.007)	(0.004)	(0.004)	(0.008)	(0.012)
Unemployment	0.004	-0.009	-0.185***	-0.102	0.050
	(0.046)	(0.030)	(0.050)	(0.066)	(0.064)
Location	0.010	0.012	0.013	0.022	0.026**
	(0.008)	(0.007)	(0.009)	(0.014)	(0.012)
Male	0.255***	0.275***	0.252***	0.221***	0.139***
	(0.025)	(0.024)	(0.023)	(0.040)	(0.041)
Age	-0.004***	-0.002***	-0.001	-0.001	-0.003*
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)
Education	0.065***	0.078***	0.063***	0.079***	0.071***
	(0.006)	(0.007)	(0.009)	(0.011)	(0.014)
Bias	-0.009	-0.020***	-0.012**	-0.028***	-0.022
	(0.007)	(0.006)	(0.005)	(0.007)	(0.015)
N	8360	9381	7843	5113	3034
R-sq.	0.140	0.138	0.139	0.128	0.117

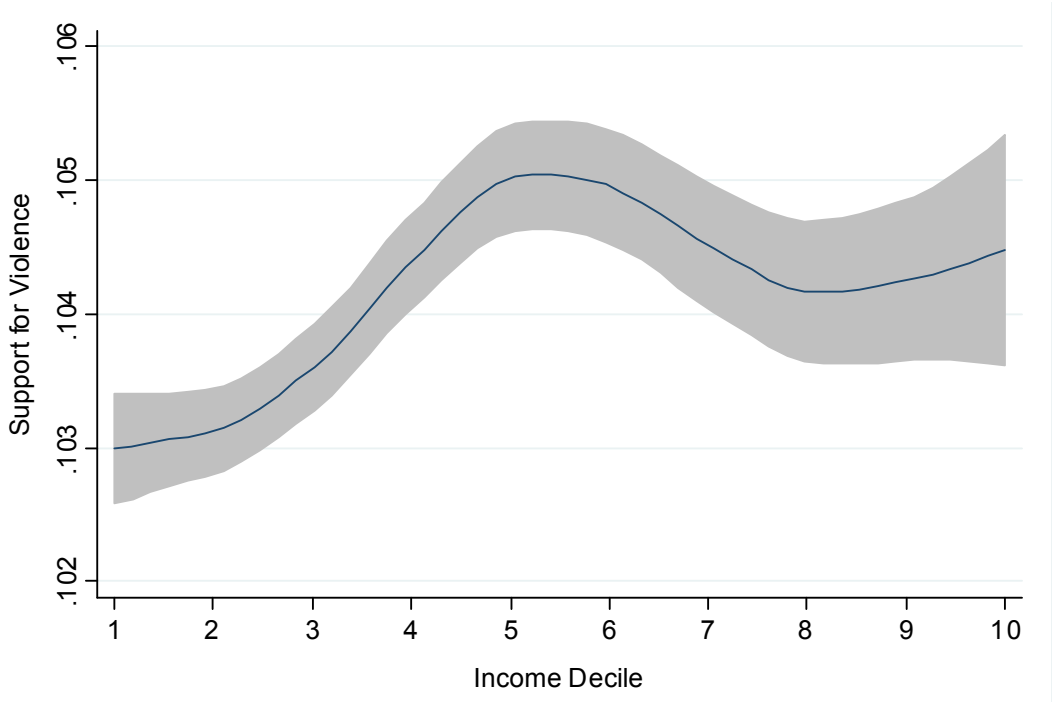
Notes: All estimations include intercepts, country and time dummies (not reported), and are weighted by population-sample weights. Standard errors clustered by country are in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4: Preferences for Revolution and Support for Violence

	Radicalism (OLS)	Radicalism (Logit)	Violence (OLS)	Violence (Ordered Logit)
Political rating	-0.007***	-0.066***	-0.007*	-0.015*
	(0.002)	(0.018)	(0.004)	(0.008)
Inequality	0.004***	0.037***	0.005	0.013*
	(0.001)	(0.011)	(0.004)	(0.007)
Decile	-0.001	-0.012	-0.002	-0.005
	(0.001)	(0.014)	(0.006)	(0.014)
Unemployment	0.008	0.059	0.052**	0.090*
	(0.005)	(0.050)	(0.024)	(0.051)
Location	-0.000	-0.004	0.005	0.013
	(0.001)	(0.012)	(0.004)	(0.008)
Male	0.023***	0.236***	0.063***	0.123***
	(0.006)	(0.071)	(0.017)	(0.035)
Age	-0.001***	-0.009***	-0.002***	-0.004***
	(0.000)	(0.002)	(0.001)	(0.001)
Education	0.001	0.009	-0.013*	-0.027**
	(0.001)	(0.015)	(0.006)	(0.013)
Bias	-0.005**	-0.048***	0.005	0.010
	(0.002)	(0.017)	(0.005)	(0.010)
N.	32647	32647	23056	23056
R-sq.	0.068		0.032	

Notes: All estimations include intercepts, country and time dummies (not reported), and are weighted by population-sample weights. Standard errors clustered by country are in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Figure 2: Support for Violence by Income Decile, Local-Polynomial Regression



Note: Graph shows isolated effect of income decile on individual support for political violence, developing countries only, based on local-polynomial regression with biweight (quartic) kernels and bandwidths of 2.0. The shaded band represents 95% confidence.

Table 5: Political Action, Quintile-Difference Panel Regressions

	Petition	Boycott	Demonstration	Strike	Occupation	Political Action	Radicalism	Violence Justified
Political rating	-0.061	-0.150***	-0.092	0.009	0.019*	0.106	0.013	-0.056
	(0.058)	(0.042)	(0.060)	(0.026)	(0.011)	(0.185)	(0.035)	(0.081)
Income	0.008***	0.003**	0.009***	0.000	-0.000	0.020***	-0.001	-0.002
	(0.002)	(0.001)	(0.002)	(0.001)	(0.000)	(0.006)	(0.001)	(0.002)
Age	0.005***	-0.004***	0.001	-0.001	-0.001***	-0.012**	-0.001*	-0.001
	(0.002)	(0.001)	(0.002)	(0.001)	(0.000)	(0.005)	(0.001)	(0.002)
Education	-0.009	-0.026***	-0.042***	0.019***	0.001	-0.103***	0.007	0.014
	(0.011)	(0.009)	(0.012)	(0.005)	(0.002)	(0.038)	(0.007)	(0.012)
Unemployment	-0.293**	0.010	-0.030	0.286***	0.061**	-0.889**	0.239***	0.063
	(0.137)	(0.099)	(0.143)	(0.061)	(0.026)	(0.439)	(0.071)	(0.118)
N.	204	200	204	204	204	200	172	112
R-Sq.	0.679	0.625	0.637	0.697	0.755	0.606	0.744	0.927

Notes: Results are from panel regressions with country-fixed effects and standard errors in parentheses. Standard errors clustered by country are in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.