Fight or Flight in Civil War? Evidence from Rebel-Controlled Syria

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Abstract

How do people respond to escalating civil war violence? Using original survey and experimental data from the ongoing conflict in Syria, we try to understand how people facing conflict select into different combatant and non-combatant roles. Examining a range of hypotheses from the existing literature, we focus here on how personal, collective, and political grievances affect decision-making at the individual level. Using a well-balanced sample of over 300 active rebel fighters, civilians from within the conflict zone, and externally displaced refugees, we observe that people with stronger regime-based grievances are most likely to mobilize for insurgency. In contrast, refugees and civilians are less revenge-seeking and more willing to support negotiations for peace and reconcile with adversaries. Our study offers both novel theoretical insights and empirical evidence of the importance of political grievances to understanding role differentiation in an ongoing civil war.

Introduction

Faced with full-scale civil war raging on their doorstep, what can ordinary people do? Despite a rich theoretical literature on this topic, it is still unclear what makes some people risk life and limb to mobilize for violence, others to remain in conflict zones as non-combatants despite high probabilities of being injured or killed, while others take considerable travel risks to seek safety in another location. Using survey and experimental evidence from inside the civil war in Syria, we seek to understand how people make critical, often life-and-death decisions in real time as conflict is unfolding. Our research focuses on the choices individuals make whether to fight, leave or stay in an environment of ongoing violence.

Examining individual preferences and motivations in the midst of conflict is a novel approach. Most evidence about insurgency violence is post-hoc, relying on retrospective interviews and surveys to understand determinants of participation in civil war or refugee flight. On one hand, retrospective studies conducted over an extended period of time could allow for greater clarity of motivations, especially if people feel pressure not to reveal their true intentions either during or in the immediate aftermath of conflict (Kalyvas 2006). Time removed from violence could potentially lessen constraints and prohibitions on speaking openly and honestly. However, research on the psychology of memory also suggests that retrospective studies may be prone to "moral rationalizations" where conflict outcomes alter one's perceptions of prior motives and beliefs (Tsang 2002). Numerous studies have shown, for example, that information and experiences after an event can influence how people recall the event and color emotional memories (Bartlett, 1932; Loftus 1992; Levine 1997; Safer et. al. 2002).[1] Collective memory, i.e. ''the representation of the past embodied in both historical evidence and commemorative symbolism'' (Schwartz 2000, p.8) could also bias the recall of critical decisions and events (Harris et. al. 2008). The timing and location of our study helps us understand how people make decisions and interpret those decisions when outcomes are still unknown.

In addition, when retrospective studies are conducted in the aftermath of an especially protracted, brutal civil war, there is obvious selection bias on survivors, and we do not know how people who survive differ from those who do not. If fighters and civilians in combat zones are disproportionately killed, then many critical actors in the conflict would be non-randomly selected out of those studies. We attempt to overcome the retrospective selection bias problem by surveying people as conflict is still ongoing and survival is still highly uncertain.

To survey combatants, civilians, and refugees under conditions of high intensity violence is extremely challenging.[2] It is difficult to gain access to sub-populations of interest due to dangerous and uncertain conditions in the field. While previous studies (ex. Humphreys and Weinstein 2008) have conducted retrospective surveys and interviews with both ex-combatants and noncombatants, we attempt to capture a broader range of subgroups to active and former

[1] Safer et. al. (2001) and Levin et. al. (2001) show that recalled emotions about a tragic event are better correlated with current feelings of grief that with an actual grief reported at the time of event. Safer et. al. (2002) show that recalled emotions are biased by information acquired later.

[2] In addition, our study takes place in the absence of any coordinated international peacekeeping intervention in the field. Conducting research under the security umbrella of peacekeeping forces would be much safer than what we have attempted to do, but then we are no longer studying decision-making under active conflict, but rather under third-party enforcement and monitoring, which is known to significantly alter individual and group level decision-making and behavior in the field (Doyle and Sambanis 2000; Fortna 2004).

rebel fighters, fighters from different groups, civilians in combat zones and refugees in camps. Our multi-group approach allows us to compare marginal differences between civilians, combatants, refugees at a time when they are still determining their respective roles in the conflict.[3]

Finally, while asking pointed questions like *Why do you stay? Why do you fight? Why did you decide to leave?* could be important to identifying individuals' stated rationales and intentions, their responses may also be subject to social desirability biases and preference falsification, especially if people may have incentives not to reveal motives for fear of recrimination and retribution.[4] We approach this problem in two ways. First, we ask direct questions to fighters, civilians, and refugees about their stated motivations for joining rebel groups, staying in conflict zones, and fleeing abroad. Then, we attempt to uncover revealed motives, relying on cross-comparisons between subsamples of fighters, civilians, and refugees to identify meaningful between-group differences. Comparisons between stated and revealed differences in attitudes and behaviors help alleviate concerns that our results are driven by response bias.

The remainder of our study is outlined as follows. First, we provide an overview of the literature on civil war participation and refugee flight. Next, we offer our theoretical perspective on the role of grievances in civil war and present hypotheses. We then discuss the appropriateness of our case selection, outline our research design and empirical strategy, summarize our data collection efforts, and present results. We conclude with discussion of how our findings inform the existing literature on civil war participation and refugee flight.

Participation in Civil War

What do people do when faced with civil war? First, we draw on a growing literature on civilians and refugees in conflict. Although previous research has examined the targeting of civilians during the civil war (Valentino, Huth and Balch-Lindsay 2004, Kalyvas 2006; Lyall 2009) and government and insurgent efforts at winning over civilian hearts and minds (Lyall et. al. 2013; Beath, Christia and Enikolopov forthcoming), little is known about who civilians are and their reasons for staying in a combat zone in the first place. Using the case of Nepal, Adhikari (2013) has made important steps trying to understand why some people stay while others leave on the micro-level, and his results reinforce evidence from prior large-N studies (Schmeidl 1997; Davenport, Moore, and Poe 2003; Moore and Shellman 2004, 2006, 2007). Specifically, Adhikari (2013) finds that exposure to violence and the threat of further violence motivates civilians to take flight, but economic means and opportunity are also important predictors of which civilians leave and which stay behind.

For those who remain in conflict zones, less is known for why some decide to take up arms while others do not. Some recent studies emphasize the blurring of lines between civilians and combatants. In particular, Kalyvas (2006) underscores the challenges of identifying combatant from non-combatant in civil conflict. In a similar vein, Wood (2003) has posited

[3] To better distinguish between initial motives as opposed to post hoc rationalizations, we can compare individuals, for example, who have only recently joined rebel groups to those who have been fighting for an extended period and refugees who are just arriving in camps to those who have been displaced for extended periods of time.

[4] This problem could also be true of retrospective studies, if people are afraid to admit their past affiliations for fear of reprisal.

complex in-group ties between rebels and civilians in conflict that breaks down the usual combatant/civilian dichotomy. For example, Parkinson (2013) has shown how women played an important support role for rebel fighters during the civil war in Lebanon, challenging conventional notions of what it means to be a combatant during wartime. Combatants often rely on active civilian affiliates to make what they do on the frontlines possible.

In contrast, other research draws clearer distinctions between combatants and civilians in conflict, emphasizing how selective incentives (Olson 1965), relative deprivation (Gurr 1970), in-group ties and bonds (Horowitz 2000), and out-group aversions (Peterson 2001, 2002) drive people to mobilize for violence. Recent studies have also shown how combatants can be distinguished by intensity of grievances. Based on surveys of rebel factions in Sierra Leone's civil war, Humphreys and Weinstein (2008) find that people with strong grievances are more vulnerable to political manipulation and more likely to engage in violence. Examining non-traditional fighters, including Hezbollah fighters and suicide bombers, Krueger and Maleckova (2003) also find that the decision to fight is a function of long-standing grievances and frustrations. Arjona and Kalyvas (2008) also conclude that both political grievances and economic deprivation were driving mobilization for violence in Colombia.

At present, it is unclear how people select into different roles during conflict. Our research will attempt to address ambiguities between civilians and combatants through the use of comparative subsamples of rebel groups, civilians, and refugees in multiple areas of contestation. In this study, we focus on grievances as a possible sorting mechanism for civil war participation and refugee flight.[5]

Theory and Hypotheses

To what extent are people who mobilize for violence driven by personal or collective grievances against some perceived rival or adversary? To unpack grievance motivations, we will draw theoretical distinctions between personal, collective-social, and political-regime based sources of grievance.

Personal grievances could provide a powerful rationale for joining rebel groups. As Kalyvas (2006) observes, personal grievances in civil war can take many forms and may be directed at any number of different targets.[6] We focus on personal grievances directed against a governing regime. At the group level, relative deprivation theory states that people are more likely to mobilize for violence when they are marginalized from political decision-making, economically disempowered, and afforded inferior social status within their societies (Gurr 1970; Tilly and Tarrow 2006). At the individual level, the desire for rebellion could be a function of the intensity of deprivation felt. Accordingly, rebel groups could attract the most economically disempowered and status-inferior members of the group. Those with greater status and

[5] We develop alternative non-grievance based hypotheses and present results in a supplementary appendix to this manuscript. Since grievances play a prominent role in the literature on civil war participation, we feel that a focus on grievances is justified and necessary. We will draw attention to other hypotheses on civil war participation (the role of selective incentives, social sanctioning for example) in subsequent manuscripts.

[6] Kalyvas (2006) shows how inter-personal grievances can be masked by loftier, idealistic intentions for fighting, which could explain the often observed phenomenon of neighbor-against-neighbor violence in civil war. People take opportunities during violence to settle scores.

opportunity might refrain from fighting or use their resources to take flight. On the other hand, revolutions are also theorized to be driven by disaffected elites (Skocpol 1979). If individuals at the top rungs of society feel the sting of deprivation more acutely than those at the bottom, they could be more likely to mobilize for violence.

To assess relative deprivation, we examine whether there are important class distinctions between fighters, civilians, and refugees within a given group. As a proxy for group status, we ask whether people who fight are poorer and less educated than others. If there are not clear status-based differences between fighters, civilians, and refugees, it could mean that relative deprivation theory functions better to explain behavior at the group-level rather than at the individual level. We test the following hypothesis about rebel group participation and refugee flight:

H1 (*Relative Deprivation*) People who fight are poorer and less educated than those who flee.

Next, we consider how grievances based on personal victimization could drive people to join insurgencies. On one hand, the loss of individual family members, close friends, the destruction of one's home and property, and personal injury at the hands of a brutal regime could be a powerful source of grievance. However, victimization could also place undue burdens on individuals preventing them from fighting and possibly compelling them to flee to a safer environment. We believe it may be useful to distinguish between direct forms of personal victimization (such as severe injury or the destruction of one's home) and more indirect victimization through the death and injury of family and friends. Direct forms of victimization, we argue, could actually prevent individuals from acting out their grievances through fighting, because they are not physically able to do so due to severe injury or, in the event their home is destroyed, they must focus on providing for now-displaced families. Given assumptions of both shortages in access to health care and housing in conflict zones, we predict that direct victimization is more likely to induce refugee flight than mobilization for violence. In contrast, indirect victimization, through the death and injury of family and friends, provides a strong grievance-based rationale for fighting and fewer constraints. We hypothesize the following:

H2.1 (*Direct Victimization*) People who flee are more likely to have experienced severe injury/property destruction at the hands of a governing regime than people who stay and fight.

H2.2 (*Indirect Victimization*) People who fight are more likely to have experienced loss of family/friends at the hands of a governing regime than people who flee.

In the absence of identifiable personal grievances, we also consider how individuals may mobilize for violence in response to collective grievances held by one's in-group against a rival out-group. Petersen (2002), in particular, has emphasized how shared in-group/out-group fears, hatreds, and resentments can be an important precipitant of violence. To the extent that a civil war can be accurately characterized by ethnic, sectarian or other meaningful in-group out-group cleavages, we anticipate that more parochial individuals would be driven to fight, while those with less in-group ties and out-group aversions would be more likely to flee from an ethnic or sectarian war that they neither support nor identify with. We test the following hypotheses:

H3 (*In-group Ties*) People who fight have stronger attachments to their in-group than people who flee.

H4 (*Out-group Aversion*) People who fight have stronger out-group aversions than people who flee.

Finally, we contemplate the role of political grievances against a governing regime. We ask whether there are political-regime based grievances that are distinct from personal grievances or collective in-group/out-group divisions. We consider three dimensions to regime-based grievances – intense vilification of the regime, a strong preference to vanquish the regime through military victory rather than negotiate for peace, and a desire to seek vengeance against regime loyalists for crimes of the past.

On vilification, we ask whether rebel fighters naturally hold the most intense hatred of the regime they are fighting against. Humphreys and Weinstein (2008) among others reason that people who harbor political grievances against a regime would be most willing to join rebel insurgencies. Refugees, in contrast, may be fleeing civil war for lack of motivation to fight a regime they do not necessarily oppose and rebel causes they do not support. However, if civilians and rebel fighters are functioning as one large fighting community, then differences in regime opposition could be negligible between them (Wood 2003). We test the following hypothesis:

H5 (*Vilification of the Regime*) People who fight will have stronger negative views of the opposing regime than people who flee.

We also consider intensity of support for regime change as an indicator of political grievance. To what extent are people willing to endure the costs of fighting to remove the regime from power, or are they amenable to bargaining with regime supporters for peace? Humphreys and Weinstein (2008) suggest that rebel fighters would be less favorable than their civilian or refugee counterparts to negotiating with the regime, preferring to fight until military victory, no matter the costs. Furthermore, if refugees are fleeing conflict for a lack of regime-based grievances, then they may be the most open to negotiating settlements to bring the war to an end. Again, Wood (2003) and Kalyvas (2006) provide a rationale for negligible differences due to the transformation of civilians and combatants into a broader fighting community. We hypothesize the following:

H6 (*Bargain for Peace*): People who fight will be less favorable to negotiating with an opposing regime than people who flee.

As a final dimension to regime-based grievances, we inquire whether rebel fighters are ultimately revenge-seeking. As a proxy for revenge motives, we ask individuals whether they would be willing to grant amnesty to members of an opposing regime – i.e. forgo justice in the interests of peace. On one hand, if fighters are more revenge-seeking, they should be most opposed to any amnesty for regime loyalists. If refugees merely want the war to end so they may return to their homes, they could be the most willing to support amnesty as part of a negotiated settlement. On the other, revenge-seeking preferences could be shared by all groups, especially

when the regime is indifferent to fighter-civilian distinctions on the battlefield and everyone is effectively treated as an enemy target. We test the following hypothesis about revenge-seeking.

H7 (*Revenge*): People who fight will be less willing to grant amnesty to members of the regime than people who flee.

Given that grievances could manifest in different forms (personal, collective, and political), how might they theoretically interact? One possibility is that grievances are cumulative, with each incidence increasing the probability of fighting in an insurgency. Those with least cause for grievance are likely to remove themselves from a fight that is not clearly their own. In this case, there should be fairly black-and-white distinctions between with rebel fighters (strongly aggrieved), refugees (least aggrieved), and civilians in the combat zone (in between). However, the effects of grievances could be more blurred, nuanced, and difficult to predict across fighters, civilians, and refugees in civil war. Grievances pulling civilians into fighting roles may compete and conflict with those pushing them to take flight.

A second related question is whether different sources of grievance carry the same weight in decision-making? We argue that political-regime backed grievances should have greater predictive power in determining fight or flight in civil war than personal or collective grievances. With respect to relative deprivation, we suspect that rebel fighters often come from many different walks of life and are not confined to a particular sub-class of the poorest of the poor or the least educated. Fighting often requires higher order training and skills to handle complex weaponry and understand insurgency tactics. We also have doubts about personal victimization driving rebel recruitment, in part because of the potential destabilizing effects victimization could have on an individual's means and ability to fight. Furthermore, collective grievances against out-groups are problematic, in part, because regime supporters and out-groups may not clearly overlap, or in-group/out-group cleavages are not helpful for identifying friend from foe in a combat environment. Some out-group members support the regime, but others support rebel insurgents. Instead, political-regime based grievances provide the clearest link between motivational desires for regime change and concrete action through participation in rebel insurgency. To be sure, there could be other non-grievance based explanations for rebel recruitment and refugee flight, including selective incentives, social sanctioning pressures. However, if the ostensible goal of insurgency is revolutionary regime change, regime-based grievances should be most pronounced in the goals and motives of active rebel fighters for the logic of Humphreys and Weinstein (2008) to hold.

In summary, we seek to understand how decision-making during conflict is affected by different sources of grievance, using novel data from an important case of violence at a critical moment when war is still ongoing and people are still actively deciding what to do.

Background on Syria

To test hypotheses about grievances in civil war, we conduct our research in war-torn Syria. In March 2011, in the wake of the Arab Spring, violence in Syria broke out in response to a revolutionary movement to oust President Bashar al-Assad from power.[7] When the Assad regime responded to protesters with a brutal military crackdown, opposition groups organized an

[7] The opposition was often characterized as peaceful, secular, and democratic at the beginning of the revolution but this depiction is now more contested.

armed insurgency, and the Syrian civil war was underway. For much of the first two years of the war, rebel groups, loosely organized under the umbrella of "the Free Syrian Army", fought against forces loyal to the Assad regime for control of key towns and supply routes. However, neither side was able to achieve a decisive military victory on the battlefield. In desperation, the Assad regime turned to increasingly brutal methods to route insurgents, including indiscriminate bombing of rebel-controlled towns and villages and the use of chemical weapons. While the United States threatened military intervention, it opted instead to provide economic aid and military training to rebel groups, while Assad pledged to dismantle his chemical weapons arsenals and take part in a series of peace talks with rebels. Despite these commitments, the war raged on. It was in this environment that our study began in August 2013.

Since our field work in Syria was completed, the Free Syrian Army (FSA) has become increasingly fragmented, and new groups with stronger Islamist orientations have emerged to challenge both the FSA and the Assad regime for control of Syria. At present, there are now multiple insurgent groups, including the Al Qaeda backed Al-Nusra Front, the Iraqi-led Islamic State, moderate Syrian Islamist groups like Ahrar al-Sham, and the degraded FSA, which are fighting both against the Assad regime and one another. In the meantime, nearly 200,000 people have been killed in the conflict and millions more have been displaced internally and abroad since the war began three years ago.

We argue that Syria is an appropriate case to test grievance-based theories of violence. Given the purported goals of the initial Syrian revolution – removing the Assad regime from power – the origins of the subsequent armed insurgency clearly speaks to grievance-based motivations. In addition, the Syrian case enables us to test collective social-sectarian grievances. Sectarian divisions are often presumed to exist between Sunni Muslims and the Alawite minority, with Sunni Muslims supporting the insurgency and Alawites supporting Assad. If deep-seated sectarian grievances are fueling the conflict, then the Assad regime merely represents a proxy for underlying grievances against Alawites.[8] By testing hypotheses of regime-based grievances against collective social-sectarian grievances, we can tease out whether regime opposition or sectarian hatreds are driving people to fight.

Finally, we are able to assess the extent to which differing degrees of relative deprivation and victimization affect decision-making. In our research, we examine individual grievances in communities of well-defined in-groups (Syrian Sunni Muslims) inside rebel controlled territory and refugee camps abroad who fled those same communities. Class-based differences in education and status should be apparent in comparisons between fighters, civilians, and refugees. Also, with the war now in its third year, we can assess the toll of victimization. Importantly, the perpetrators of violence against subjects in our study are external to the local community. Victimization was a result of aerial bombardment, shelling, and sniper attacks by forces loyal to the Assad regime. At the time of our study, subjects in our sample did not face the immediate problems of neighbor-against-neighbor or otherwise intra-group violence described by Kalyvas (2006). Since our data collection was finalized, however, Sunni-on-Sunni violence has increased as various rebel factions battle one another in formerly uncontested areas. Our study was conducted in a unique window where rebel groups were still aligned against the Assad regime, and victimization of Sunni Muslims was almost exclusively regime-based. In addition,

[8] Some scholars, however, contend that this is an oversimplification of complex divisions in Syrian society and dispute that the current conflict is sectarian in nature. See Seale (1986) and Heydemann (1999) for historical background and Pierret (2013); Hashemi and Postel (2013) for analysis of the conflict.

victimization in our sample is so widespread that we can capture meaningful between-group differences even with small samples. In an environment of near indiscriminate violence, everyone in rebel controlled territory, whether they supported the insurgency or not, was a potential target for attack by the Assad regime, making Syria an appropriate case for evaluating victimization-based grievances.

Research Design

Our research design focuses on conflict at the micro-level, examining how individuals are affected by violence within their local environment. As such, our research employs a multi-method approach consisting of survey, experiments, and in-depth interviews. For ecological validity, we conduct our study in multiple locations and among various sub-populations of interest to include civilians, rebel fighters, and refugees.

All subjects recruited for our study begin by taking part in several decision-making tasks known as dictator games.[9] Each subject must decide how to divide a sum of money between themselves and anonymous counterparts of varying in-group/out-group identity. We incentivize self-interest by offering randomized pay-offs for whatever is kept by the subject in each experiment. The dictator games capture an element of grievances by providing a behavioral measure of how individuals threat in-group others relative to out-groups. The dictator games are followed by a series of risk games. Each subject must decide between a sure pay-off or choosing among several chance pay-offs with different pay-off amounts and probabilities. The risk games are included to provide a behavioral measure of risk tolerance and with adaptations of the Eckel and Grossman (2002) and Hold and Laury (2002) protocols.[10]

Following the experiments, subjects took part in a survey. Our survey instrument is wide-ranging, encompassing a number of themes. It begins with an emotional battery, followed by demographics, rebel group participation, refugee status, and then attitudinal questions about perceptions of safety and security, general outlook for the future, ethnicity, religiosity, social identity and inter-group relations. We then introduce questions specifically about the Syrian conflict including views of different combatant groups, the peace process, international interventions, and Syria's future to include preferences for democracy and post-war reconciliation. We conclude the survey with questions about victimization by violence, displacement, and property damage.

After the survey, additional data were collected on respondents' safety and comfort levels with the location of the interview and the questions asked by the interviewer. We also included similar items for the interviewer about safety and comfort levels while conducting each interview. As an incentive to participate, subjects were paid approximately $5 for their time, as the study generally took between 45 minutes to an hour to complete. All interviews were conducted by one of the authors, face-to-face, in Arabic, with assurances of privacy and confidentiality in what both the subject and interviewer deemed to be a safe location.

Sampling and Data Collection

[9] Dictator games have been shown to be a useful instrument for gaging altruistic behavior toward anonymous recipients under a range of different treatments (see Engel 2011 for a meta-analysis)

[10] Experimental protocols are provided in a supplementary appendix to the manuscript. We test hypotheses about risk tolerance in a separate manuscript.

Sampling and data collection were major challenges for this project due to potential risks posed to our interviewer as well as subjects inside Syria. Minimizing risk to our participants was the utmost priority. Because we are targeting difficult to reach subpopulations in a dangerous environment with unknown population parameters, we utilize cluster sampling methods to better target sub-populations of interest.[11] We identify two regions inside rebel contested areas of Syria for data collection. First, we sampled in and around Aleppo, Syria's second largest city, which has experienced intense, ongoing violence between rebel forces and the Assad regime. As a comparison point, we also sample in and around the city of Idlib, which was generally considered a safer area for rebel forces and civilians at the time of our research than Aleppo.

For recruitment of civilians, we avoid random route sampling due to inherent uncertainties and dangers of movement from street to street. We also refrain from door-to-door sampling to protect our interviewer. Instead, we identify areas of the city, locations where civilians are congregated in public. These clusters are our initial sampling point. Interviews are conducted with no more than five respondents per cluster and no more than two clusters for a given street or neighborhood. We limit our interviews to 1 person per household or extended family. If multiple family members are able and willing to participate, we select one family member at random. Each interview was conducted in an open, public location for safety concerns, but the interviewer kept a distance from crowds to ensure privacy, and did not permit others to listen in on the interview once in progress. We entrusted our review to use discretion when deciding where to conduct interviews.

To access flight motivations in civil war, we survey a sample of refugees from a UNHCR run refugee camp in Kilis, Turkey, which is just across the border from Syria and a primary destination for refugees fleeing the Aleppo and Idlib regions. Inside the camp, the interviewer followed a random route, interviewing no more than 1 per household and no more than five subjects on a given street or pathway.

For interviews with rebel fighters, we sample from two predominant groups – rebels fighting with the Free Syrian Army (FSA) and Islamists with various groups including the Islamic Front/Ahrar ash-Sham and Al-Nusra Front. We identify locations where rebel fighters are currently positioned based on local knowledge. Interviews of FSA rebels are conducted in both Aleppo and Idlib regions. Interviews with Islamists are only in the Idlib area.[12] Although we conducted extensive qualitative interviews with people on all levels of the chain of command, we limited our survey to only rank-and-file FSA and Islamist fighters, not officers or unit leaders. For a given unit or cluster of FSA or Islamist rebels, we interviewed no more than five soldiers per cluster or unit. We also interviewed former-FSA fighters who have since stopped fighting

[11] Interviewing rebel fighters and civilians in a combat zone potentially exposes both the enumerator and subjects to risk. We devised a cluster sampling method, which would minimize potential risks to all our study participants relative to the risks they assume by remaining inside an active combat zone. Cluster sampling enabled us to include a random element to the sample selection process while taking into account the safety and security of our participants. Finally, consistent with ethnographic approaches to in-depth interviewing and field research methods, we believe that surveying active rebel fighters and civilians in combat requires the enumerator to gain trust and acceptance within the community before they are willing to grant permission/consent to be interviewed. This design received IRB approval.

[12] Permission to conduct surveys with FSA rebel fighters was granted by their superiors and by an informal "Islamic court" for interviews with Islamist fighters.

and now reside in Turkey to capture the behavior of those who join and, for various reasons, have exited the conflict.[13]

Because of safety and security concerns as well as practical challenges of conducting field research, we collected data incrementally from August 2013 till May 2014 in a series of month-long waves. Our response rate was over 80% in each location among those contacted for an interview, which we believe is due in part to financial incentives to participate in the study. Even rebel fighters had periods of rest during the conflict and were eager to express their views. In total 305 subjects took part in the study as indicated in Table 1 below. We note that our samples are remarkably well-balanced across gender, age, education, and whether the subject was employed before the war began (a proxy for pre-war income/savings). Nevertheless, we include extended controls for demographics in our subsequent analysis.[14]

Table 1 about here

Empirical Strategy

We begin by examining a range of grievance instruments in our survey data. We compare stated preferences for joining rebel groups, staying in the combat zone as civilians, and fleeing abroad. Then, we use regression models to examine revealed differences in grievances across groups. For example, if fighters claim to be joining rebel groups out of desire for revenge, to what extent do they exhibit out-group aversions that are markedly greater than civilians or refugees? Our reasoning is that indirect measures of preferences are less susceptible to social desirability biases or other contaminating effects. Indirect measures of preferences and motivations also provide an important robustness check on what people claim as their goals, motivations, and intentions.

To test hypotheses on why individuals select into different roles in civil wars (combatants, noncombatants, refugees), we turn to binary and multinomial logit models which predict the probability of choosing or being assigned to different roles based on observable characteristics of individuals in our sample. Our key outcome or dependent variables of interest is a discrete variable (Y_{ij}) denoting whether individual (i) is a member of group (j). In the binary logit versions of the model, our comparison groups consist of a fight model (combatants vs. non-combatants) and then a flight model (refugees vs. non-refugees). In the multinomial logit model, we expand the group outcomes to include the five broader subgroup categories (FSA fighters, Islamists, ex-fighters, civilians, refugees). Our key explanatory variable (Γ_{ij}) consists of different attitudinal and behavioral measures of grievances, while X_{ij} is a vector of controls for covariates such as gender, age, and education.

$$Y_{ij} = \beta_0 + \beta_1\Gamma_{ij} + \beta_2 X_{ij} + \varepsilon_{ij}$$

Of course, all our primary variables of interest are observational in nature, so any causal claims about how and why individuals take on different roles in conflict are subject to

[13] We will highlight and discuss differences between active and former rebel fighters in more detail in a subsequent manuscript.

[14] We also use covariate matching techniques (propensity score matching, coarsened exact matching) for robustness checks for possible selection on observables in our data.

identification problems due to endogeneity, selection, and sorting effects. We apply extended controls (X_{ij}) based on gender, age, education, and prior employment (a proxy for income) to help deal with potential sorting effects and selection on observables. We also employ locational/temporal fixed effects and covariate matching as robustness checks.[15]

Finally, because individuals are already in their respective roles at the time of our study (fighters, refugees, civilians), we need to distinguish between a priori motivations from socialization effects after the fact. For that, we can control for time in group. For example, we know how long individuals have been fighting with various rebel groups or how long they have been living as refugees abroad. By comparing seasoned fighters to new recruits, we can estimate the strength of socialization effects over time. This helps us assess whether, for example, rebels enter into a conflict with a long list of grievances or whether they simply acquire those grievances over time as a consequence of fighting.

Analysis

We first provide an overview of stated rationales individuals give for fighting with rebel groups, fleeing abroad, and remaining inside Syria as civilian non-combatants. We asked FSA and Islamist rebels why they joined their respective groups and why they think others joined. We asked civilians in Syria why they are staying and refugees why they left. We also probe why they did not join rebel groups. In each case we offered respondents a range of options, inquired if there were other reasons we had not considered, and then prompted them to choose the most important reason among the options they selected. Their responses to these questions are provided in Appendix Tables 1.A-E and are briefly summarized as follows.

Self-reported Goals and Motivations

At first glance, we observe mixed motivations and rationales for fighting, leaving, and remaining in Syria.[16] Some responses suggest underlying grievances may play a role in decision-making while others do not. For example, many refugees in Turkey claim non-grievance based reasons for leaving such as risk aversion (Appendix Table 1.A). They left because Syria is too dangerous. Social sanctioning pressures from friends and family also played a role in convincing them to leave Syria. Selective incentives related to work and family responsibilities are also prevalent, which could all suggest weak commitments to rebels and their causes.

Inside Syria, civilians appear divided (Appendix Tables 1.B-C). Some are clearly staying to support rebel fighters. They may not take up arms themselves because they do not have skills required for the combat, but they are there to help the rebel cause in some other capacity. Others, however, appear to be there to protect family and property and would be willing to leave if the means and opportunity presented itself. They are not there to aid rebel fighters and may not share their goals.

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[15] There may also be potential unobservable differences. To deal with selection on unobservables, we can also follow Altonji et. al. (2005) by considering how strong an omitted variable would need to be to explain away the effects of our covariate of interest and observable controls.

[16] More detailed discussion of Appendix Table 1.A-E responses is provided in the supplementary appendix.

In contrast, most rebel fighters claim grievances against the Assad regime as a primary reason for fighting (Appendix Tables 1.D-E). They are willing to risk their lives not only to defend the community, but are also to take revenge against Assad loyalists. Although Islamist rebels are inspired by goals of building an Islamic state, this seems to be a secondary motivation compared to achieving victory and vengeance against Assad's forces.

In general, our self-reported responses support the Humphreys and Weinstein (2008) view that rebel forces can be empirically distinguished from civilians and refugees based on grievances. However, the extent to which the insurgency is fueled by a combination of collective grievances against Alawites, political grievances against Assad, and/or grievances resulting from personal experiences such as victimization during the war is unclear. To provide a more refined understanding of the role of grievances, we compare between-group variation in attitudes and behavior using regression analysis on distinct aspects of political, collective, and personal grievance. We begin with hypotheses of personal grievance.

Sources of Personal Grievance

First, we consider whether people who join rebel groups represent an economic underclass of society. If our relative deprivation hypothesis (H1) is correct, less aggrieved wealthier individuals will take the opportunity to leave Syria, leaving only the poorest of the poor to stay and fight. Of course, this could also be a function of selective incentives rather than grievances. Civilians stay and fight only for lack of resources to leave. However, as we note in Table 1, our samples are remarkably well-balanced on education and prior employment. In Table 2 below we also compare active and former rebel fighters, civilians, and refugees on levels of education, prior employment (a proxy for prior income) and find little difference between groups. Consistent with prior findings by Berman et. al. (2011), FSA rebel fighters, civilians, and refugees come from similar walks of life. Higher-educated persons with marketable skills are apparently discounting opportunity costs when joining rebel forces. We find little evidence that rebel fighters and civilians in Syria are comprised of the poorest of the poor, or an aggrieved economic underclass.[17] We do not find support for H1.

Table 2 about here

Next, we evaluate individual-level grievance motivations based on a range of victimization indicators (H2). In Table 3 below, we present logit models of self-reported victimization. First, we begin with direct victimization in the form of personal injury and property destruction (H2.1). Over half our sample report experiencing personal injury and nearly one-third of our sample report some form of property destruction. In Model 2.a we find that differences in personal injury experiences are not significant across groups. However, one possibility is that we are selecting on only people with minor injuries, as those with more serious injuries remain in hospitals or lack the capacity to conduct interviews. We find more support for H2.1 in Models 2.b-e which assess differences in property destruction. People inside the combat

[17] Staying in Syria is potentially more costly than fleeing abroad. Refugees are provided basic necessities in camps. People who remain inside Syria must purchase food and supplies at high costs due to scarcity. This may also explain why those who stopped fighting for FSA and fled to Turkey are of more working class background (Table 2).

zone (FSA, Islamists, and civilians) are less likely to have suffered property damage and destruction than those who are displaced in Turkey. Rather than joining the fight, people who lose their homes and business are more likely to flee abroad.

Next, we examine the possible effects of victimization by loss of individual family members and close friends (H2.2). Over two-thirds of our sample report that family members and close friends have been injured, killed, or are missing since the war began. Islamists, in particular, are more likely to have experienced victimization of family and friends compared to others. Of course, people who remain in combat zones could experience more victimization, so it is an effect of the decision to remain in a combat zone rather than a cause. However, we do not find that time serving with rebel groups is a significant predictor of victimization. With the possible exception of Islamists, individual grievances resulting from victimization does not help us distinguish between FSA rebels, civilians, and refugees, who experience comparable losses of family and friends. Hence, we find only partial support for H2.1 and H2.2.

Table 3 About Here

Sources of Social Sectarian Grievance

We now turn to questions of collective grievances based on sectarianism. We hypothesized that individuals with stronger ties to their religious in-group (H3) and greater out-group aversions (H4) are more likely to stay and fight. In Table 4 below, we first consider in-group sectarian ties. As our sample is made up almost entirely of Sunni Muslims, we examine differences in religiosity across groups (Model 3.a) and find that intense feelings of religiosity are not exclusive to rebel fighters. There are also significant gaps between FSA and Islamist rebels, where Islamists attach far greater importance to religion. Using social distance as another proxy for sectarianism, we then ask about how close people feel to those of their same religion compared to others in Syria (Model 3.b) and to Sunni Muslims in Syria specifically (Model 3.c). We find that Islamists hold the strongest attachments to their religious in-group, but differences among FSA rebels, ex-FSA, civilians and refugees are less clear. Therefore, we only find support for H3 with respect to Islamist fighters.

We then examine out-group aversions (H4), focusing on the Alawite minority, who are often characterized as supporters of the Assad regime. We ask subjects how close they feel to Alawites in Syria (Model 4.a). Again, Islamist fighters are more intensely sectarian than others. FSA fighters, in contrast, feel much closer to Alawites. We also consider blame attribution as alternative measure of out-group aversion. We ask subjects whether Alawites in Syria deserve blame for the ongoing violence. In Model 4.b we again find that FSA fighters are much less blaming of Alawites than Islamists. However, refugees in our sample appear more sectarian than many civilians and FSA fighters in the combat zone, so H4 appears valid only for Islamist fighters.

As a robustness check on sectarianism, we employ a behavioral measure of in-group/out-group loyalties and aversions. We utilize a dictator game where we ask subjects to contribute a portion of their potential earnings from participating in this study to alternate recipients of varying identity. We ask subjects to distribute 500 Syrian pounds (about $5) between themselves and people residing in their local community (a proxy for Sunni Muslims) Assad-controlled territory (a proxy for Alawites). Compared to in-group altruism where everyone was

extraordinarily pro-social (Model 4.c), few subjects are willing to give any money to out-groups (Model 4.d). In both cases, we do not find behavioral evidence to support the hypothesis that fighters are more sectarian than civilians or refugees.

In summary, while there are clear sectarian divisions between how Sunni Muslims view and treat one another compared to Alawites, these distinctions are not sufficient to understand why some people chose to fight against the Assad regime. Strongest support for H3 and H4 is found among the behavior of Islamists, suggesting that those with sectarian grievances differentiate between rebel groups. FSA fighters are no more parochial either in terms of in-group bonding or out-group aversion than non-combatant civilians and refugees.

Table 4 About Here

Sources of Political Grievance

We now examine the extent to which different groups vilify the Assad regime and their supporters (H5). First, we inquire whether respondents draw distinctions between Alawites in general and the Assad regime using measures of blame attribution and social distance as proxies for vilification. When asked who deserves blame for the ongoing conflict, 100% blame the Assad regime, but fewer (76%) blame Alawites. We also ask subjects how close they feel to supporters of the Assad regime compared to Alawites and find that while most (80%) do not feel close to Assad supporters, fewer (57%) feel the same about Alawites. As a behavioral measure, we also had respondents decide how much money to keep for themselves and how much to send to an Assad supporter in a dictator game. Paired t-tests indicate that subjects are willing to give less to a declared Assad regime supporter than to someone who happens to reside in Assad-controlled territory, which we use as a proxy for Alawites ($t = 3.43$, $p = .0004$). We then compare views of Assad loyalists across groups in our sample (Table 5 Model 5). We find that Islamists are most socially distant to supporters of the Assad regime, while other groups are not clearly distinguished from one another. Hence, H5 is best supported by the attitudes and behavior of Islamist fighters, but all groups are more distant, blameful, and punitive of declared Assad loyalists than of Alawites in general. Political-regime based grievances appear to cut deeper than sectarian divides.

If grievances are primarily directed at the Assad regime, we also anticipate that rebel fighters will be far more committed to military victory and less willing to negotiate for peace with Assad's forces compared to civilians and refugees (H6). In Model 6.a we find that rebel fighters are much more likely than civilians to agree that Assad should be defeated no matter the costs. Conversely, civilians and refugees are more likely to support an immediate ceasefire to negotiate for peace (Model 6.b). Overall, there is strong support for H6.

As a proxy for revenge-seeking, we also find that rebel fighters are also less willing to trade justice for peace (H7). We ask whether they think everyone in the Assad regime should be held accountable for war crimes or only the top leadership. In support of H7, rebel fighters are far more committed to holding everyone linked to the Assad regime accountable for crimes committed during the war (Model 7.a). Refugees and civilians are more willing to support a general amnesty in the interests of peace, undercutting the notion that they are as heavily aggrieved as rebel fighters. We find strong support for H7.

Table 5 about here

In summary, political and regime grievances highlight salient differences between combatants and non-combatants, civilians and refugees. In the case of Syria, rebel fighters report that they join for the sake of regime change, while civilians and refugees are less inspired by these goals and do not join. Furthermore, civilians and refugees are willing to consider negotiated settlements for peace that may include amnesty and reconciliation with opposition groups, something that rebels are far less willing to do. Overall, we find evidence that political and regime grievances matter in distinguishing those who participate in civil war from those who does not.[18]

Discussion and Conclusion

In conclusion, our research provides a unique glimpse into possible sorting mechanisms that are taking place between committed fighters, civilians and refugees in the midst of civil conflict. We observe mixed motivations and preferences in different subpopulations of civil war participants (rebel groups, civilians, refugees). People are fighting, leaving, and staying for myriad, complex reasons, but grievances play an important role in distinguishing combatants and non-combatants in our sample. Our research advances the theoretical literature on conflict participation by unpacking the concept of grievances into different composite forms (personal, collective, regime-based). Based on unprecedented access to empirical data from an intense, ongoing conflict, we find that not all grievances are equivalent predictors of who joins rebel insurgencies.

First, political-regime based grievances matter most. We find evidence of strong sorting on political, regime-based grievances between combatants/non-combatants in our sample. While rebel fighters, civilians, and refugees are united in their vilification of a brutal, authoritarian regime, rebel fighters are much less willing to negotiate for peace than civilians or refugees, wanting nothing less than victory and vengeance. Our results speak to work by Humphreys and Weinstein (2008), Lyall (2009); Lyall et. al (2013) regarding how regime-based violence can fuel insurgencies within a civilian population. In real time, our research shows how people respond to regime-driven violence by mobilizing for rebellion.

In contrast, other forms of social sectarian and personalized forms of grievance are less predictive of role differentiation in civil war. Here, our results support work by Kalyvas (2006) and Wood (2003) on the blurring of lines between combatants and non-combatants. On the personal level, we also find, like Berman et. al. (2011), that fighters, civilians, and refugees come from different walks of life and cannot be readily type-caste by class, education, or employment. Rebel fighters do not clearly emerge from an under-class of the poorest of the poor.

We also advance the literature by disaggregating victimization-based grievances. We find that the loss of family and friends is an especially powerful grievance motive for fighting.

[18] Our results here are robust to alternate specifications and models using temporal fixed effects. Also, when we control for how long fighters have been actively fighting, how long refugees have been living in camps, and how long civilians have been living in their current locations, we find the effects of time are negligible or not significant. This helps reduce concerns that our observations of political grievances are primarily endogenous to socialization effects of fighting, staying, and leaving - mere rationalizations after the fact.

However, other forms of victimization, such as the destruction of housing, are more likely to induce people to take flight. By specifying how different forms of state repression may affect incentives for refugee flight, our findings help inform observations from research at the macro-level (ex. Davenport et. al. 2003; Moore and Shellman 2007).

Regarding collective grievances, we find strong sectarian divisions in our sample. Consistent with Petersen (2002), individuals exhibit hyper-polarized views of in-groups vs. out-groups. Behaviorally, subjects are exceedingly pro-social to in-group members and punitive of out-groups. However, because sectarian divisions permeate the group, they are not clearly predictive of who fights and who does not. On one hand, this finding supports work by Fair et. al. (2010) that intense religiosity and sectarianism are not exclusive to fighters. However, we also observe that Islamist fighters are significantly more sectarian than comparable FSA fighters, suggesting that collective grievances could be important for selection into rebel groups with different purported goals.

Finally, our research offers an important new baseline for evaluating the development of grievances during and after violence. In retrospective studies, it is unclear the extent to which people re-imagine their experiences through the lens of conflict outcomes in a reconciled post-war society. We also know that some of those who are intensely involved in conflict do not survive to recount their experiences. The effects of healing over time and selection on survivors may discount the raw intensity of grievances held by those who fight and die for salient political causes. In an ongoing civil war, we find that such grievances play an important role in the process of insurgency mobilization and refugee flight.

Table 1. Descriptive Statistics

	Mean	SD	N
FSA fighters	0.20	0.40	305
Islamist fighters	0.16	0.37	305
Civilians inside Syria	0.28	0.45	305
Refugees in Turkey	0.20	0.40	305
Ex-FSA in Turkey	0.16	0.37	305
Aleppo	0.31	0.46	305
Idlib	0.33	0.47	305
Turkey	0.36	0.48	305
Female	0.12	0.33	305
Age	29.80	9.39	296
Education	2.47	0.72	296
Employed	0.84	0.37	297

Balance across sub-samples (Combined KS-statistics)

	Fighters vs. non-fighters	Refugees vs. non-Refugees	FSA vs. Islamists	Fighters vs ex-fighters	Fighters vs. civilians	Fighters vs. refugees	Refugees vs. Civilians
Female	0.05	0.06	0.09	0.09	0.08	0.08	0.03
Age	0.06	0.16	0.18	0.17	0.06	0.14	0.12
Education	0.08	0.03	0.07	0.25**	0.09	0.05	0.09
Employed	0.00	0.09	0.04	0.00	0.09	0.07	0.13

*** p<0.01, ** p<0.05, * p<0.1

Table 2. Relative Deprivation Grievances

	(1)	(2)	(3)			
	fighters	refugees	FSA fighters	Islamist fighters	Ex-fighters	Civilians
Female	-0.411	0.538	0.0603	-16.47	-16.16	0.237
	(0.410)	(0.430)	(0.517)	(1,201)	(1,065)	(0.503)
Age	-0.00559	0.0326*	-0.0261	-0.0320	-0.058**	-0.0181
	(0.0165)	(0.0190)	(0.0256)	(0.0251)	(0.0261)	(0.0236)
Education	0.0984	-0.146	0.304	-0.0135	-0.515	0.547*
	(0.199)	(0.240)	(0.309)	(0.329)	(0.328)	(0.299)
Employed	-1.361	-0.0554	-15.83	-0.604	0.614	0.344
	(1.127)	(0.912)	(2,698)	(1.313)	(1.061)	(1.341)
Professional	1.324	-0.327	16.32	0.501	-0.558	0.447
	(1.115)	(0.904)	(2,698)	(1.301)	(1.051)	(1.286)
Laborer	0.913	-1.225	16.52	1.240	0.555	1.786
	(1.124)	(0.953)	(2,698)	(1.342)	(1.074)	(1.321)
Student	1.273	-0.253	16.36	0.264	-0.653	0.538
	(1.118)	(0.920)	(2,698)	(1.325)	(1.056)	(1.313)
Constant	-0.449	-1.634*	-0.419	1.010	2.658**	-1.581
	(0.744)	(0.879)	(1.184)	(1.186)	(1.166)	(1.167)
N	284	284	284			
LL	-183.6	-139.5	-417.4			

Note: Model 1 and 2 estimated with by logit. Model 3 estimated by multinomial logit. Education is measured on an increasing 4-point scale. Dummy variables are used for whether the subject was employed or unemployed, a blue-collar/manual laborer, a white-collar professional, or a student before the war. Refugees are the baseline comparison group in model 3. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 3. Victimization-Based Grievances[19]

Direct Victimization by Injury, Loss of Home, Livelihood							
	(1)	(2)	(3)				
Model	Fighters	Refugees	FSA	Islamists	Ex-FSA	Civilians	N
Personally injured	0.045	-0.115	0.127	0.228	0.756*	-0.227	284
(2.a)	(0.260)	(0.306)	(0.385)	(0.407)	(0.418)	(0.355)	
Home damaged	-0.598**	1.387***	-2.159***	-0.808*	-0.590	-1.924***	284
(2.b)	(0.267)	(0.317)	(0.452)	(0.416)	(0.413)	(0.410)	
Home destroyed	-1.329***	1.074***	-1.425***	-2.283***	-0.0883	-1.047***	284
(2.c)	(0.308)	(0.312)	(0.426)	(0.551)	(0.408)	(0.382)	
Home confiscated	0.203	0.837**	-2.348***	0.629	-0.233	-2.359***	284
(2.d)	(0.293)	(0.332)	(0.661)	(0.421)	(0.443)	(0.593)	
Business damaged	-0.200	0.558*	-1.307***	0.178	0.405	-1.303***	284
(2.e)	(0.277)	(0.321)	(0.467)	(0.424)	(0.426)	(0.432)	
Indirect Victimization by Loss of Family and Friends							
Family injured	0.380	-0.279	0.105	0.982**	-0.0428	0.242	284
(2.f)	(0.260)	(0.302)	(0.383)	(0.445)	(0.406)	(0.366)	
Family killed	0.334	-1.126***	0.619	1.906***	2.039***	0.764**	284
(2.g)	(0.264)	(0.310)	(0.385)	(0.472)	(0.479)	(0.370)	
Friends injured	0.665**	-1.279***	0.922**	2.312***	18.18	0.267	284
(2.h)	(0.290)	(0.309)	(0.399)	(0.553)	(1,106)	(0.366)	
Friends killed	0.382	-1.065***	0.576	2.070***	1.907***	0.752**	284
(2.i)	(0.287)	(0.311)	(0.389)	(0.554)	(0.510)	(0.376)	

*** p<0.01, ** p<0.05, * p<0.1

[19] NOTE: Models 1, 2 are estimated by Logit regression where the dependent variable is whether the subject is a rebel fighter (1), refugee (2). Model 3 is estimated by multinomial logit using the five group categories (FSA fighter, Islamist fighter, ex-FSA fighter, civilian in Syria, civilian refugee in Turkey). Refugees are the comparison group in Model 3. All include extended controls for gender, age, education, and prior employment. Only grievance coefficient estimates (Γ_{ij}) are reported above to economize space. Robust standard errors in parentheses. See Appendix Table 2 for variable description and coding.

Table 4. Social Sectarian Grievances

Model	(1) Fighters	(2) Refugees	(3) FSA	(3) Islamists	(3) Ex-FSA	(3) Civilians	N
Importance of Religion (3.a)	0.540***	0.364**	-0.419**	1.450**	-0.438*	-0.904***	283
	(0.163)	(0.148)	(0.196)	(0.722)	(0.233)	(0.190)	
Close to same religion (3.b)	0.385**	0.310	-0.844***	15.45***	-0.305	-0.859***	280
	(0.156)	(0.194)	(0.250)	(0.328)	(0.295)	(0.238)	
Close to Sunni Muslims (3.c)	0.553***	0.217	-0.0160	0.551*	0.0650	-0.850***	278
	(0.183)	(0.211)	(0.272)	(0.327)	(0.291)	(0.254)	
Close to Alawites (4.a)	-0.393**	-0.599***	0.824***	-2.077***	0.949***	0.955***	278
	(0.181)	(0.194)	(0.255)	(0.733)	(0.264)	(0.245)	
Blame Alawites (4.b)	-0.0641	1.105***	-1.436***	-0.622*	-1.283***	-1.054***	203
	(0.162)	(0.299)	(0.345)	(0.377)	(0.323)	(0.378)	
Dictator: Send to In-group (4.c)	0.000	0.001	-0.000		-0.005***	-0.000	207
	(0.001)	(0.001)	(0.001)		(0.002)	(0.001)	
Dictator: Send to Out-group (4.d)	-0.000	-0.005***	0.004*		0.008***	0.005**	216
	(0.001)	(0.002)	(0.002)		(0.002)	(0.002)	

*** p<0.01, ** p<0.05, * p<0.1

NOTE: Models are the same as in Table 3. Refer to Footnote 18 for further explanation.

Table 5. Political, Regime-based Grievances

Model	(1) Fighters	(2) Refugees	(3) FSA	(3) Islamists	(3) Ex-FSA	(3) Civilians	N
Close to Assad Supporters (5)	-0.455	-0.472	0.632	-15.06***	0.221	0.994**	275
	(0.299)	(0.339)	(0.415)	(0.392)	(0.481)	(0.404)	
Fight until victory (6.a)	1.093***	-0.474***	0.887***	16.15***	0.302*	0.0940	282
	(0.148)	(0.120)	(0.165)	(0.412)	(0.169)	(0.141)	
Immediate ceasefire (6.b)	-0.812***	0.375***	-0.586***	-1.743***	-0.259	0.0384	279
	(0.117)	(0.119)	(0.153)	(0.288)	(0.164)	(0.141)	
Accountability for crimes (7)	1.113**	-1.114***	1.008**	17.85***	17.63***	0.280	282
	(0.438)	(0.395)	(0.503)	(0.314)	(0.513)	(0.420)	

*** p<0.01, ** p<0.05, * p<0.1

NOTE: Models are the same as in Table 3. Refer to Footnote 18 for further explanation.

Appendix Table 1. Role Differentiation in the Syrian Conflict

A. Reasons given for Leaving Syria (Refugees, ex-FSA fighters only)

Why did you decide to leave Syria?	Refugees in UNHCR camp		Ex-FSA in Turkey	
	Reason	Main reason	Reason	Main reason
Too dangerous to stay	56.7	40.7	84.0	48.0
People threatened me that I should leave	35.0	11.9	72.0	12.0
My family convince me to leave	46.7	6.8	58.0	6.0
My friends convinced me to leave	38.3	5.1	28.0	4.0
Most of my neighbors also left	31.7	1.7	5.0	
I had no other place in Syria to stay	26.7	1.7	2.0	
Government forces destroyed my home	31.7	5.1	0.0	
The costs of living inside Syria became too high	31.7	5.1	16.0	6.0
I ran out of money and could no longer stay	16.7	5.1	2.0	
Government forces took over my town	43.3	13.6	18.0	2.0
Rebel groups took control of my town	13.3	3.4	24.0	11.0
N	60	59	50	50

B. Reasons Given for Staying in Syria (Civilians in Syria only)

To what extent do you agree with the following statements?	% agree	N
I have no other option but to stay here	66.3	80
I would go somewhere safer if I had family, friends to help me	47.6	84
I would go somewhere safer if I had money to do so	42.2	83
I would go somewhere safer if travel were less dangerous	34.9	76
I am staying to protect my family	51.3	80
I am staying to protect my home/property	59.0	83
I am staying to fight	56.5	85
I am staying to help those who are fighting	62.4	85

C. Reasons for Not Joining Rebel Groups (Civilians, Refugees Only)

Reasons Given (%)	Civilians	Refugees
I have to take care of my family	2.4	50.0
I have a job and I need the money	2.4	38.3
My family does not want me to join	18.8	46.7
I was never asked to join	31.8	46.7
My religious views do not permit me to fight	7.1	13.3
I do not support the goals of the rebel groups	27.1	0.0
I do not have skills necessary for combat	83.5	61.7
I am too old or not in good health	17.7	1.7
I am fearful of what will happen to me if I join	38.8	35.0
N	85	60

D. Reasons Given For Fighting (Active, Former FSA and Islamists)

Why did you join this group?	Active FSA		Former FSA		Islamists	
	Reason given	Main reason	Reason given	Main reason	Reason given	Main reason
Because Assad must be defeated	68.9	12.5	74.0		89.8	
To take revenge against Assad's forces	78.7	44.6	84.0	8.0	79.6	
To defend my community	70.5	12.5	54.0	26.0	83.7	18.2
I support the goals of the group	62.3	17.8	78.0	50.0	100.0	50.0
I felt inspired by people in the group	52.5	1.8	92.0	4.0	61.2	6.8
Because all my friends joined	47.5	3.6	84.0	10.0	44.9	
All my family wanted me to join	16.4	1.8	8.0		4.1	
Because I wanted people to respect me	9.8	1.8	0.0		0.0	
I didn't want to join, but was forced to	4.9	1.8	0.0		0.0	
I joined because I needed money	0.0	1.8	0.0		0.0	
I joined to fight for Islam, to build an Islamic state	-	-	-	-	71.4	25.0
I joined to get training, combat experience	-	-	-	-	71.4	
Fatwas by the Ulama led me to fight	-	-	-	-	63.3	
N	61	56	50	50	49	44

E. Reasons Given For Why Others Fight (Former FSA and Islamists)

Why do you think other people join your group?	Former FSA	Islamists	
	Reasons given	Reasons given	Main reason
Because Assad must be defeated	44.0	93.9	4.2
To take revenge against Assad's forces	70.0	89.8	14.6
To defend their communities	64.0	98.0	20.8
They support the goals of the group	70.0	85.7	33.3
They felt inspired by people in the group	80.0	73.5	6.3
Because all their friends joined	48.0	34.7	
Their families wanted them to join	0.0	8.2	
Because they wanted respect	0.0	2.0	
They didn't want to join, but were forced	0.0	2.0	
They joined because they needed money	0.0	0.0	
They joined to fight for Islam, to build an Islamic state	24.0	83.7	20.8
To get training, combat experience	10.0	69.4	
N	50	49	48

Appendix Table 2. Variable Description and Coding

Variable	Description	Mean	SD	N
Female	1 = female subject, 0 = male subject	0.12	0.33	305
Age	Subject age in years from 18 to 60	29.80	9.39	296
Education	Subject education from 1 = no formal education to 4 = post-secondary education	2.47	0.72	296
Employed	1 = working before the war, 0 = unemployed, not working	0.55	0.50	297
Professional	1 = white collar professional, employer, manager before war 0 = other	0.34	0.47	305
Laborer	1 = blue collar, semi-skilled, unskilled labor, 0 = other	0.17	0.38	305
Student	1 = full or part time student before war, 0 = other	0.29	0.45	305
Personally injured	1 = injured as a result of violence during the war, 0 = not injured	0.55	0.50	305
Home damaged	1 = home damaged as a result of violence during war, 0 = not damaged	0.38	0.49	305
Home destroyed	1 = home destroyed as a result of violence during war, 0 = not destroyed	0.32	0.47	305
Home occupied	1 = home occupied, confiscated during war, 0 = not occupied, confiscated	0.22	0.42	305
Business damaged	1 = business damaged during war, 0 = not damaged	0.29	0.46	305
Family injured	1 = family member injured as a result of war, 0 = no family injured	0.60	0.49	305
Family killed	1 = family member killed as a result of war, 0 = no family member killed	0.61	0.49	305
Friends injured	1 = close friends injured as a result of war, 0 = no close friends injured	0.69	0.46	305
Friends killed	1 = close friends killed as a result of war, 0 = no close friends killed	0.73	0.45	305
Importance of religion	How important are your religious beliefs to you in your daily life? 1 = not at all important, 4 = very important	3.17	0.97	304
Close to same religion	How close do you feel to people of your religion compared to other people in Syria? 1 = no real difference, 2 = somewhat closer, 3 = much closer to same religion	1.83	0.85	301
Close to Sunni Muslims	How close do you feel to the following? [Sunni Muslims in Syria] 1 = not close at all, 4 = very close	3.32	0.72	299
Close to Alawites	How close do you feel to the following? [Alawites in Syria] 1 = not close at all, 4 = very close	1.62	0.81	299
Send to in-group	Dictator Game: How much money would you like to send to someone in your local community (0-500 Syrian Pounds?)	459	119	224

Send to out-group	Dictator Game: How much money would you like to send to someone living in Assad-controlled territory (0-500 Syrian Pounds?)	42	125	229
Send to Assad supporter	Dictator Game: How much money would you like to send to someone who supports the Assad regime (0-500 Syrian Pounds?)	11	69	228
Blame Alawites	In your opinion, who deserves blame for the protracted conflict in Syria? [Alawites] 1 = strongly disagree, 4 = strongly agree	3.55	0.92	209
Close to Assad supporters	How close do you feel to the following? [Supporters of the Assad regime] 1 = not close at all, 4 = very close	1.22	0.48	296
Fight until victory	Tell me whether you support or oppose the following [Continue Fighting until the Assad regime is defeated, no negotiations with the Assad regime] 1 = strongly support, 4 = strongly oppose	3.10	1.23	302
Immediate ceasefire	Tell me whether you support or oppose the following [Immediate ceasefire to begin negotiations with Assad's forces] 1 = strongly support, 4 = strongly oppose	2.16	1.30	299
Hold accountable for crimes	Which of the following statements comes closer to your view: 1 = Only the top leadership should be held accountable for crimes committed during the war in Syria 2 = All those responsible for war crimes in Syria should be held accountable for what they have done	1.86	0.35	303

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