Wartime Threats and Displacement Decisions

Civilian Self-Protection Strategies in the Battle for Abidjan

Jacob Henry Lomax

October 2014

Acknowledgements

Table of Contents

Chapter 3:   57

Armed Groups and the Production of Direct Threat.   57

Chapter 4:   86

Figures by Chapter
Figure 1.1: Conceptual framework diagram: impact mechanisms of violence
Figure 1.2: Satellite image showing PK18 outlined in white north of Banco National Forest.
Figure 1.3: PK18 Main conflict events in late February 2011
Figure 1.4: Satellite image showing PK18 and surrounds [approx. area outlined in white in Figure 1.2], including major checkpoints and other important locations.
Figure 2.1: Satellite image showing PK18, important locations and survey blocks.
Figure 2.2: Satellite image showing detail of blocks delimited by mud tracks on each side. Buildings are clearly visible within each block.
Figure 4.1: Histogram showing proportion of pre-crisis assets sold during the crisis, amongst those who sold assets.
Figure 4.2: Histogram showing proportion of pre-crisis assets looted, amongst those whose assets were looted.
Figure 4.3: Cité de Police . The red roofs and tarmaced roads of the modern police quarter in PK18 contrast with the iron roofs and mud roads of surrounding buildings.
Figure 5.1: Displacement decision tree with homogenous time periods.
Figure 5.2: Displacement decision tree with household-specific time periods
Figure 5.3: Full PK18 sample displacement decision tree.
Figure 5.4: Survey questionnaire extract
Figure 5.6: Timing of group 2 displacement by displacement outcome.
Figure 5.7: Histogram showing number of days between group 1 and group 2 displacement actions. Gaps of more than 10 days are grouped with 10.
Figure 5.8: Survey questionnaire extract
Figure 5.9: Histogram showing density of values of the asset index.
Figure 6.1: Five step model of causal mechanisms from violence to protection actions, with examples in capitals (derived from conceptual figure in introduction)
Figure 6.2: Three zones in the displacement model.
Figure 6.3: PK18 threats categorised as spatial or selective
Figure 6.4: Predicted probability of no displacement by perception of threat to capital assets
Figure 6.5: Predicted probability of partial displacement by perception of threat to capital assets

Tables by Chapter
Table 5.1: Four displacement outcomes and four displacement categorisations
Table 5.2: Displacement outcome categories from decision tree
Table 5.3: Number of displacement actions by displacement category
Table 5.4: Cross-tabulation of displacement decisions against spending decisions.
Table 5.5: Cross-tabulation of displacement and spending decisions against displacement outcomes.
Table 5.6: Descriptive statistics of date of groups 1 and 2 leaving by displacement outcome.
Table 5.7: Descriptive statistics of RHS variables.
Table 5.8: Means of RHS variables by displacement outcome categorisations, with standard errors.
Table 5.9: PK18 displacement outcome categories
Table 5.10: Regression results for four different displacement dependent variable constructions.
Table 6.1: Sample exclusions on including threat measures
Table 6.2: Selection of ranking for relatively important threat
Table 6.3: Descriptive statistics for RHS variables
Table 6.4: LHS variable categories with numbers and proportions comparing reduced sample for Chapter 6 with total sample used Chapter 5.
Table 6.5: Violent incidents by displacement outcomes
Table 6.6: Cross tabulation of independent variables with the dependent variable
Table 6.7: Multinomial regression results [LHS variable is complex displacement outcomes].

Thesis Abstract

Wartime Threats and Displacement Decisions:

Civilian Self-Protection Strategies in the Battle for Abidjan

This thesis fits into the wider topic of how war impacts civilians, focusing on the little-understood mediating factor of how civilians protect themselves from wartime threat. The research context is a short battle in PK18, a remote northern suburb of Abidjan, Côte d'Ivoire. The Invisible Commando rebel group was fighting to oust President Gbagbo following his refusal to accept electoral defeat in late 2010. Many civilians fled in late February 2011 due to four days of intense fighting between Gbagbo loyalists and the Invisible Commandos. A survey of 715 households was conducted in late 2012, as well as key informant interviews, and semi-structured interviews with households and ex-combatants. This very localised mixed-methods approach to a short period of wartime violence provides the opportunity to study the interaction of armed group decisions and civilian decisions, centred around the concepts of threat and protection.

On the basis of this data, four empirical chapters analyse different aspects of threat and protection. The third chapter studies armed groups actions that result in the production and reduction of threat. The fourth looks primarily at civilian protective responses to threat in PK18, and also at how the protective motivation affected the Invisible Commandos through mobilisation and demobilisation. Using quantitative data at the intra-household level, the fifth chapter describes in detail one particular protection strategy - that of displacement. The sixth chapter then investigates why households choose particular displacement strategies, analysing the importance of three causal channels from violence to displacement - direct threat, indirect threat and impact. The thesis concludes that displacement, like other civilian protection strategies, results from complex decisions in managing competing threats and scarce protection resources.

Chapter 1:

Introduction

One of the most visible outcomes of war is civilian displacement, often on a massive scale. In 2013, the highest levels of displacement on record were observed, with 51.2 million people displaced, 33.3 million of those internally displaced (UNHCR 2014, IDMC 2014). Displacement presents not only a huge policy challenge, but also one for academics who seek to understand why people stay and leave during conflicts, and, more frequently, the impacts of displacement on the displaced themselves and host populations. This thesis falls into the first of these areas, an area that is both under-conceptualised and under-researched empirically, with only a handful of household-level papers most of which use Nepalese or Colombian data.

Asking why people flee is often the starting point for displacement choice research, but as Lischer (2014) and others have argued, it may be more instructive to take why people stay as the starting point. It is not surprising that people flee from violence; it is rather more surprising that some people do not. If there was a simplistic relationship with violence, displacement would be homogenous in given contexts, which is not the case (Czaika and Kis Katos 2009). A literature has emerged researching the causes of variation in displacement outcomes (Adhikari 2012, 2013, Engel and Ibáñez 2007, Davenport et al. 2003), which forms the core literature on which this thesis builds, but this literature has to date failed to place displacement choice either empirically or conceptually within a larger range of strategies for coping during wars, with the notable exceptions of Steele (2011), Lindley (2009) and, recently, Mironova et al. (2014).

Displacement may be understood, I shall argue, in whole or in part as an attempt to protect the households' members. In order to understand wartime displacement, then, it is necessary first to ask: how does war affect people? Despite a large and growing range of literatures addressing the impacts of war there remains no theoretical micro-foundation for understanding *how* the processes underlying the impacts of war are created. This thesis will comprise an attempt to draw together, at an extremely localised level of analysis, the violent actions perpetrated by combatants with the responses of civilians in order to build theoretical and empirical understanding of how

war affects civilians. This provides the foundation for extending the existing migration-based displacement models (see Engel and Ibáñez 2007).

War may, of course, affect people in a many different and complex ways. Psychological impacts are not discussed here, nor long term impacts of any kind, including damage to institutions and systems of national governance. I concentrate on household level decision-making, although decisions made by firms and other organisations during conflict may be based on similar principles. War is also a loosely defined concept and, while I make reference to civilians' wartime decisions, the analysis centres on political violence and its consequences rather than other aspects of war. So my interest is in violence - indeed only what may be considered a narrow definition of violence - and while the context here is one that may broadly be considered to have been a civil war the important delimiting factor is not whether or not a war is being conducted, but rather the extent of the threat of violence. It is not difficult to conceive of non-war situations the threat of violence may exist (Kalyvas 2014), but I make no attempt here to address such situations and I frame the research as being on the topic of wartime violence and wartime decision-making, as generally understood. So from how wars affect people, I have narrowed the context to how wartime violence affects households and household decision-making. In the following conceptual section the scope will be reduced to decisions focused on protecting household individuals and assets from threats; these shall be referred to as 'protection decisions' or 'protection strategies', a term differentiated from coping strategies and other terminology in related literatures. A further restriction is that the analysis is rooted in understanding displacement decisions, so it is on these that the analysis is centred while incorporating other protection decisions.

This thesis focuses on the relationships between armed groups and civilians in civil wars, focusing on central themes of violence, threat, protection and displacement. There are six main contributions to the literature within the body of work presented here. First, the thesis seeks to contribute by illustrating conceptually and empirically how displacement decisions are embedded in a wider context of wartime self-protection decisions. The thesis also relates these civilian decisions to decisions made by armed groups, and the process by which armed actors create the threat conditions to which civilians respond. This second contribution relates to a third: I detail using my own data a little known period of recent Ivorian political history - the rise and fall of the Invisible Commando rebel group in Abidjan. The fourth contribution is an original methodology and questionnaire design for the study of displacement decisions that can

provide detailed decision information at the intra-household level. The fifth contribution is the use of this data to provide the first in-depth description of the process of displacement that highlights the importance of splitting the household to manage threats. The sixth contribution is an analysis of the reasons for heterogeneity in displacement outcomes that contributes to the few already conducted in the literature in a number of ways, including the use of a non-binary dependent variable, a novel assessment of threat, and a more conceptually-informed analysis of endogeneity concerns.

This introduction chapter now turns to present three of the main concepts in turn, then outlines a conceptual framework that draws them together. I discuss the mechanisms of wartime impact using this framework. Then the recent historical context of Abidjan that provided the setting for the data collection is summarised. Finally, the structure of the thesis as a whole is presented with the underlying research questions for each chapter.

1.1 Concepts and Literature

The literature on household decision-making during wars is relatively sparse. There are four relevant literatures: that on crime and the threat of victimisation particularly, the livelihoods literature and the related protection policy literature, the literature on risks and shocks, and the literature on household micro-dynamics of conflict. I address the relevant sections of these literatures, presenting an argument that the role of assets and their protection has been understudied and under-conceptualised in most attempts to understand mechanisms of impact of conflict to date. I then take some examples from a fifth relevant literature, the often politically-motivated field of terrorism research, to illustrate how most aspects of this framework have already been thought through and researched in an area of study where 'we' in the West are the ones making decisions when faced with political violence.

I outline in this section a conceptual model of household decision-making during conflict in response to wartime threats. In doing so I discuss three key factors within that decision: assets, threat, and protection. I define those and other key terms along the way, before describing a framework of how these are related to each other. In brief, assets are the individuals and physical assets of households that may be killed, injured or destroyed by acts of violence. The threat of violence causes households to follow various strategies to protect themselves, which may produce indirect threats such as lack of financial access to food.

Assets

There is little cross-over between the qualitative livelihoods literature and the micro-economic literature on displacement and conflict, but these literatures deal with similar issues, even in similar ways. This thesis focuses on decisions made by households under threat and this intra-household level of analysis, perhaps more than other micro-economic work, may benefit from insights provided by the livelihoods literature. While broadly I follow conceptual frameworks from the micro-economic displacement choice literature, I borrow the conceptual framework based on assets from the sustainable livelihoods framework (SLF) (Chambers and Conway 1992) adapted by Korf (2004), and rooted in the work of Sen (1981). The adapted SLF (Korf 2004) includes six forms

of assets attributable to individuals: natural, physical, human, social, political and financial. The additional advantages of the SLF for the purpose of understanding household decision-making come primarily from the recognition of these assets and their value beyond their economic returns. Assumptions in economics centre around households maximising their financial returns to labour and other assets. While I do not deviate from these assumptions in the general sense, this thesis will suggest that their are situations during wars where the prevention of destruction of assets is an important factor in decision making, and such situations are less well conceptualised within existing economic frameworks. Economic models usually are based on maximising returns to capital, which sensibly entails establishing the source of those returns (human capital, or social capital). However, while the killing of an individual within the household destroys human, social and other capital embodied in that individual, the reason for protecting that individual transcends the expected future returns embodied in the individual. In addition, the means of protecting individuals and physical assets involve actions to be taken by individuals, and issues such as mobility which are better addressed according to individual assets rather than household aggregate capital.

There is further crossover between the literatures in their conception of civilian actors in wartime, and while the traditional SLF does not cope well with conflict settings, extensions to the framework, such as the inclusion of political assets, have made them more applicable (Kulatunga and Lakshman 2013). As Korf summarises: "The major strength of the [SLF] framework is that it does not perceive people as vulnerable and helpless victims, but as dynamic actors, who adapt...and cope with shocks..." (2004: 277). This echoes the emergence within the mainstream analysis of conflict the recognition of the importance of civilian agency in actively managing their security during wars (see e.g. Kalyvas 2006). Focusing on assets enables the construction of a conceptual framework that, while rooted in the qualitative SLF, retains the rationalist approach of the micro-level displacement literature that is the main field to which this thesis seeks to contribute.

I define violence as *the destruction or removal of physical or human assets by armed groups*. Looting and theft and extortion are therefore included as acts of violence. However, the possibility of 'destruction' of, for instance, social capital, as distinct from the individual or individuals in which it is embodied, is not included in my definition. The definition of violence might usefully be extended to encompass destruction of other forms of SLF assets, but I focus only on the tangible assets as embodied in individuals and their physical assets: so of the six types of assets in the adapted SLF my focus will

be primarily on the physical and human assets belonging to households. 'Human assets', which I shall also refer to as individuals throughout the thesis, also embody some part of the household's social and political assets. Physical capital, or physical assets, which I shall also refer to throughout as goods, possessions or belongings, also includes the households' natural and financial assets. One important type of asset not covered by the SLF are protective assets. These are assets that may be employed to provide protection to other assets. each individual may have the capacity to provide protection from the threat to him or herself as well as to other individuals within the household, so not only is threat potentially specific to each individual or asset, but protection is too. I shall return to discuss these in greater detail below.

Returning to the definition, it is of course possible that violence is perpetrated by individuals other than those in armed groups. While I do not exclude this possibility here, it is not my focus. In most situations violence by individuals would be described as crime rather than political violence (though of course criminal acts may also be conducted by groups). Criminal actions may be more likely in situations of widespread political violence due, amongst other factors, to the frequent absence of law enforcement. In terms of the framework, there is little reason to think that decision-making would be very different in response to threat of criminal violence rather than political violence so long as those threats were comparable, though the range of protection strategies open to households might also be very be different. My focus, however, is on political violence and it is this that I refer to as violence throughout unless specified otherwise.

The definition of violence provided highlights how an asset-centred conceptual framework also joins the supply side and 'demand side' of violence. Violence is exercised by armed actors against individuals and physical assets, and the choice of asset to target is based on factors internal to the group and its context. All violence is exercised against assets (including individuals), and all violence has an impact on the households or others to which that asset belonged or was part of. All violent relations between armed groups and civilians are mediated through actual violence or the threat of violence against assets.

To summarise: assets are *individuals or physical assets belonging to households* (or businesses or communities). They have a value to other members of the household rooted not just in the returns that may be expected from them, but in emotional and other values, and the other forms of household capital which they embody.

Threat

Violence involves the destruction of assets and killing of individuals by armed groups, but this represents only a small fraction of those impacted by conflict (Rockmore 2011, Chapter 6 of this thesis). The mechanisms by which violence impacts civilians are poorly understood, and little consensus has emerged on the terminology or substance of the mechanisms.

Justino (2012) reviews the micro-level conflict literature to identify channels by which conflict causes poverty. She identifies three mechanisms: reduced productive capacity (differentiating short-term effects such as destroyed productive assets from long-term effects such as lower educational attainment), markets (price shocks and labour markets); and institutions (social cohesion as well as local governance). In the same paper Justino also recognises that these effects are mediated by the coping responses of civilians. An earlier paper by the same author discusses the indirect and direct means by which conflict affects civilians (Justino 2009), following similar conclusions in Keen (2001) and Stewart and Fitzgerald (2001). Justino's wider body of work in supporting understanding of impact mechanisms in the wider micro-level conflict literature has been influential, and it is in Justino (2009b) that these mechanisms are most comprehensively outlined. In that paper, direct effects of violence on civilians are threefold: changes in household composition (through disease etc as well as killing), destruction of assets and forced displacement. I shall argue here that the framework outlined in that paper may be refined and clarified through disaggregation by whether civilians or armed groups exercise agency in the impact. Amongst other implications, this clarification will suggest that displacement, rather than being a direct effect of violence, is more usefully classified as a strategy used by civilians to avoid the impact of violence.

At the root of the ambiguity in violence impact mechanisms is that there is no clear definition of what impact is. I start from a very narrow definition of impact of violence, namely *the asset cost to the household caused by physical loss or damage to household assets, including individual household members*. I define cost as being related to assets so as to avoid any losses of returns to labour or capital being included. For instance, the killing of a household member represents the cost to the household in terms of the loss of value of that household member including the value of emotional connections, love, companionship and so on as well as the loss of

financial and other labour returns provided by the individual. Physical assets may similarly have an emotional value, albeit usually not so significant, as well as their functional value. I also refer to the cost imposed on the household as an economic unit rather than individuals, and I discount potentially important but complex factors such as physical pain, trauma, hunger and so on, for which classification as a cost or otherwise is not straightforward.

Impacts may usefully be divided into immediate and long-term according to when the impact has a cost. Child stunting caused by war-induced malnutrition is a long-term impact, while physical injury is an immediate impact. The same impact may be both immediate and long-term. I focus on immediate impacts here as they are both more relevant to the short-term context studied and, most likely, more important decision factors in high threat environments. It should also be noted that the cost is not necessarily imposed on the household by external actors, but the loss may be a constrained decision made by the household itself. For instance, the household may choose malnutrition rather than risk leaving the house to find food during intense fighting. Even when the cost is imposed externally, the household may have some agency as to which violence, where and when, by which actor, and to which household assets or individuals; all this being largely a function of the household's agency over mobility of its constituent individuals as well as other protection strategies, to which I turn in the next section. Financial and other costs, then, are excluded from impact in framework used by this thesis. That is not to say they are discounted altogether: the deliberate forgoing of income, for instance, is included within the range of protection strategies available to households, and serious market shocks are included in the concept of indirect threat.

This asset-centred conception of impact goes against the grain of the shocks literature that forms the conceptual framework for much conflict impact research. As McPeak (2004, 2006) suggests, asset risk is largely unexplored in this literature, which concentrates on transitory income shocks. As he argues: "While focusing exclusively on income shocks may be reasonable in some cases, it is not applicable to all contexts. Exogenous shocks such as droughts, floods, fires, disease, theft, or warfare threaten household well being not only through a transitory food availability crisis, but also through the prospect that assets accumulated over many years will be suddenly swept away by such events" (2004: 263). While we may disagree on the extent to which warfare is an exogenous shock, the point is well made. Sandmo (1970) identifies theoretically heterogenous impacts of capital risk and income risk on consumption and

savings; there is reason then to think that not only will asset shocks and income shocks have different ex post effects, but that the ex ante response will also differ. Rather than taking income shocks as the starting point, this thesis will help to describe the process of production of wartime income shocks, and argue that this process is largely rooted in civilian response the threat of asset shocks. Indeed, part of the reason conflict is often considered a shock, rather than a process, may be due to the difficulty in capturing the process dynamics in survey research (Brück et al. 2010: 12-13) rather than solid conceptual foundation.

Violent acts represent the imposition of impact by external actors. But, as discussed above, this is not usually the main cause of impact during war. Households react to *the probability of violence, and the impact (or expected asset cost) of that violence*, which I shall term direct threat. Risk is a term often used in the literature regarding the probability of hazardous events, and this has moved over to the micro-economics of conflict (see, e.g. Verpoorten 2009, Rockmore 2011), but I prefer threat for three reasons. First, violence is deliberately produced by armed actors often in cooperation with civilians. So there is agency in the production of violence that is absent in the conception of risk of other hazards: as Justino (2012: 10) argues, "...violent conflicts such as civil wars are distinguished from other shocks by their deliberately destructive nature..." Second, armed actors can use threat, as well as violence, instrumentally. (See, e.g. Kalyvas 2006, and Chapter 3 for more discussion.) Threat may be produced by armed actors in two ways: through information conveyed by acts of violence themselves, or through verbal or other non-violent communications of the prospect of violence. Third, direct threat relates not just to civilian perceptions but also to the armed actors' decisions, so on the supply side of violence to refer to its prospect as 'risk' is problematic in the same way that it is problematic to refer to a person's own 'risk' of jumping off a cliff. This is echoed in discussion in the terrorism literature. Brown and Cox (2011) suggest that modelling terrorism risk with probabilistic risk assessment (PRA) is problematic. They argue there is no proof that, as some have suggested: '...the same type of conditional probability assessment applies as well to terrorism risk analysis as to [PRA] of natural hazards and engineered systems" (2011: 196)[1]. One reason they give is that there is information used by the attacker to decide how to allocate violence, and that information is unknown to the potential victim. For these three reasons, as I discuss both the armed actor and civilian sides, I prefer threat to risk.

---

[1] It is beyond the scope of this thesis to engage with the very wide literature on probability and decision theory that this discussion might merit. Here I simply want to specify some of the difficulties of using risk with respect to political violence.

I have said that I refer to civilian side and armed actor sides of threat. These I refer to as perceived and objective threat respectively. The objective threat is produced by the armed group on the basis of its targeting criteria, targeting capacity and propensity for violence. I detail these in Chapter Three but essentially these are which group or class of assets is targeted for violence, the ability of the armed group to exercise violence against that class of assets, and the net benefits of using violence as opposed to other strategies to achieve their objectives. Of course the three are closely intertwined and may frequently be co-dependent. For instance, targeting criteria for which houses to loot may be broadened if the benefits of looting are found to be substantial. These three components of direct threat are essentially military factors that function within the broader spectrum of organisational capacity and territorial contestation that shape behaviour of armed actors. The literature on armed groups use of violence generally focuses on these broader issues of capacity (Weinstein 2006) and contestation (Kalyvas 2006) but is selective in their underlying rationale of violence and the mechanisms by which these are translated into threats to civilians. Focusing on the military mediating factors enables a broader view that incorporates the various rationales underlying the objective threat. The objective threat pertains to a targeting criteria-defined class of assets in a given location at a given time.

Civilian-side, or perceived threat, is the civilians' understanding of this objective threat to their particular household members and physical assets. The threat is specific to each physical asset and individual - targeting may well differentiate within the household. For example certain high value assets may be sought for looting by armed groups while others are left, or only young men of fighting age may be assaulted. The perceived threat is based on the information available to the household regarding the objective threat, and the uncertainty they have about about that information. So perceived threat may be expressed formulaically as:

$$Direct\ Threat\ =\ Prob(V).I(V)$$

(1)

Here *V* refers to violence, and *I* refers to impact, or asset cost as discussed previously. The probability is the perceived probability, so is based on the available information and includes uncertainty. This direct threat, like risk, cannot have an impact on the household's members or assets, so is somewhat ephemeral. The only possible

consequence of direct threat is behaviour change. But this behaviour change, on the part of the household itself or on the part of other households, may result in another form of threat of loss or damage to the household and its assets. For individuals, the threat of loss stems from the possibility of death from starvation, dehydration, disease or other illness. Malnutrition and disease (and arguably lack of education etc) may result in long-term damage to individuals, especially children. In the longer term, physical assets such as buildings, cars and so on may degrade because of problems maintaining them during the war, while cattle and other livestock suffer the same short-term issues as humans. This distinct form of threat stems from the lack of access and availability of goods and services.

This second form of threat I refer to as indirect threat, which is *the prospect of household asset costs incurred though lack of access to or availability of essential goods and services*. Indirect threat, unlike direct threat, may have impacts. This is because direct threat is rooted in external agency, while indirect threats are based on the households' own agency amidst the structural constraints they face. For a household, direct threats may or may not be perpetrated, while indirect threats will inevitably cause impact if not addressed. To take an example, if food is not available in a given location this will inevitably lead to starvation and it is for the household to decide whether to leave to try to find food. If a household member is injured and they have no money to pay for treatment, it is for the household to decide whether to risk finding work in a dangerous environment in order to pay for the treatment. Of course there are very serious structural constraints in both these cases, but, assuming the required goods and services are available somewhere, it is for the household to decide how they are impacted by indirect threat.

Protection Strategies

Humans, like other animals, instinctively protect themselves from danger: an instinct that has been subject of analysis in fields including psycho analysis (for example, Khantzian and Mack 1983). People also protect others especially family members. Solomon and George (1996) suggests there is a 'caregiving behavioural system' that evolves in humans during childhood and adolescence, before being completed through interaction with the child such that: "situations of danger...should activate the caregiving behavioural system". In the social sciences, and international development-related literatures particularly, much of the academic literature is related to policy interest in the

rather vague concept of humanitarian protection in emergencies, though with the emerging understanding that the first protectors of civilians are civilians themselves (Bonwick 2006).

Frameworks for understanding the range of strategies, including protection, adopted by at-risk populations agree that they may be short term or long term (Kulatunga and Lakshman 2013, Korf 2004). Long term strategies are also referred to as 'adaptive' strategies, while the short term strategies are also known as coping strategies, especially in the environmental hazards literature. Often, wartime strategies are framed as coping strategies (for example Verpoorten 2009), mirroring peacetime research on consumption smoothing following income shocks. But Jaspars, et al. (2007) suggest that those short term strategies employed in response specifically to violence may be referred to as protection strategies. But this definition is, I think, lacking specificity. The contextual cause of behaviour is irrelevant conceptually, and the distinction may be made more robustly in the nature of the activity: where responses are to protect assets from loss or damage, these are protection strategies; where responses are to secure income, these are coping strategies. The economics literature on insecurity of property rights makes a similar distinction, with 'guard labour' being a distinct option from productive labour (Besley and Ghatak 2008), albeit in contexts where the labour resources are not themselves subject to threat.

Of course there is some cross-over: at some level of poverty, the need to secure income may be necessary to avoid starvation and in this sense, coping strategies may also be protection strategies when income is required to protect assets. Jaspars et al. (2007) consider economic subsistence strategies as distinct from protection strategies, and in doing so follow Vincent and Sorenson (2001). Korf (2004) similarly differentiates between managing personal risk and managing 'household economics', but within the managing personal risk includes *taking risks for economic survival*. This latter includes examples such as collecting firewood, and trespassing in restricted marine areas in order to catch fish. The conception of protection strategies used in this thesis follows Korf's example in that it includes accessing essential goods and services as a protection strategy. But there is a need, reflected in the various frameworks, to differentiate protection strategies from other 'livelihood' strategies that predominate in the absence of threat. Of course this definition becomes very broad, given the prevalence of global food insecurity amongst the poor. So I consider seeking income to be a protection strategy only where, as well as there being the need for income to avoid asset loss, there are significant risks associated with the process of generating

income. This could be performing dangerous work, such as prostitution or working for an armed group, or it could be working in an insecure environment where commuting or working outside increases threat exposure.

Protection is not unique to conflict situations and to threat. Moving cattle away from a volcanic eruption, watching over sheep on a hillside, installing a burglar alarm or fire alarm in the home, supervising children in a playground: all these are protection activities, although the latter two move away from the contexts we usually expect. I do so in order to illustrate a point: it is not clear in Kulatunga and Lakshman's (2013) summary what an 'at risk population' is. There are undoubted threats to children playing unsupervised, albeit at a low probability, so in some sense they are a population at risk. We might differentiate in a general sense between everyday protection activities in low risk environments, and protection strategies in higher risk environments, when more thought goes into ensuring protection. But the important point for this analysis is the stage at which asset protection predominates decision-making. The easiest way to do this is again through observation of behavioural response. When protection of assets from direct threat is prioritised over generating income, this represents a profound shift in decision-making and behaviour. This condition, which I shall refer to as the 'asset protection assumption', occurs in situations characterised by high levels of threat, and may be very short-term. Moving cattle away from the volcano, to return to the previous example, may disrupt generating returns from those cattle. If so, the asset protection assumption holds while protection activities are prioritised over income generating activities. Moving cattle seasonally to ensure they can be fed also protects the assets, this time from indirect threat. But to do so does not disrupt income, rather it avoids income being diminished over time as poor quality food leads to reduced cattle output. In this latter case, although the protection of assets is part of the decision, the asset protection assumption does not hold because the threat is indirect.

So the asset protection assumption holds *when protecting assets from direct threat is prioritised over seeking income*, the latter being either on a day to day basis or part of a set of coping strategies. Protecting assets from indirect threat is usually a corollary of securing income, as in the example provided, while protecting assets from direct threat is more likely to involve income trade-offs. As we may assume people are utility maximising, those who seek income will be doing on a day-to-day basis those activities that meet these needs. Direct threat represents a change to these conditions, and protection and coping strategies will be different. Protection from indirect threat,

however, will generally involve protection and coping strategies being aligned. This may be illustrated with further examples. Fleeing from an area where markets have collapsed, work is scarce and food is unavailable is clearly protecting the individuals in the household from starvation but would also be the expected coping response. If the labour market has collapsed and a household is threatened with starvation due to their lack of financial access to food that is available, then leaving the area in search of work is both a protection strategy and a coping strategy. If the food market has collapsed and is unavailable, the household will have to leave to find food even though they might still anticipate that their labour returns would be better in situ due to existing networks. The latter may also be true of spikes in food prices. Here then the differentiating factor is the necessarily short-term perspective of protection strategies, which in some cases runs contrary to the longer-term priorities of coping strategies. Perhaps the most detailed assessment of protection strategies is in Kulatunga and Lakshman (2013). They find evidence in Sri Lanka supporting their suggestion that livelihood and coping strategies are intertwined, and that threat factors impact on both.

Because threat is different from risk, the way of responding to it is different. Justino (2012: 11) suggests that the deliberate destruction of livelihood assets frequently observed may make coping with wars particularly difficult. And indeed that is true for coping strategies, but for protection strategies the nature of threat presents an opportunity that does not exist with exogenous shocks. Bonwick (2006) defines protection strategies as comprising avoidance, containment, and confrontation strategies. I also follow this same framework of three broad strategic options for protection, with some modifications, when I come to classify and illustrate protection strategies in Chapter Four. This represents something of a departure from much of the literature on civil wars, which has tended to compartmentalise various strategies, with the literature on mobilisation, for example, being generally quite distinct and using different conceptual frameworks than the literature on displacement. For now, I define protection strategies as *short-term actions taken by civilians in order to mitigate threats of violence or indirect threats*.
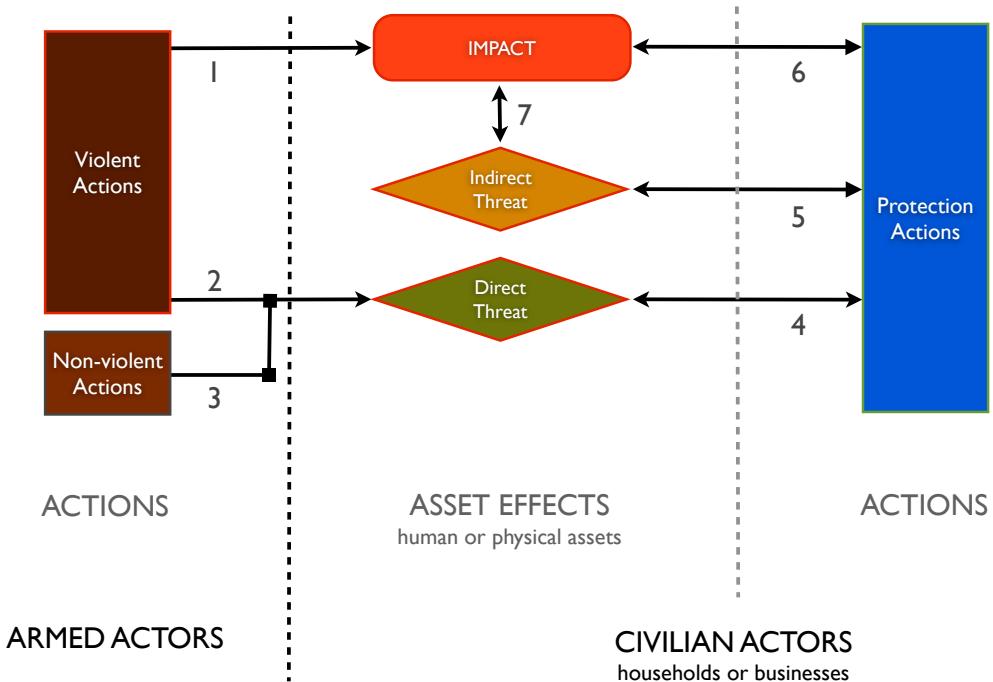
Figure 1.1: Conceptual framework diagram: impact mechanisms of violence

The diagram represents how actions of armed groups impact civilians, with impact defined as a cost to the asset portfolio[2]. Coping strategies are not in the model because of the asset protection assumption. The diagram should be read with respect to the time period t_0 being the action of an armed group on the left hand side. while the effects and actions on the civilian actor side incorporate all subsequent time periods. For this reason the armed actor's action cannot be affected by civilian actions or asset effects[3]. Also not reflected is the possibility of civilian actors becoming armed actors and visa versa, which I address in Chapter 4. Further, armed actors are restricted to violent and threatening actions rather than public good provision or other activities in which they may be engaged.

1. Violent actions have an impact on an asset. The violent action destroys or removes an asset from the household or business, including the killing or injury of

---

[2] Non-asset costs (i.e. income losses) are included within the protection actions only where these costs are incurred to serve a protective function.

[3] Of course this diagram does not intend to preclude the possibility that violence is allocated according to protection actions or perceived threat. Indeed, it is very likely that violence is allocated in this way. But for simplicity, the diagram only deals with the (asset) consequences of violence, not the allocation of violence. For this reason, the diagram does not represent the interaction between armed actors and civilians with respect to direct threat that represents one of the key themes of the thesis.

household members[4].

2. **Violent actions also affect the direct threat:** Violent actions communicate information about the direct threat to other assets than the one destroyed or removed. From this information, civilians may re-evaluate direct threat to other assets, either up or down. The effect described here is that on the *perceived* (civilian-side) threat, not the objective (armed actor side) threat. As with impact, the effect is one-way: changes in direct threat do not have an impact on violent actions because the direct threat is defined with respect to civilian assets.

3. **Non-violent actions also affect direct threat:** non-violent actions may be used as a less costly means of generating direct threat, where generating such threat is the objective of violence.

4. **Protection actions and direct threat: (a)** Protection actions are taken in order to reduce direct threat to a particular asset **(b)** however protection actions may expose (the same or other) household assets to (the same or other) direct threat.

5. **Protection actions and indirect threat: (a)** Protection actions are taken in order to reduce indirect threat to a particular asset **(b)** however protection actions may expose (the same or other) household assets to (the same or other) indirect threat.

6. **Protection actions and impact: (a)** protection actions lead to impact on the asset portfolio of households through the exchange of household assets for reduction of threat, forced sale of assets to reduce indirect threat. **(b)** where assets had a protective function either against direct or indirect threat, their destruction changes the protection actions available to the household.

7. **Impact and indirect threat: (a)** indirect threat leads to impact through loss of or damage to household physical assets and members due to inability to access essential goods and services, which may result in whole or in part from the lack of availability thereof **(b)** indirect threat also follows from impact in that in that destruction or damage to assets may directly affect indirect threat without mediation through a change in protection actions. Included in this are destruction of essential goods and services, whether those be subsistence assets belonging to the

---

[4] Arguably the perpetration of violence may change the perpetrator's choices regarding future violence, but I refer here to an individual violent action.

household or elements of the supply chain or service providers. Killing local medical workers, destroying crops, looting food aid convoys and so on are all examples of such actions.

The strength of the diagram is in highlighting the role of civilian agency in the production of direct threat, indirect threat and impact. This helps to distinguish the channels by which acts of wartime violence result in impact. I now summarise the mechanisms by which violence affects impact according to this framework, then describe how three of the papers in the literature approach these channels or mechanisms.

Mechanisms

Having outlined the framework of mechanisms I shall be working with, it is easier to identify the state of existing knowledge regarding these mechanisms. There should be three types of impact on individuals and other household assets. First, the violent actions of armed groups against the assets of the household. Second, the sale or exchange of household assets as part of a protection strategy. And third, the impact of lack of access and availability of essential goods and services. In this latter category, the major impacts during wars are malnutrition and disease, caused by lack of access to food, clean water, adequate shelter, sanitary living conditions and medical services. Often these follow from the initial protection strategy of displacement, but the important emphasis provided by this framework is that these are in all cases either mediated by civilian decisions (protection strategies - relationship 5b) or follow from impact (relationship 7b). In the case of protection strategies these may be the decisions of the household itself, or the decisions of other households and businesses that culminate in market-level effects. So how have these channels or mechanisms been represented in the literature to date? To answer this in part I now describe three key papers on impact mechanisms.

Minoiu and Shemyakina (2014) test empirically the mitigating impact of various mechanisms on height for age scores during the first Ivorian Civil War. They test four links, creating indices for: displacement; economic losses (assets or revenue); health impairment; and violence against household members. The outcome of height for age scores is a long-term impact, caused by malnutrition attributable to either access or availability of food. So the test is of the determinants of impact attributable to access and availability, and the four mechanisms tested all were found to negatively effect

height for age scores. Unsurprisingly, they also find very high correlation between the various mechanism indices. It might be interesting to reframe the indices according to the mechanisms outlined in this chapter; to do so could provide more detail on the distinct channels. Economic losses, for instance, are impacts (assets) and protection costs (revenues) imposed by armed actors, markets and the household's own decisions. Displacement is a protection strategy that may have benefits as well as costs.

Verpoorten (2009) finds that cattle in Rwanda, often used as a buffer stock for coping with shocks, were seemingly used much more than usual as a protection strategy during the genocide (if buffer stock sales are not to avoid threat, they are not protection strategies). In 1994, 44% of cattle sales were to fund food purchases, quadruple the peacetime rate. That year alone, 50% of the cattle were sold, even though the prices were very low and food prices very high, reducing the efficiency of the strategy. However, Tutsi households did not sell livestock, even though they faced higher threat and greater war-related shocks. The author argues this is due to the lack of safety - either it was too insecure for these households to sell cattle, or their cattle was in any case looted. This highlights the role of variation in threat in shaping the strategic options of households during wars.

Finally, Brück and Schindler (2009) describe mechanisms by which conflict affects inputs for household farm production. They propose four ways in which these mechanisms may operate, conflict impact on labour endowments, land endowments, capital and production technology, listing distinct mechanisms under each. I take the example of capital, for which they specify four means by which war may have an impact: through (i) looting, pillage, and destruction of capital assets due to absence of property rights enforcement; (ii) capital flight to protect capital; (iii) reduced investment due to insecurity; and (iv) reduced efficiency of production due to input market failure and interruption of (veterinary and other) service provision. These correspond broadly to the framework outlined[5], but include both short-run and long-run impacts, asset impacts and revenue impacts, and protection and coping strategies, including some, such as capital flight, that do not lead to any asset impact.

These examples serve to highlight the overlap of coping strategies and protection

---

[5] (i) looting etc is clearly violent actions and impact, (ii) capital flight is a protection strategy, that does not lead to impact as no assets are lost, (iii) reduced investment is again a protection strategy but may be classified as a long run impact, and (iv) inefficient production is reduced returns

strategies in the small existing literature that engages directly with 'channels' or mechanisms. To look at asset impacts, especially short-run impacts, rather than more broadly defined 'impacts' that may include revenue, consumption and long-term investment, enables greater clarity to be drawn on the mechanisms by which these asset impacts are caused. That is not to say that revenue impacts are unimportant - of course in calculating the costs of conflict these must be included - but in understanding the mechanisms for the purpose of analysing decision-making I shall argue that the narrow focus on asset impacts is beneficial. At the very least, it helps to build some conceptual clarity in one aspect of wartime impact that may be improved upon in future. I am hopeful, though, that by disaggregating coping and protection strategies important aspects of civilian wartime decision-making may be unveiled. Which is true depends rather on two inter-related factors: the extent to which the 'asset protection assumption' holds, and the timeframes involved.

1.2 Context and Armed Groups

For much of its post-independence history, Côte d'Ivoire was one of the economic success stories of Africa. In the 1970s and 80s with relatively effective governance and booming exports of cocoa and coffee, Côte d'Ivoire attracted large scale immigration from other countries in the region, encouraged by the state in order to supply the labour required to work in agriculture. But in the 1990s the economy began to stagnate, causing inter-ethnic tensions to emerge that were exploited by a new generation of political leaders emerging to take over when the 33 year rule of Houphouët-Boigny came to an end.

The first Ivorian Civil War started in 2002 when troops in the north of the country mutinied on 19 September. The failure of the rebel forces to secure Abidjan led to a stalemate in which the north of the country was run by the rebels while the south remained under the authority of the state run by President Laurent Gbagbo. Long-delayed elections to end the impasse were eventually held in the autumn of 2010 and were supposed to reunite the country. But when the close-run second round in October 2010 confirmed Alassane Ouattara as President (ICG March 2011), Gbagbo disputed the outcome and refused to leave his post. There followed several months of tension, with escalating violence especially in the West of Côte d'Ivoire as the rebel army moved down from the north towards the capital, the national army (FDS - Forces de défense et de sécurité) divided with many supporting Gbagbo, and pro-Gbabgo youth militias mobilised in Abidjan. A French-led UN force patrolled the capital and defended Ouattara but had no mandate to intervene effectively until UN Resolution 1975 was passed at the end of March 2011.

Amidst this tense stand-off, in December 2010 a shadowy Abidjan-based rebel group began fighting against Gbagbo. Known as the Invisible Commandos (IC), they fought a guerrilla campaign from PK18, a remote suburb in the north of Abidjan. Before describing the Commandos and PK18, I outline briefly the other main armed actors. The Forces Nouvelles (FN) were the rebel army that had controlled the north of the country for the last decade. They were led by Guillaume Soro, the Prime Minister and an ally of Ouattara. On 18 March 2011 they were merged into a new army, the Forces Républicaines de Côte d'Ivoire (FRCI) alongside parts of the FDS that had defected to Ouattara's side. The FN formed the majority of the new FRCI, and the new force, like the FN, suffered from a weak decentralised command structure (ICG August 2011). For simplicity I refer to Ouattara's military support during the crisis as being the FRCI

throughout the thesis. Also on the side of the FRCI were the French, and French-led UN forces in Côte d'Ivoire although they played little offensive military role until the very end of the Crisis.

Unless otherwise stated, FDS in this thesis refers to the majority within the FDS that stayed loyal to Gbagbo while parts of the state army splintered to support Ouattara. The FDS operated from several bases across Abidjan, including 'Camp Commando' in Abobo. Also on Gbagbo's side were CECOS, a special security command police force, some number of Liberian mercenaries, and the Jeunes Patriotes (young patriots) youth militia. These young patriots, primarily southern Christian male youths strongly supportive of Gbagbo, were mobilised by their leader, Gbagbo ally Charles Blé Goudé, and were eventually armed by the Gbagbo side to help shore up the forces attempting to keep him in power.

Somewhere between these two coalitions were the Invisible Commandos. Fighting like the FRCI to oust Gbagbo, they were led by a long-standing rival of FRCI leader Soro. They came seemingly from nowhere to become one of the most effective fighting forces in Abidjan during the early days of the crisis, and they took control of PK18 by early March, declaring it the 'Autonomous Republic of PK18' (Daily Telegraph 2011), before disappearing just as quickly. In this introduction I give an overview of PK18 and the Commandos, including the decisive Battle of Black Saturday around which this thesis is centred. The Commandos' relationships with the civilian population I leave to Chapter 3, and their emergence, recruitment and sudden demise I leave to Chapter 4. Little of the story of the Commandos is widely known or published in academic literature, so detailed research was required to build the contextual understanding required for analysis of civilian decision-making.

The Invisible Commandos

Following a failed attempt on the life of Prime Minister Guillaume Soro in 2007, and the 'Christmas in Abidjan' coup plot later that year, a small group of former rebel soldiers were exiled to Benin. They were a group close to Ibrahim (commonly referred to as 'IB') Coulibaly, who had many years before been a bodyguard for Alassanne Ouattara while he served as Prime Minister. IB had risen rapidly from bodyguard to a position of influence thanks in part to his involvement in the 1999 coup d'etat. However his involvement in later coup attempts was much less successful. He directed military

operations in the attempted coup of 2002 which failed, and led to the division of Côte d'Ivoire with the rebels controlling the north of the country. IB was absent as they took control, and in the power vacuum Guillaume Soro took control of the north and unified the rebel forces. Clashes between IB's men and Soro's in 2004 in the northern rebel capital of Bouake led to a permanent rift between the two that left IB in political exile. In 2008 IB was tried and convicted in absentia in France and he was served with an international arrest warrant. But two years later preparations began for another attempt to regain political power. According to one of the ex-combatants I interviewed in Abidjan, this core group returned from exile in 2009 under IB's instruction in order to plot to overthrow Laurent Gbagbo following the 2010 elections – whatever the result. Some of the group based themselves initially in Bingerville, close to Abidjan on its eastern side but they settled eventually in PK18 at the start of the Crisis.

One civilian account of why the IC attained that name, heavily influenced by the mystic beliefs prevalent amongst many in Côte d'Ivoire, told how several Commandos, led by IB, showed themselves to Gbagbo-loyalist forces in order to encourage an armoured vehicle to pursue them. Once the Commandos had been cornered in a cul-de-sac, they used mystic powers to disappear and reappear behind the armoured vehicle, trapping it and permitting it to be destroyed. Other accounts focus less on overtly mystic explanations and more on how their local knowledge and effective use of guerrilla tactics made them 'invisible' to the extent that they were very difficult to find and attack.

There were about 12 loosely organised collectives across Abobo referred to as the Invisible Commandos (Ben Rassoul 2012). The main faction, that discussed in this chapter, was based in PK18. They were led by Inza Karamoko, also known as 'Commander Fongnon' (meaning 'wind' in Dioula), and also known as 'Colonel Bauer', from the television series '24', who was previously a Com'zone Commander of Dabakala, east of the rebel capital Bouaké (Ben Rassoul 2012). He was the military commander of the Invisible Commandos, and appeared in press interviews prior to IB joining his forces in Abidjan.

PK18

PK18 (Point Kilometre 18, reflecting its distance from a location in central Abidjan), is one of several unusually-named *quartiers* of the northern Abidjan suburb of Abobo. Abobo is a sprawling working class suburb, home to 1.5 million of Abidjan's 6.4 million inhabitants, many of whom are immigrants or Northerners. Abobo contains major transport hubs of Abidjan, including its train station which connects to the north of the

country and Burkina Faso, where much of the immigrant population is from. Abobo forms much of the northern part of Abidjan and as it is located north and east of the Banco Forest it is relatively isolated from the rest of Abidjan. The most remote part of Abobo is PK18. The satellite image below shows PK18 outlined in white, through Abobo and north of the large expanse of Banco National Forest.
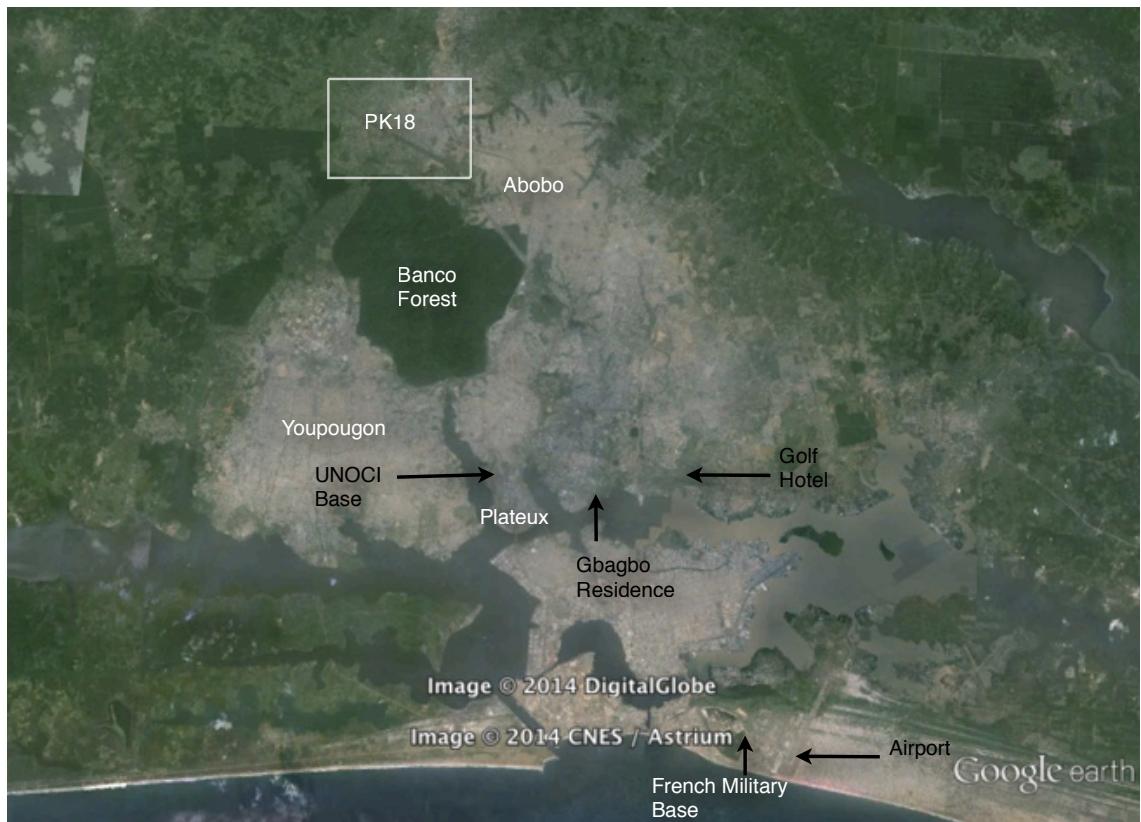
Figure 1.2: Satellite image showing PK18 outlined in white north of Banco National Forest.

The image shows the remoteness of PK18 from the centre of Abidjan, the central business district of Plateau by the lagoon. The Presidential Palace is in Plateau, south of the UNOCI base, but Gbagbo's residence was east along the lagoon. A few miles further east is the Golf Hotel, where Ouattara's camp set up during the Crisis.

Abobo was, during the crisis, considered a pro-Ouattara stronghold. Certainly it was home to many ethnic northerners and immigrants viewed as Ouattara supporters, and was, overall, supportive of Ouattara in the 2010 elections. But Abobo cannot be viewed simplistically as being in opposition to Gbagbo; it had also previously elected Simone Gbagbo – the wife of Ouattara's rival – to office and the loyalties of the population there were far from being unanimous. Still, it was an attractive location for an armed group opposed to Gbagbo because, apart from the presence of potentially-sympathetic

ethnicities in the local population, there were, more importantly, a significant number of ex-members of northern rebels living in that area of Abidjan. As a result of having associates who had been resident and working in PK18 for years, many as taxi drivers, the Invisible Commandos had a level of pre-existing knowledge of who in the community was sympathetic to or working for the Gbagbo regime. The presence of ex-soldiers also meant there was a pool of potential recruits with previous experience of handling weapons and social contacts in the rebel forces. The imported local knowledge enabled the Commandos effectively to combine the military effectiveness of trained soldiers with local knowledge to target policemen and other members of the state apparatus to build up their weapons supply in the early days of their operations.

Many Abobo residents consider their quartier to be different to the rest of Abidjan; that it is in some way less part of of the state. The Mairie has limited influence and there are frequent demonstrations and resistance to state authority. Perhaps in order to compensate for this, state institutions have been built in Abobo, including Camp Commando – a military base – and Cite de Police – a modern, luxurious and tarmacked housing development in built amongst the mud and shanty housing of PK18 to house police officers. The MACA prison is also not far away on the southern fringes. Despite these measures, the relative weakness of state institutions in Abobo generally and PK18 in particular may have had some role in attracting the Commandos to the area.

The physical characteristics of PK18 mirror the independent character of its population. Abobo sits on the northern and eastern fringes of the Banco National Forest, which forms a natural barrier between the area and central Abidjan. PK18 is particularly remote and its haphazard network of narrow mud tracks makes it difficult to navigate. While two roads run through it – one from Abobo to Anyama, and the other up the western side of Banco up to the north, these roads were not connected to each other with tarmac until after the crisis, so progress into the interior of PK18 was difficult. The satellite image shows how, while it is urban and part of the capital, immediately north and west from PK18 is rural.

Despite its isolation, as the main aim of the Invisible Commandos was to oust Gbagbo, the importance of the location of PK18 was also its proximity to central Abidjan and Gbagbo's forces. Troops stationed in the capital would be influential because of their potential to engage government troops and attack key state apparatus, without actually posing a large threat basing themselves anywhere that entails control of such

apparatus. So PK18 was far enough away from the opposition forces and the key strategic assets to make attaining control realistic, but sufficiently close for rebel control, once established, to provide a base from which to present a real threat to Gbagbo's control of the capital.

Black Saturday (Samedi Noir)

Central to this thesis are the events of the week running up to the Battle of Black Saturday. This was an intense fight between Gbagbo loyalist troops (CECOS and FDS) and the Invisible Commandos. The main sequence of events is presented in the table below and then described.

Monday 21	Tuesday 22	Wednesday 23	Thursday 24	Friday 25	Black Saturday	Sunday 27
No fighting	Ambush of CECOS forces. Shelling & Fighting	Shelling & Fighting	Shelling & Fighting	No fighting	Ground incursion and shelling	Fighting moves away from PK18

Figure 1.3: PK18 Main conflict events in late February 2011

The map below shows some key locations in this early episode of fighting in what became known as the Battle for Abidjan. The IC had set up their main military base under General Bauer at a very small hotel not far from the N'Dotre junction to the west of PK18. It was a little west of a school that later became their training facility for new recruits. The road running east-west through the centre of PK18 was, at the time, not tarmaced and this made it difficult terrain for armed vehicles to enter. Checkpoints and other barriers that began on the small side streets of PK18 were quickly established on this main road, particularly at Pharmacie Safi midway between N'Dotre and Agripac. The zone of influence around Pharmacie Safi was relatively uncontested, but the area closer to their main base at N'Dotre was very heavily shelled in the week running up to Black Saturday, with Gbagbo's tanks firing from the road that runs north to N'Dotre from the Western edge of the Banco Forest. The main access road on the eastern edge of PK18 had always had a government forces checkpoint at Agripac, the junction between the cross road and the main Abobo-Anyama road.

Figure 1.4: Satellite image showing PK18 and surrounds [approx. area outlined in white in Figure 1.2], including major checkpoints and other important locations.

Agripac checkpoint formed a centre for Gbagbo's influence in PK18, but the FDS rarely moved past this point. Even during the massive incursion of Black Saturday, the considerable force sent to defeat the IC apparently did not dare to move far past the Agripac checkpoint:

> *The Wednesday[6] before that Saturday, we had killed an army officer in combat, and the Saturday, it was like a revenge that the FDS were coming to take. They were heavily armed (22 tanks and nearly 3000 men) and led an assault on PK18. They succeeded in pushing us back and we had to desert the checkpoints that we had. We retreated as far as Unicafe. The FDS stopped their assault at Agripac, and they did not progress any further. But still they fired shells towards our position. We had to call on the old men with mystic power to help us out of the situation. There were five mystics there. Their actions made the shells stop exploding when they landed. That helped us a lot. And we began to plan ambushes against the FDS to the point that*

---

[6] Media reports suggest this ambush occurred on the Tuesday. The testimony from this combatant also suggested Black Saturday was a week later than it eventually transpired to have been. This demonstrates some of the challenges of this 'nano-level' research in intense conflicts with relatively weak media coverage and human rights monitoring. (Of course these might also be considered relatively strong depending on the frame of reference).

they were forced to retreat back to Abobo centre. That was how we regained
our checkpoints and retook the ground.

<div align="right">Senior ex-combatant</div>

The account reflects the deep belief in mysticism held by many in the Commandos as well as their opponents and the civilian population. Once the battle turned late on Black Saturday, the IC took advantage of weapons caches south of the Agripac checkpoint to rapidly turn the battle against the government forces and push them much further east towards the centre of Abobo.

So exactly what happened on Black Saturday is not entirely clear, but it does seem that despite a concerted effort to remove the Invisible Commandos through a ground and artillery offensive, the IC came out ultimately victorious and from that period controlled PK18 unchallenged, with the FDS being pushed back to the area in and around Camp Commando in the centre of Abobo. 'Samedi Noir' was well known by the residents of PK18 and Abobo, but did not seem widely known in other areas of Abidjan and, despite it being a key turning point in the Battle for Abidjan, was not widely reported in the media as a conflict event. Nevertheless, media documentation of clashes and mass outflows of civilians on the Saturday and Sunday are evident, and the events triangulate with the testimony of an Medecins sans Frontieres (MSF) representative working in Abobo and with interviews with civilians in PK18. On 28 February, MSF set up their Abobo hospital. MSF could not access PK18 because of intense fighting there at the time, and on the 28th February they started receiving wounded individuals from that area. That day 115 patients were received, some with bullet wounds (45% of the 115), and shrapnel or knife wounds (MSF pers. comm. 2012).

So through this battle of Black Saturday, the IC emphasised their control over the centre of PK18 and pushed the FDS further away from the periphery. They gained control of the key checkpoints on arterial roads at Agripac and N'Dotre so were better able to prevent the FDS from firing shells at the population.

1.3 Structure

The thesis addresses the questions raised in the introduction in four empirical chapters, following on from the next, second, chapter which describes the methodology used. Briefly, Chapter 3 outlines the range of actions of armed groups, while the Chapter 4 outlines the range of actions of civilians. Chapter 5 describes the protection action of displacement specifically and in isolation, before the Chapter 6 analyses the causes of displacement. Chapter 7 concludes. I now outline in more detail the structure of the empirical chapters.

Chapter 3 focuses on the actions of armed actors: both violent and non-violent actions. The chapter analyses the context in which these actions took place, and seeks to examine the rationale for the use of violence, and the process of production of threat. The fourth chapter examines the actions of civilians. There is some cross-over between civilian and armed group actions, in that one protective action of civilians is to become armed actors. I deal with this issue in Chapter 4. Chapter 4 describes the interrelationships in PK18 between protection actions and direct and indirect threat, and the way protection actions may produce impact on the household.

Chapters 5 and 6 then move on to quantitative analysis of the determinants of choice of protection actions. Chapter 5 focuses on the protection action of displacement, so looks within the conceptual framework's 'blue box' of protection actions to describe in detail one action without analysing the external relationships or relationships between boxes. The process of decision-making in displacement is analysed conceptually and then empirically. Several aspects of PK18 displacement decisions are described, including intra-household decision-making. Displacement is found to be non-binary at the intra-household level. The argument is made that at least four displacement outcomes may usefully be categorised, and that displacement process as well as outcomes are important. The nature of households in these categories are then described, with particular focus on two socio-economic variables: the asset index and education. Education varies little across the categories, but in this descriptive analysis the asset index appears to be positively associated with the displacement process of splitting that leads to staged or partial displacement.

Chapter 5 is about the patterns of displacement in PK18, including intra-household patterns, whereas Chapter 6 then goes on to try to explain these patterns. The

introduction describes endogenous relationships in displacement choice research, which make establishing causality between violence and displacement difficult. The two main forms of endogeneity are exposure and threat variation. Building on the framework from the Introduction and Chapter 4, three channels are identified by which protection actions (including displacement) are related to violence: threat, indirect threat, and impact. A three-zone theoretical model of displacement is adapted from that expressed in Engel and Ibáñez (2007). A new approach to the assessment of threat focuses on the relative importance of selective threats and threats to assets. Relative to those who all left simultanously: (1) the staged displaced were more likely to say that selective threats at home were an important reason for displacement; (2) the partial displaced were more likely to to say that looting was important reason for staying, and (3) the 'all stay' were less likely to say that looting or selective threats en route were important in their reason to stay. Possible explanations for the important role of the asset index in displacement are analysed.

As a whole, the thesis represents a conceptual and empirical analysis of the production of threats in war, civilian self-protection strategies in war, and how displacement functions as one of those protection strategies. To achieve this required unique data, and I turn now to describe the methods used in producing the dataset.

Chapter 2: Methodology

2.1 Introduction

Following the outline description of the Ivorian and Abidjan context in the introduction, this chapter introduces the research design for the proceeding four data chapters. I introduce the various methodologies used in the literature, explain the choices made here and then briefly describe the process by which the data collection effort was conducted. The analysis uses data collected in October and November 2011, almost entirely in PK18. Semi-structured and unstructured interviews with households, key informants and ex-combatants provided detailed information on patterns of violence and displacement. A survey of 715 households was then undertaken that focused on displacement decisions, including intra-household variation in those decisions. The timing, route and destinations were collected for all displacement groups within households – groups being one or more people within the household leaving for the same destination at the same time and by the same route.

In the introduction I outlined some of the progress made in researching civil wars at the micro, subnational level. Research at the micro-level has been praised because it helps overcome some of the difficulties found with cross national research. Kalyvas suggests that: "compared to the macro-level, a subnational focus offers the possibility of improving data quality, testing micro-foundations and causal mechanisms, maximising the fit between concepts and data, and controlling for many variables that can be held constant." (2008:397). Blattman and Miguel (2010) similarly endorse such a micro-approach. However, I will argue here some of these difficulties remain at the subnational level and progress can be made by researching at even more localised levels: that I shall refer to as 'nano level'[7]. For instance, Kalyvas (2008) points out that over aggregation remains a key concern even in micro-level research: "a combination of insufficient theorisation, superficial engagement with the case at hand and reliance on off the shelf datasets leads to the use of variables that are insufficiently or inadequately disaggregated" (2008: 398).

The specific problem in displacement research that I seek to overcome in this work is the lack of understanding of the mechanisms by which the incidence of violence affects human behaviour. Macro-level theories have addressed this issue through several

---

[7] Levels of analysis are typically divided in macro, where the unit is the nation state; meso, where the unit is armed groups or other organisations; and micro, where the household or individual is the unit. 'Nano level' is used here to refer to what is effectively highly localised micro-level research.

avenues: in, for instance, the study of participation in armed groups, impact of war on poverty, and impact of poverty on war. Yet at the micro-level, there is no overarching theory on how civilian decision-making during wars is impacted by violence. In displacement research scholars are working with adapted migration theories without detailed understanding of how these may be affected by different contexts of violence. When this lack of theory is combined with the spatial and temporal aggregation of violence and civilian decision-making inherent in much micro-level research, it remains difficult to understand the relationship between violence and decision-making, even if we can say with increasing certainty that such a relationship exists.

This paper uses a variation of what I shall call the 'whole population strategy' for displacement research, implemented at the nano level. I shall explain and justify first the choice of whole population strategy, then move on to explanation and reasoning of the scale of analysis, followed by a detailed description of the process by which the data was gathered including ethical issues.

2.2 Outline of research strategy

At the cross-country level, analysis of displacement has often used cross-national refugee flows per annum, or national IDP statistics (Davenport et al. 2003, Moore and Shellman 2006, Melander and Oberg 2007). This strategy has also been used at the micro level – Czaika and Kis Katos (2009) look at migration flows between different regions in Aceh. In these approaches, there is no possibility of comparison of the displaced and non-displaced to analyse distinctions between them, only comparison of different national or regional characteristics. At the subnational level there are two strategies available for researching displacement heterogeneity, which allow for overcoming the challenge of comparing displaced and non-displaced households: case matching strategies, and whole population strategies.

Whole population strategies involve sampling an entire population and establishing whether each household was affected in some way by displacement. A nationally-representative survey conducted after a war, and after refugees have returned, and IDPs returned or resettled, may capture variation in displacement decisions during the conflict that may be compared with aggregate or household data on violence during the same period, so establishing some association between violence and displacement. There is a requirement that a significant proportion of the population of both displaced and non-displaced be present within the area that is sampled. This condition may be more likely to be met at the national level but, in conditions where there is a high level of displacement and return to smaller localised areas, the whole population strategy may also be used. Indeed it is only at this localised level that there is any significant work using this methodology – that being a working paper by Brück et al. (2012).

On the other hand, case matching strategies involve sampling in a region where people are displaced, and then sampling in the sites from where these households originated. One of the original studies on household displacement heterogeneity – Engel and Ibáñez (2007) – uses this method. Adhikari (2013) uses the same method but develops it further, using a much larger sample size and, due to the context, including the displaced and returned in the sample.

Both these methods exclude certain parts of the population. Whole population strategies do not include any households who have been displaced and have remained outside the sampling area. Case matching strategies suffer from the same problem, in that if people leave to areas that are not the receptor locations used in the sampling strategy they are excluded. Depending on the displacement context and on the scale of analysis each may result in different degrees of bias. Particularly in contexts where displacement has been short-term, case matching strategies may not capture the complexity of displacement outcomes. Whole population strategies have been, to date, under-utilised, and displacement research has focused primarily on situations of long-term displacement. The research effort that underlies this thesis seeks to redress the

balance somewhat by focusing on the context of displacement and return, using whole population strategies in one small area.

The 'Nano-level'

The data collection effort here focuses on an area just 3 kilometres from east to west and 1.5 kilometres from north to south. Micro-level displacement studies typically analyse displacement heterogeneity across whole countries, so to do so over just a few blocks of part of one suburb of a city represents a novel approach in the literature, which requires some explanation. I shall return to this issue in more detail in Chapter 6, so the discussion here is rather superficial. Briefly, violence that affects civilians and their decisions during wars may be measured in several ways: by asking each household about their own experience of violence; by using troop presence or incidence of violence at some aggregate level (Bohra-Mishra and Massey 2011, Engel and Ibáñez 2007) by asking each household about their knowledge of others' experience of violence in their area (Brück et al. 2012); by measuring violence at the community level, either directly or through aggregation of the same dataset (Czaika and Kis Katos 2009); by matching violence datasets to households (or whichever unit displacement is measured at) – probably at some level of regional aggregation of violence (Adhikari 2012); or by combining several of these approaches (Adhikari 2013).What is missing with most of these approaches is some degree of certainty as to whether and how the violence has impacted on people's lives. That there were killings or other violent incidents in an area of thousands of square kilometres does not necessarily confer threat to any individual within that area.

Overcoming this link from violence to some measure of threat is a challenge. Brück et al. (2012) make use of the theory of horizontal inequalities to proxy for the likelihood of a household facing violence. Adhikari (2013) asks households directly how afraid they were. These represent significant advances, but remain imperfect.(See Chapter 6 for more details). Moving from a micro- to a nano-level, which might loosely be defined as a single episode or event of violence occurring across a limited space, might help in three ways: first, it may be established that all households within that space are affected by a significant threat of violence; second, that the direction of causality may more easily be attributed; third that knowledge of the conflict dynamics as they affected households, and the types of threat present, may more easily be understood. It should be emphasised though that the nano-level is likely to suffer from other problems. For instance, data may not be available to systematically compare levels of violence across different parts of the area; and it may not be clear a priori whether there is variation in displacement outcomes in such an area, so there are obstacles to finding the right context.

One example of the 'nano-level' might be a large building hit by a shell but not destroyed. Everyone in the building, if present, experiences the same event and has reason to feel considerably threatened by such a violent incident. Hence variation in outcomes may be attributed to factors other than threat heterogeneity. That said, some will be closer to the impact of the shell than others, so some variation in threat will occur. In this case, attribution of such

additional in-case variation might easily be done objectively by measuring distance to the impact of the shell, but this benefit of the particularly small scale may be offset against the possibility that the whole population of the building left shortly after impact. Finding the balance between the benefit of a very localised scale, while retaining variation in the outcome variable of interest, is one challenge faced in this research.

Overall, the narrow focus of such an approach enables an emphasis on building theory, combining qualitative and quantitative evidence and concentrating on the effects of one main event in a conflict rather than the aggregated effects of all conflict events.

Recall data

Many micro level survey datasets from civil wars use recall data. There are clear restrictions on data availability and ability to conduct research during wars that means other forms of data are not available and are difficult to obtain. The use of recall data underlies some of the seminal contributions to micro-level conflict studies, including Humphreys and Weinstein (2006), as well as the baseline conflict effects in Humphreys et al. (2012).

Research designed to overcome the absence of theoretical models as well as the absence of empirical evidence necessitates an approach where various forms of evidence may be used in an inductive process to help build towards the establishment of theory while retaining some prospect of external validity. One way to do this is through the construction of a detailed understanding of civilian responses to a very short, intense period of violence bounded spatially and temporally, using both qualitative and quantitative methods.

Wars may comprise a series of episodes of violence spread out over space and time. Civil war may last a number of years and across a whole country. Micro-level studies often take districts the country and individual years within the period of conflict as the level of aggregation for incidence of violence. So using recall data may be problematic where patterns of conflict were repeated over years, or where many incidents of sequential displacement occurred, which may blur recollection of timings and locations of violence and displacement actions, and make establishing whether displacement was ex ante or ex post impossible. Violent incidents within wars, then, may be more a more promising setting than the war as a whole for understanding civilian response to violence and threat.

2.3 Research Design

The initial research questions are focused around understanding displacement heterogeneity, but the research design necessitated building an understanding of the context that required collection of data in itself - due both to the lack of published information on the wider conflict and the nano scale of the context. As such there were two broad phases to the collection of data for the research: first the collection of data regarding the context, and second, based on the context, the design and implementation of a survey focused on displacement decisions. There were overlaps between the two phases: the survey also provided further information about the context, and the initial context data provided useful data on displacement decisions.

Choice of context

Five factors underlie the selection of PK18 for data collection, and contribute to the strength of the data gathered for researching displacement. First, the context permits some potential to control for threat heterogeneity driving displacement heterogeneity. The conceptual framework outlined briefly in the introduction highlighted the complexity of isolating economic impacts of violence from threat. The ideal threat context for research on socio-economic determinants of displacement would be either entirely random or (similarly) entirely homogenous, but at a level which is sufficient to drive some to leave while others stay. PK18 was subject to intense shelling, which if not random is certainly targeted spatially rather than based on personal characteristics, be they behavioural or proxies for behaviour. The intensity of the violence also meant that the degree of threat faced was high, but displacement response was not homogenous.

Second, the context is one of displacement and return. In a rare set of circumstances, the threat diminished very quickly after the end of hostilities: both fighting parties in PK18, the Invisible Commandos and Gbagbo's forces, were defeated by a third group – troops loyal to current Prime Minister Soro and current President Ouattara – in a matter of weeks following the main period of fighting. This new government undertook to protect all its citizens and was to a large extent trusted by Ivorians. Their troops had had no involvement in the fighting in PK18 that caused displacement. The context of displacement and swift return permits whole population sampling. This avoids bias based on destination selection found in some case-matching research, although the possibility exists that other new forms of bias are introduced.

Third, Abidjan is the economic hub of Côte d'Ivoire. As such, the economic incentives for leaving are at best short term: this helps to explain the context of displacement and return, but beyond that also isolates the decision as one based on household characteristics, costs and threat, rather than one based on desire to increase economic returns by moving to areas of greater economic opportunity. Many conflicts in the literature that produce displacement, including

Nepal and Colombia, involve rural violence that serves to produce additional push factors for ongoing rural-urban migration. The research context here does not suffer from the same issues.

Fourth, relatedly, the 'short, sharp' conflict means that short term threat avoidance was the focus of the displacement decision. The conflict was ongoing across Côte d'Ivoire, but only for a short time. There was insufficient time for long term effects of conflict on economic activity to be felt in one place any more than others. Long-term conflict may erode economic activity and so produce migration forces that did not previously exist.

Fifth are practical and ethical issues. Because of the context promoting displacement and return, outlined in the second point above, it was safe to do research within a short period of the end of the conflict, not just for the research investigators but for participants. And as the conflict was short, recent, and had clearly defined patterns of violence, it was supportive of accurate recall data regarding behaviour during the conflict.

I spent two months in Abidjan, from the start of October to the end of November 2012 . This period of nine weeks was selected as being sufficient to build contextual understanding and conduct a survey, while not spending more money than budgeted for the fieldwork. Prior to leaving for Abidjan, I developed contextual understanding through reading local media reports and blogs from during the crisis, and *Abobo la Guerre*, a book written by Lesley Varenne, a French journalist present in PK18 during the crisis. Reports by Human Rights Watch and International crisis group were also useful.

A research assistant was recruited to assist with both phases of the research. This was to assist both with contacts and contextual information as well as to overcome linguistic barriers – while I do speak some French the local dialect is quite difficult even for fluent French speakers to understand initially. I contacted several individuals who had been used as stringers by journalists during the crisis and the selected research assistant was recommended as reliable. I chose Isidore Kouadio because of the recommendation and because of his being also fluent in English. It happened that he also came from PK18, the area eventually selected for analysis. He had a Masters degree from the US and was comfortable conducting interviews and approaching people for information, including during very tense periods during the crisis. He was Christian but from a Northern family so in some way transcended the divisions within Ivorian society.

Several options were considered for building a survey team including training local youths myself. However while in Abidjan, INGO contacts suggested I contact the survey team at MESAD, a youth-focused development NGO in Abobo. MESAD were recommended as having effectively conducted surveys in various areas of Abobo for UN agencies and INGOs. I met the survey manager at MESAD to discuss the possibility of working with his enumerators. He suggested that team of 10 would be best for the task of conducting 500 questionnaires in PK18, and that he had a team of trained enumerators of the right size available. Because of this and their track record I decided to conduct the survey using MESAD's enumerator team.

Phase 1: Interviews

Data collection began with key informant interviews to understand threat and displacement dynamics within PK18 during the crisis. I spoke to journalists from the BBC, Reuters, senior staff in UNOCI, staff from UNHCR, several local and expatriate staff members from each of the number of international NGOs including Save the Children, Norwegian Refugee Council, Internal Displacement Monitoring Centre, Terre des Hommes. Local organisations consulted included a local peace focused research organisation and MESAD. While these interviews were being conducted I was beginning to narrow my focus on PK18. It was noteworthy that staff members in these organisations tended not to know specifics of what happened during the crisis in Abobo.

These were followed up with four ex-combatant interviews (all Invisible Commandos), 25 structured telephone household interviews, mostly inside PK18, and five other semi-structured face-to-face interviews. More detail on these interviews is provided in Chapter Four. Many of these interviewees were personal contacts of my research assistant, or contacts of contacts. One of the ex-combatants was the brother of a contact at a research organisation in Abidjan, and another a former student of theirs. Several other informal discussions with taxi-driver ex-combatants were held but as these were informal and my research assistant was not present to confirm understanding, they are not included in the analysis here.

These interviews enabled a relatively detailed picture of the temporal sequence of the fighting to be established, though precise spatial dynamics of conflict and displacement proved difficult to confirm. In order to capture variation in possible displacement outcomes sites were selected across PK18 for the survey.

Phase 2: Survey

The questionnaire design (see Appendix 1 for full questionnaire) was informed by Macartan Humphreys' impressive data collection efforts in Sierra Leone (of ex-combatants) and DRC (civilians). In line with those, the design used the method of using a timeline of conflict events to promote recollection on the part of respondents as to the date of actions taken. The main difference being that events in Abidjan were over a four month period (and for most events within one week) ending 18 months previously, rather than over a decade ending three years previously in the case of Sierra Leone. As such, recollection in this case may be expected to be markedly better than in comparable studies, and in line with this more detail is requested from respondents as to the dates of their actions.

Design: Displacement heterogeneity

The design of the questionnaire was based in the contextual understanding developed during phase 1. The questionnaire was to capture displacement heterogeneity, several features of which had come to light: the propensity of households to split and move in separate groups; the massive scale of displacement which led to some concern that there may not have been

variation in displacement action (some people in PK18 told us that everyone left[8]); and the possible roles of different household members in making decisions about displacement.

The main component of the questionnaire was a module which recorded movements made by household members during the crisis, based on the household roster. Each member of the household was allocated to a group if they had displaced together – the same time on the same day by the same route to the same destination. For each group, information was recorded on the date of departure. Because we were seeking to understand whether displacement had occurred before or after incidents of violence, it was important to know the exact day each group had left. Because we already knew that the majority of displacement had occurred within the week of Black Saturday, that week was broken down into individual days in a table, that corresponded to a conflict timeline the enumerators were familiar with. Much earlier or later displacements were captured by approximate date (the conflict timeline the enumerators were trained in included not just the main pattern of PK18 violence but also other earlier and later significant dates in the crisis that were widely known). Discussing conflict experience with civilians during the interviews provided confidence that people remembered exactly when they left relative to other conflict events. The survey also included a module on groups' routes out of PK18, their final destinations, and the cost of displacement.

Design: Threat

Phase 1 also identified looting as being an important threat to households, as well as the possible importance of threats en route to a destination and issues with food and water. As such, three main modules were designed to gather data on these. An asset index was extended to establish whether each of the assets owned by the household before the crisis was looted or destroyed during the crisis, and whether the household was forced to sell any of the assets during the crisis. A threat ranking module asked respondents which of five pre-specified threats that might cause them to think of leaving were important in their decision, and which of five pre-specified threats that might cause them to think of staying were important in their decision. Space was left for up to three additional important factors to be added to the list of threats for staying or leaving. They were then asked to rank the top five important factors within 'threats promoting leaving' and five within 'threats promoting staying', with one being the most important. These threats included only different threats of violence, although it was already appreciated that for many lack of food was a major issue during the crisis that might have had a role in displacement. At the time it was thought, however, that it might be difficult for respondents to compare – for instance – the relative roles of potential starvation and potential death by shelling as a cause of displacement. Hence food security issues were separated, although many listed food as an additional factor in the three empty spaces in the threat module. Households were then asked in a series of questions about food security including availability of food in markets,

---

[8] It was not entirely clear prior to implementing the survey that there would be sufficient variation in displacement outcomes for displacement actions to be the dependent variable, which may have had to be timing of displacement if very few did not ultimately leave.

whether food was affordable, whether they rationed food and water supply [see Appendix 1 p6 for more details].

2.4 Survey Implementation

Training

Two days of training were arranged for the enumerators. This training focused firstly on the questionnaire, ensuring that they knew and understood the questions. As we discussed each question in turn all together, some changes were agreed to be made for the final version for printing. The second focus of the training was how to select blocks, buildings, and households. Various randomisation techniques were discussed and a simple method based on random number sheets selected. My research assistant was present on the ground for the first day of the implementation of the survey.

At the end of the second day of training, two enumerators and my research assistant conducted five interviews near the Agripac checkpoint to pilot the questionnaire. All three were present for the five questionnaires, and I discussed the process afterwards in depth with my research assistant. No significant issues were found with the overall design, but it was agreed to remove one question on political allegiance from the questionnaire due to some awkwardness this created.

Presence in the Field

I was advised by the survey manager and others with experience working in the area that to be present in PK18 during the implementation of the survey would raise suspicions about what the survey was for. It was better for the survey team to conduct the survey without my being present, as they were an organisation with a reputation in the area so people would know who they were and not be suspicious about their intentions. This corresponded with my own brief experience when approaching strangers to conduct interviews in PK18.

This of course presented issues with my capacity to control quality in a timely manner. I met the survey manager after the first two days of the survey being conducted, as a security issue prevented meeting after the first day. A few issues were identified with the completion of surveys on the first day, and the enumerators concerned were sent back to the households to re-do these questionnaires. I met the survey manager after the third, fourth and fifth days and the problems had been addressed. In the following week, once I had looked through questionnaires in more detail, any issues with the completion of the questionnaires were raised and enumerators clarified or corrected the work. The main issues were with three enumerators and fewer than 30 questionnaires, and were rectified in the week following the first enumeration week.

Sampling

The first round of the survey sampled 505 households, 100 in each of five purposively selected areas across PK18, and five pilot surveys conducted near Agripac checkpoint. The five areas

were selected on the basis of location relative to key checkpoints, with two near N'Dotre in the west, two in the centre between Safi and Agripac, and one the other side of Agripac. In each of these areas, of around 0.5 km², 10 blocks were randomly selected, and four buildings randomly selected within each block. Block selection was done by the teams on the day so one member of the survey team with some experience of maps marked the blocks selected on satellite images of the area. Two or three households were randomly selected within each building, to total 10 household interviews within each of 10 blocks in each area. Households were required to have been in that building in PK18 six months prior to the crisis. Interviews were held with the household head whenever possible, or otherwise with a spouse or other senior household member.

Figure 2.1 below is a satellite image showing the blocks selected in the sampling process in five areas: one area is in the north-east of the image, and the other four are north-east, south-east, south west and north west from Diallio checkpoint. The area south-east from Diallio was re-sampled for the second phase.

Figure 2.1: Satellite image showing PK18, important locations and survey blocks.

Figure 2.2: Satellite image showing detail of blocks delimited by mud tracks on each side. Buildings are clearly visible within each block.

Second stage

Preliminary coding of the survey responses revealed that the two central areas demonstrated greater variation in displacement patterns, with more households staying in whole or in part. One of these central areas, north of the goudron (tarmac road, the main east-west road through PK18), had proved problematic for research so the other area, south of the goudron, was therefore selected for additional sampling of households. Sampling of an additional 210 households used the same block selection method but with exclusion of blocks already selected in the first round and in a slightly broadened area. Three of the enumerators were not used for the second stage of the survey. 11 blocks were surveyed on one day, and 10 on a second day.

Several changes were made to the questionnaire for implementation in the second stage of 210 additional households. Additional open-ended questions were added, including one on civilian inter-relationships during the crisis; and an open question asking respondents to describe the process of how the decision was made. Questions on how long the respondent's family had lived in the house, and how long they had lived in PK18 were erroneously omitted from the first round of the survey and were included for the second. To make space for these, some modules removed, including the intra-household bargaining module which had been replaced by the open question. The adapted questionnaire is included as Appendix II. At the end of the survey I spent time with the enumerators gathering their thoughts on the reasons for displacement heterogeneity based on their experience speaking to people in the different areas.

Administration and Ethics

The research was conducted in Côte d'Ivoire under the remit of the wider research program of Agency and Governance in Civil Wars, with Côte d'Ivoire government approval granted. As the research covered a recent conflict and very sensitive issues great care was taken to ensure no harm was caused through the research process or by the outcomes of the research.

The fieldwork was funded as part of the Côte d'Ivoire section of the global Agency and Governance in Civil Wars project. The main section of this research was conducted by Dr. Yvan Guichaoua on the education system under the period of rebel rule in the north of the country following the First Ivorian Civil War. The project was funded by DFID/ESRC.

The survey implementation partner was selected in great part due to the recommendations given by international NGO partners. Marc Gnahore, the manager, was trained in psycho-social support provision and had worked in implementing such programmes in the community. As MESAD had experience providing counselling, as part of the implementation agreement all survey respondents were offered the possibility to follow up with MESAD if they wanted to discuss anything further.

It was emphasised to enumerators during training that they should stop the interview immediately if there was a chance the interviewee might become upset or otherwise experience possible negative consequences of participation. Two surveys were incomplete as a result of this: one was terminated because the enumerator considered that the respondent was likely to become upset if the interview continued; second was incomplete because the respondent's husband returned home and was unhappy that his wife was talking about their wartime experience. In general, my experience and one that the enumerators shared, was that people wanted to talk about what had happened and wanted to share their experience, as long as the information was anonymous. I ensured MESAD were able to provide a forum for the survey enumerators to gain any assistance or support required, and made the same efforts with my research assistant.

Research permissions were taken orally on the advice of MESAD and others with survey experience in the area. No names were taken, and building locations were not recorded so identification even with the full dataset and local knowledge would be difficult in most cases. A short piece was read to each participant prior to starting the interview to explain what the research was for. Phone numbers were taken and five survey respondents were phoned to check that the correct process had been followed.

Interview permissions were also granted orally. People were genuinely inquisitive as to the nature of the research and this was explained fully prior to the start of each interview. Great care was taken to explain the importance of research ethics to the research assistant, who had previously worked in journalism so his approach required some adjustment prior to commencing

interviews. I gave out my business card to all face-to-face interviewees, and all telephone interviewees were able to contact my research assistant on an ongoing basis if required.

Data entry was undertaken in Spring 2013 by myself and two volunteer assistants, both fluent in French. One volunteer entered all of the open ended questions, while myself and the second volunteer entered the quantitative data, working together so as to ensure consistency. Data were entered directly into a spreadsheet designed to highlight errors with the entry. A random sample of 20 questionnaires were checked following data entry and no significant problems found. The open-ended and quantitative spreadsheets were later merged. Excel sheets were imported into Stata, which was used for data analysis.

2.5 Conclusion

I have outlined a research design for understanding civilian decision-making during violent conflict. Research at the highly localised micro level (or nano level) has potential for maximising some of the benefits of mixed methods research. A detailed understanding of armed groups and meso-level factors and conflict events may be combined with the micro-level survey data in order to provide the opportunity to analyse mechanisms as well as outcomes. The next four chapters analyse the dataset constructed during and following the fieldwork.

Chapter 3:

Armed Groups and the Production of Direct Threat.

Abstract

This chapter outlines how armed actors' actions shape the threat environment within which civilians make decisions. It is about the process of production of threat and, to a lesser extent, its reduction. Existing literature studies why violence is used against civilians but this literature does not analyse how actions of armed groups affect civilian wartime strategies. Despite this, within the recognition of civilian agency that underlie work such as Kalyvas (2006), some assumptions - based in the case of Kalyvas on extensive anecdotal evidence - are made as to civilian strategies in war and how violence may affect them. Further, other, non-violent options available to armed groups to achieve their objectives are under-studied, as are possible interlinkages between these options. This chapter examines the processes of production and reduction of threat through the actions of armed groups.

The empirical section of the chapter analyses civilian-side perspectives and impacts of four types of action taken by armed groups in PK18. Violence against armed groups, non-violent communication, violence against civilians and violence against assets were analysed using primarily civilian-side interview data. The analysis illustrated the nature of the relationships between these various actions and threat consequences for civilians. Two actions, violence against armed groups and non-violent communication, were also analysed for their role in protecting PK18 civilians.

3.1 Introduction

This chapter outlines how armed actors' actions shape the threat environment within which civilians make decisions. It is about the process of production of threat and, to a lesser extent, its reduction. Existing literature studies why violence is used against civilians but this literature does not analyse *how* actions of armed groups affect civilian wartime strategies. Despite this, within the recognition of civilian agency that underlie work such as Kalyvas (2006), some assumptions - based in the case of Kalyvas on extensive anecdotal evidence - are made as to civilian strategies in war and how violence may affect them. Further, other, non-violent options available to armed groups to achieve their objectives are under-studied, as are possible interlinkages between these options. This chapter examines the processes of production and reduction of threat through the actions of armed groups. The agency of civilians is central to this, but the implications for civilian decision-making I leave to the next chapter.

I build on the Introduction Chapter to present a definition of the concept of direct threat that provides the link between incidence of violence and civilian response. Existing conceptions of threat are not substantively or explicitly differentiated from risk, and focus on the civilian side. This chapter analyses the armed group side in order to better understand interactions between armed groups and civilians and the strategic options of the latter to protect themselves. Rather than the *reasons* for the use of violence by armed groups, the subject under analysis becomes the *implications* of this use of violence for the civilian population. Understanding the implications of the use of violence may help bridge the way towards researching the effectiveness of armed groups' use of violence, an area of study advocated as the next logical stage for progression in the field in the review article by Valentino (2014). It is difficult to study the effectiveness in any overall sense without understanding first what the range of effects on the civilian population are. What we have thus far are the broad range of studies on the reasons for using violence, and some rather narrow evaluations of the effectiveness according, including Lyall (2009) who suggests that indiscriminate state violence may reduce insurgent attacks from the villages subjected to violence. Also, while causes of the use of violence may be studied in isolation - for instance the

rationale of one particular group's use of violence - examining how threat is produced in a given context involves understanding the role of all armed actors and their interaction. This chapter may help in the building of foundations for researching the broader effectiveness of various forms of violence and other armed group actions, as well as the subsequent chapters of this thesis which focus on civilian responses to threat.

The next section outlines the relevant literature and describes the component concepts of threat building on the conceptions in that literature. These are targeting criteria, targeting capacity and the propensity to use violence. These in turn are shaped by meso-level factors of the location of the armed group and other organisational factors. The third section describes the PK18 data used, which comes mostly from semi-structured household interviews and unstructured ex-combatant interviews. The analysis is then split into two sections. The fourth section of the chapter analyses the production of threat, focusing on four actions of armed groups in PK18 and how these intersect with the five conceptual determinants of threat. The fifth section analyses the reduction of threat by armed groups in PK18, using evidence on two of the four actions of armed groups. The sixth section concludes.

3.2 Concepts and Literature

There is a growing literature seeking to explain why violence is used against civilians in war, summarised in a recent review article by Valentino (2014). Valentino categorises recent contributions into two narratives: war and politics. War-focused explanations of violence against civilians recognise the important role of civilians in supporting war efforts, especially of insurgents, and the various strategic implications that follow from this finding explain use of violence. Politics focused explanations similarly emphasise strategic benefits of violence against civilians, but concentrate on the role of elites in leveraging ethnic differences to cement their political position. The focus here is primarily on the former, as the research is at a very localised level and a short time frame, but as discussed in the introduction the violence certainly occurred within a national context in which ethnic tensions had been deliberately escalated by politicians to maintain their positions.

Within the wartime strategic motivations for violence against civilians, Valentino suggests that four arguments predominate. First, government violence against civilians may be explained by the aim to undermine the resource base of the rebels, (Valentino et al. 2004). Second, rebel violence against civilians may be an attempt to pressure the government by inflicting costs on their constituency (Hultman 2012), a strategy that includes what is commonly defined as terrorism. Third, both rebels or governments may target civilians in order to change their behaviour - both to encourage support and dissuade cooperation with the opposition (Kalyvas 2006, Kalyvas and Kocher 2009). The fourth motivation outlined by Valentino (2014) is the organisational incentive and capacity of an armed group to manage the behaviour of its troops, as in Weinstein (2006) and Humphreys and Weinstein (2006). Yet this last motivation is not itself a motivation, but rather the ability to constrain the motivations of its troops. These must be assumed to be functional motivations for violence, rewarded by looted goods, sex or other returns to violence.

In contributing to this literature, this chapter examines the motivations for the use of violence in PK18. The focus goes beyond explaining the use of violence, however, to connecting the role of the use of violence to the production of direct threat to civilians and to other non-violent actions by armed groups. I also detail how violence and other actions by armed groups may protect civilians. I articulated in the thesis introduction some of the links between violence and threat. The concept of direct threat is

comprised of three elements: targeting criteria, targeting capacity, and propensity for violence. The purpose of this chapter is to build from the existing literature on the allocation of violence into a broad model of threat production that seeks to understand how civilians protect themselves from that violence. Addressing the rationales underlying the violence is extremely useful, but I argue that going beyond this in order to build a more complex and comprehensive picture of threat is important. It can help us understand why the rationale for militia use of violence may matter to civilians.

These three armed-group-side determinants of direct threat are each influenced by the interrelated wider issues of organisational capacity of the armed group, and control and contestation, both of which are familiar from the literature (Kalyvas 2006, Weinstein 2006). Before going on to detail these further, the next section fills out the three concepts - criteria, capacity and propensity - briefly outlined in the introduction, while relating these to existing concepts in the literature.

Targeting criteria

The criteria used by perpetrators of violence to select their targets are usually considered selective or indiscriminate (Zhukov 2013, Kalyvas 2006). According to Kalyvas (2006) violence aims to change behaviour, and is selective when the behaviour deserving of punishment is identified at the individual level. By contrast when violence is indiscriminate: "the concept of individual guilt is replaced by the concept of guilt by association" (2006: 142). Kalyvas goes on to describe indiscriminate violence as 'random' and 'completely unpredictable' (2006: 143), and provides anecdotal evidence that in some instances this is indeed the case. This view of indiscriminate violence being random is, in my view, problematic, as is the view that violence is necessarily directed against civilians in order to change behaviour. Both of these issues are addressed in Steele (2011), extending from Kalyvas (2006) to suggest three forms of targeting: criteria may be indiscriminate, collective (based on some shared characteristic) or selective. This sub-divides indiscriminate violence into collective and indiscriminate, effectively ascribing the 'guilt by association' to collective identity. However the problematic 'indiscriminate' violence remains, inferring the absence of targeting criteria. So for 'indiscriminate' violence I substitute 'spatial targeting', which is when 'guilt by association' is based on location. Even the most 'random' of violence, for instance the drunken shelling in Lyall (2009), is first defined spatially even if an argument may be made that allocation is somewhat random within that space. I also prefer 'behavioural' to what is usually called 'selective' targeting criteria. If perceived behaviour is not the criteria for selection then it is some

characteristic of identity or location, so is collective or spatial respectively. It is important to note that targeting criteria may be set at different levels within the armed group, and may be, within the armed group, internally consistent or variable both in their design and in their execution. Variability in targeting criteria may reflect the targeting capacity and propensity for violence described below. Targeting criteria may also overlap. For example, the observed behaviour of a person of a given ethnicity in a given location being viewed as suspicious and met with violence.

I shall describe each of these in more detail, first behavioural, then collective, then spatial targeting criteria. Some overlap may be noted between these and the motivations of violence in the literature outlined above - it is perhaps unsurprising that the targeting criteria of violence may reflect the motivation for using it. First, behavioural targeting is allocated based on the perceived behaviour of the subject of violence. Disobedience, support for opposition, use of violence, breach of curfew and so on may all be behaviours that elicit violence according to these targeting criteria.

Second: collective targeting is often based on characteristics or identities that proxy more or less closely for behaviours. To illustrate: targeting of uniformed armed groups in conventional warfare may usually be assumed to be collective, based on the identity portrayed through the wearing of the uniform. In this case the identity is strongly associated with the behaviour of being engaged in combat. But commonly in asymmetric conflicts, irregular armed groups may be indistinguishable from the local population. So other perceived identities may be used to proxy for behaviour. For instance, where these conflicts have an ethnic dimension, the ethnicity of individuals may be assumed to reflect behaviour, such as co-operation with the armed groups associated with that ethnicity. Collective targeting may also be used without being a proxy for behaviour - in genocide for example the perceived behaviours of the targeted ethnicity are subsumed into the ethnic identity of the target - the intention is less to punish particular behaviours but rather to exterminate those of the particular ethnicity. I return to this in the propensity for violence section below. Collective targeting is a concept from Steele (2011) who analyses the strategic use of violence to displace those likely to vote for the opposition.

Third, and similarly, in spatial targeting location may proxy for behaviour or for identity. Where identity cannot be observed due to the distance from which the weapon is being deployed, the targeting criteria are spatial. Where an individual is targeted based on behaviour or identity, but deployment of the weapon has margins of error that result in

violence being perpetrated against others, they have similarly been targeted spatially, according to their location in proximity to the behavioural target.

Targeting capacity

The majority of the literature on the allocation of violence focus on the capacity of armed groups to target violence according to their chosen criteria. Targeting capacity is a function of the choice of weaponry and information (regarding location, personal characteristics or behaviour): so knowing what or whom the target is, and being capable militarily of using violence against these targets and not other human or capital assets.

Information is the most prevalent aspect of targeting capacity in the literature, stemming from Kalyvas' (2006) influential theory of territorial contestation and control in explaining wartime violence against civilians. One particular contribution of the theory was to emphasise the importance of the agency of civilians, who are not just passive victims of violence but influential actors in their own right who can use the presence of armed groups to serve their own ends. For Kalyvas, importance of the role of information is central, insomuch as this is the main resource that civilians have – they may know who amongst the civilian population is supporting the opposition and so denounce them to the controlling armed group, enabling that armed group to target violence effectively.

An important part of targeting capacity, less prominent in the literature, is the form of weaponry used. Take, for example, the following comment from a former Crew Commander of the Israeli Artillery Corps, regarding the use of shelling in Gaza. Shelling also featured heavily as a threat in PK18.

> *The truth is artillery shells cannot be aimed precisely and are not meant to hit specific targets. A standard 40 kilogram shell is nothing but a large fragmentation grenade. When it explodes, it is meant to kill anyone within a 50-meter radius and to wound anyone within a further 100 meters. Furthermore, the humidity in the air, the heat of the barrel, and the direction of the wind can all cause unguided shells to land 30 or even 100 meters from where they were aimed. That is a huge margin of error in somewhere as densely packed as Gaza.*[9]

---

[9] Barir (2014)

An armed group can only target according to the technology it has at its disposal. If shells are its only means of allocating violence, then there is necessarily a strong spatial element to the targeting criteria. More precise weapons in conjunction with remote visualisation might enable exclusively behavioural targeting criteria to be used even from distance.

Propensity for violence

Violence propensity is the likelihood that the armed group chooses to destroy, remove or degrade civilian assets, as opposed to the use of other strategies such as education, building relationships, persuasion or coercion, in order to achieve its objectives. Propensity to use violence here is equal to the net benefit of using violence, that is to say the economic, strategic or other benefits of violence less the economic, strategic or other costs of imposing that violence. It is important to note that civilian responses to violence will affect calculations as to its efficacy. The inclusion of propensity to violence in the composition of threat recognises that violence is allocated rationally in order to secure benefits, which is a central assumption of the main consensus in the political violence literature (Valentino 2014).

Organisational Capacity

Organisational capacity features prominently in the literature, with Weinstein's (2006) research on how the motivations, funding sources and relative civilian dependency of armed groups may affect its determination and capacity to instill discipline regarding the targeting of civilians. That is to say, where discipline is lacking, targeting criteria, rather than being determined centrally for the purposes of the armed group, may be set not only by individual units but by individuals acting on their own motivations. This may be suggestive of a financial motivation for violence, as those lower down the chain of command may be less likely to take independent violent action for strategic or political benefit.

There is evidence that organisational capacity affects propensity for violence: weakness on the part of rebel armed groups may increase their propensity to use violence against civilians due to their inability to fight powerful government forces directly (Pape 2005, in Valentino 2014). Wood (2010) suggests that cooperation of civilians may be elicited through select incentives and violence. As the latter is more feasible for weak rebel organisations, they are more likely to resort to violence to elicit support.

Location and Motivation - contestation and control

The propensity for violence, targeting capacity and targeting criteria are all also related to the location and motivation of the perpetrating armed group, including the relative location of other armed groups and the relationships between armed groups. This is commonly referred to as contestation and control, following Kalyvas (2006). So the processes of production of threat to civilians are closely related to processes of production of threat from one armed group towards another. The Kalyvas argument is based on targeting capacity - behaviour targeted violence is effective, but is only possible with information from civilians. Such information is provided only to those that exercise effective control of an area so can protect co-operating civilians.

Focusing on the deeper relational factors that underlie the establishment of rebel strongholds, Bosi (2013) discusses the importance of 'safe territories' that provide armed rebel groups with the physical space within which "social networks develop over time and shape formal and informal infrastructures of support that maintain dense affective, familial, and personal relations between armed activists and their local constituencies" (2013: 81). By establishing control over territory, an armed group may develop 'infrastructures of support' that may help them challenge the state. This suggests a stronger, long-term tie between armed groups and civilian constituencies than that suggested in Kalyvas' (2006) theoretical model, which assumes civilians ally themselves with whichever military force is the stronger, regardless of factors such as identity or ethnicity.

Of course the importance of location factors is often defined in relation to the opposition forces. But this represents an assumption about fighting between armed groups that is not always seen in reality. For example Keen (2005) documents the cooperation and coexistence of armed groups profiting from natural resources during the Sierra Leone civil war. The overall political and other motivations of each armed group in the context will be part of the determinants of how and when the group fights against other armed actors, and how it uses violence against civilians.

Having outlined the composition of direct threat and its meso-level determinants, and some of the key literature on the topic, this chapter now turns to explain the data that were used to build a comprehensive overview of civilian perceptions of and reactions to armed group behaviours during the crisis.

3.3 Data

The data analysed for this chapter and Chapter 4 stem in large part from interviews with ex-combatants in the Invisible Commandos and 32 structured and semi-structured interviews with civilians. These data were collected in five phases, which were undertaken broadly sequentially although there was certainly overlap except in the case of phases three and four. All phases were underpinned by online research of local and international media reports in French and English, and the only major western published source on the topic, Varenne (2012).

Phase One: Key informant interviews

Interviews with key informants helped to build an overall picture of the crisis and displacement during the crisis. I had repeated discussions with four international Save the Children staff, three staff at UNHCR, three at Terre des Hommes and one at Norwegian Refugee Council. I also had a meeting with three staff at UNOCI, individual meetings with two local International NGO staff, a meeting with two staff at CERAP (an Ivorian conflict research and education NGO), one local independent researcher, and a meeting with a representative of the International Displacement Monitoring Centre. Other than with UNOCI all of these discussions were with the participants as individuals rather than as representatives of their organisations. These were useful for building an overall picture of the crisis to prepare for the other phases, and for understanding displacement issues, but typically international staff knew relatively little about what happened in Abobo during the Crisis beyond the major incidents reported in news media. They, like journalists, were very restricted in their movements and most were evacuated. The local employees at the INGO lived in Abobo and PK18 and knew much more detail about what was happening on the ground. The discussions were for the most part informal, although respondents were informed about the nature of my research and their role in it, and the discussions provided contextual background rather than data. The two local INGO staff were interviewed more formally and their responses noted down. They are considered civilian interviewees. Discussions with the survey manager and other staff at MESAD, who conducted the survey, and my research assistant, also formed part of phase one.

Phase Two: Ex-combatant interviews

Four interviews were held with ex-combatants. Two were through connections I had made in phase one, and two through connections of my research assistant. One of

these interviews produced very little usable data and so is largely unused in this analysis, and a second was with a member of a youth militia outside PK18 and is also largely unused. These interviews were semi-structured, and focused on the course of events, control of territory, the Commandos as an organisation, and civilian relationships. The two interviews used here were held outside Abobo, at the request of the interviewees, due to some stigma over their involvement. They were, however, enthusiastic to share their experience.

Phase Three: Abobo structured interviews

In phases three, four and five, questions were not asked about ethnicity as to do so would raise suspicion. As the subjects were primarily direct contacts, or friends of contacts of my research assistant, there may have been some ethnic bias in the composition of those interviewed. Similarly, names were not asked for or recorded. In these phases, as in phase 2, answers to questions were recorded in writing by my research assistant. He was used to writing quickly and accurately due to his profession, but did not write in shorthand so the quotes presented throughout are presented as translations of accurate summaries (in French) of what people said rather than their exact words. Recording interviews would have been problematic given the sensitivity of much of the discussion, and practically difficult for telephone interviews.

Seventeen structured household interviews were conducted with residents of Abobo (not just PK18, although some did live there). The information from these interviews fed into the selection of PK18 specifically as the research area. The structure followed was relatively loose, and questions asked as appropriate within the framework of those provided, rather than each question being articulated in full. These were conducted by phone and in person by my research assistant using a template of questions that focused on armed group control, overall displacement patterns in the area and household displacement experience. (see Appendix III for full template for phase three and four)

Phase Four: PK18 structured interviews

Eight structured household interviews were conducted by my research assistant by phone and in person using the same approach but these were exclusively in PK18 and used a more detailed set of questions. The analysis focuses largely on these interviews and those in phase 5 due to the greater detail and geographic specificity. A template was used that also included questions on household relationships with armed actors, perceptions of armed actors, detailed information on checkpoints, shelling, looting,

communication from armed actors, information sources and threat. (Again, see Appendix III for full template)

Phase Five: PK18 semi-structured interviews

Five more open interviews were conducted with residents of PK18. Two were conducted with unknown civilians that I approached with my research assistant, interviewed together in one of their homes as they were neighbours sitting together outside their home when we approached. The interest that my presence garnered was clear, and as we were in an area not well known to my research assistant he was also uncomfortable. This experience supported the reasoning for my not being with the survey teams when that was implemented. In other areas, our presence was explained casually to his acquaintances as we walked through PK18; he was known to work with western journalists and so my presence was not unexpected. But where both of us were strangers, trying to talk about the Crisis was difficult, at least in part due to my presence. In PK18 we interviewed his father, the father of one of his friends, and a representative of a church, all of which went smoothly. The interviews focused on the same themes as in phase four.

These five phases were followed by the survey, which has been described in the methodology and more details of which are included in Chapters 5 and 6. Selected data are used from open-ended questions of the survey to illustrate certain points, but the analysis overall derives from thematic analysis of the interview data.

3.4 Producing Threat

The analysis section of this chapter focuses on four overlapping types of activity of armed groups and their implications for the threat environment within which civilians make decisions. The four actions are: actions against other groups, non-violent communication, violence against individuals, and violence against assets. These actions do not represent the extent of armed group behaviours, but are important actions observed in PK18 with implications for how civilians make decisions. I discuss first in this section how these actions produce threat, then in the next section detail some examples as to how they reduce threat. Threat throughout refers to direct threat unless specified otherwise.

I analyse the actions primarily from the perspective of civilians. Before proceeding further, though, I shall fill out some of the contextual detail regarding the armed actors who were producing the threats. Direct threats are a function of the targeting criteria, targeting capacity and violence propensity of an armed group, and civilians perceive these threats through the information available to them about this objective threat, with a degree of uncertainty. Direct threats in PK18 came from a range of armed groups, especially the FDS[4] who controlled the periphery of PK18, and the Invisible Commandos who, increasingly, controlled the centre. Beyond these two formal armed groups, there were vigilante groups acting on both sides, those on the Gbagbo side coming primarily from Anakoua-Kouté on the southern periphery of PK18, and those against Gbagbo dominating the interior of PK18.

It is important to note that the strategic production of threat was, in PK18, reflective of armed actors' wider motivations. The motivation of the Gbagbo side was to retain control of Abidjan and the monopoly of violence within Abidjan, so that Gbagbo could not be removed from power by force. They had incentive to use violence against the IC who represented a threat both to them personally and to their monopoly of violence.

The motivation of the IC was more complex, and I return to this in the next chapter, In one sense they were a group united in a clear objective: to oust Laurent Gbgabo. Yet they also served, unwittingly for many recruits, as a vehicle to bring IB Coulibaly back from political exile into a position of power. So while the IC had an incentive to use violence against Gbagbo's troops, they also had an incentive to protect the PK18 population, both for strategic purposes (so they were not isolated) and for political

purposes - so IB could demonstrate his capacity to lead by building a local civilian constituency in Abobo and PK18[10]. This ulterior motivation also served as an incentive to fight as effectively and quickly as possible, so as to make the maximum military gain before the arrival of the main FN/FRCI rebel army from the north. Both sides also had motivation to use violence against civilians who were collaborating with the opposition by sharing information or storing weapons.

Violence against armed actors

I now turn to violent acts between armed groups and the changing patterns of control and how these threaten civilians. Violence against civilians and against armed groups may not easily be distinguished and so it is here. To avoid confusion, my focus is on threat towards civilians that is incidental to the purpose of the violence. In this case that was spatially-targeted violence, especially FDS violence after they had lost control of PK18. The IC established control of PK18 for the latter stages of the crisis, particularly in the interior. But the FDS – the state army at the time – was known and trusted by most Ivorians and remained present on the periphery until the end of February.

> *Basically, the FDS is the Defence Forces and provider of security in Côte d'Ivoire, it is normal and regular army of the country. We have friends or relatives who are part of the army, so we had confidence in it. But this confidence deteriorated when after the second round of elections, the army was divided to follow each clan, then leaders in the army became a militia leader for each clan. Every inhabitant trusted the FDS clan it supports.*
>
> *Civilian interviewee 27 October*

As the state army, prior to the elections and their division the FDS had moved quite freely in Abobo and PK18, and as described above, well into the crisis FDS soldiers lived amongst the population, as well as policemen and other state security employees. Following the split, the pro-Gbabgo FDS, as a result of the presence of the IC, was frequently present on the arterial roads on the east and west of PK18, and stationed at the Agripac checkpoint.

---

[10] Of course, those members of the IC and new recruits who were local to PK18 also had the incentive to protect the population because they were their friends, family and neighbours.

In the early phases of the emergence of the IC, the FDS would still enter parts of PK18 close to these arterial roads in order to search for weapons. The organisational and targeting capacity of the Commandos was very limited - although they had experienced and trained soldiers and local contacts they had very few weapons. The lowest estimate of their initial weapon stocks was only one borrowed Kalashnikov (Ben Rassoul 2012) although the senior combatant I interviewed suggested they also had two calibre 12 rifles and two pistols. It was through Gbagbo's side's failed attempts to maintain control of Abobo and PK18, however, that the IC gained weapons. First, the legacy of state attempts to control Abobo - the police residences - were initially the source for weapons, and as these had in large part been deserted they were easily taken. Second, ongoing attempts to maintain control through patrols in armoured vehicles and attempting to find the leader of the Commandos provided ambush targets for the IC which they attacked successfully. They acquired increasingly heavy weapons and armed vehicles through attempts by the stronger armed force to destroy them. In time the Invisible Commandos, became a significant military force that posed a real threat to the Gbagbo regime.

Unsurprisingly the IC success brought increased FDS presence to the periphery in order to contain and defeat them. As the capacity of the IC increased the FDS lost the ability to travel in safety beyond their checkpoints, this created the boundaries of the enclave and the feeling that PK18 was 'under siege'[1]. Of course the FDS being pushed to the periphery meant it was now the IC that could search for weapons in people's homes, while the FDS lost the capacity to target individuals as they lacked information. If information was being passed to them from the interior, this was probably reduced by the targeting of FDS and policemen who had their homes inside PK18.

The main fighting in PK18 followed an ambush of CECOS[11] (special police forces loyal to Gbagbo) vehicles on the 22 February, on the main road of Abobo Derriere Pont[12] at Carrefour Diallio (refer to Figure 1.4). The killing of at least 10 (ICG March 2011, Abidjan.net 2011) in this incident ensured that the Gbagbo loyalist forces addressed the threat of the Invisible Commandos. That day and for the following two days, there was intense fighting between the IC and FDS, including extensive use of heavy weapons and shelling. On the Friday there was some respite, but the next day became

---

[11] CECOS is the security operations command. or *Centre de Commandement des Opérations de Sécurité*.

[12] Behind the bridge - the main area of PK18 to the west of Agripac and the adjacent railway bridge

known locally as Black Saturday for the intensity of the fighting, as described in the introduction.

These four days of particularly intense conflict across a five day period produced the greatest overall threat to civilians. While it is difficult to define exactly where fighting occurred, the overall impression of the survey enumerators after conducting the survey was that the mid-week battles were around the east-west road through Derriere Pont especially between N'Dotre and Diallio, while Black Saturday fighting extended further east, especially between Agripac and Unicafe. For this short period PK18 was a front line between Gbagbo loyalists and the rebels. While violence was targeted to some extent, troops on both sides themselves faced severe threat. Kalyvas (2006: 69) in summarising how new forms of war have been thought to result in violence speaks of "the acute feeling of vulnerability that combatants experience in the context of irregular war..." to which he attributes the killing of civilians, due either to inability or deliberate failure to differentiate civilians and rebels. My argument is similar, though attributable I think to any situation where armed actors are under severe immediate threat; such threat to the armed force may have two effects. First, threat may well broaden the targeting criteria, and increase the propensity to use violence, when the payoff of using violence includes the immediate possibility of saving one's own life or the life of comrades. In this way, contestation between armed groups increases the use of 'indiscriminate' violence against civilians due to self-protection instincts of troops under fire.

A second reason for increased 'indiscriminate' violence is that under these conditions of pitch battle, forces may seek to avoid personal threat exposure due either to strategic or personal reasons. This was observed on Black Saturday when FDS troops refused to go beyond the Agripac checkpoint to take on the Commandos, and instead shelled their presumed positions from the checkpoint (interview with senior ex-combatant, 2012), allowing the IC time to regroup and eventually win the battle while also increasing threat to civilians in the area. And hence being under threat from another armed force restricts targeting capacity because when located further away, or behind shelter, armed actors may lose the capacity to target based on identity or behaviour as they cannot see their targets, and longer range weapons may be inherently inaccurate.

Both these impacts suggest that targeting criteria are likely to become spatial under high levels of contestation, and as a result threat is produced for civilians in the area

due to what might be called respectively 'trigger happy' effects and 'shooting blind' effects of threat to the perpetrators of violence. This increase in 'indiscriminate' threat to civilians then stems from the self-protection of armed actors rather than the unwillingness of civilians to share information as in the Kalyvas model. This makes some sense given the PK18 context. Certainly in those few days of intense fighting, civilians were for the most part hiding inside rather than seeking interaction with combatants. It may be that, for certain periods in some contexts, avoiding indiscriminate violence drives the failure to share information rather than the 'hedging bets' motivation in Kalyvas (2006). In such cases it might be that indiscriminate violence causes civilians' failure to communicate information as well as the other way round.

Non-violent communication

"There are some of the CI who we knew because they were from the neighbourhood youth. But there are many who do not live in the neighbourhood so we had never seen before. Well, personally I did not trust them, I was even afraid of them. Because these young people do not necessarily know us and as we were not Dioula (ethnicity), there was fear that they are attacking us. This perception has changed over time, I still did not trust them, but I was not really scared, because they never created problems for me or tried to hurt me."

Civilian interviewee 26 October

I do not know the IC at first....but later found that some youth who lived at PK 18 had joined. I say this because there were youths I had seen in the neighbourhood who had weapons and walked with members of the IC. At the beginning of the crisis, we must say we were afraid of their presence because they had frightening appearances. Many wore amulets (charms) and hoods so we were afraid of this situation and I did not dare go out. But when the food began to run out, we had to leave, so we met them but none of them came to us to ask anything. We did not necessarily trust their presence but at least did not feel worried...

Civilian interviewee 23 October

These responses were typical of the attitudes in households which, like the majority in PK18 residents, did not have close ties to the IC but were also not targeted by them. The statements demonstrate that, unsurprisingly, some degree of threat may be created purely through presence of an armed group; a threat that may be augmented by the appearance of that group. In PK18 there was suspicion and fear initially, of course in large part because they bore arms, but also because they wore 'fetiches' and balaclavas to hide their identities. The group was unknown, and the individual members were also unknown. As increasing numbers of local youths joined up to fight with the IC, and as they stopped hiding their faces once they had established control of the area, a familiarity emerged between some of these civilians and the IC. This was assisted by the need civilians had to leave their homes in order to source food and water, which entailed passing IC checkpoints.

It was important that the IC was made up of fighters who were local, and those who were not from the area. Civilians' experience of, and relationship with the IC was shaped by their pre-existing knowledge of those who joined. As such the local origins of many of the IC formed the 'baseline' opinion of their relationship with civilians. But as many of the interviewees pointed out, the IC did not seek much interaction with the civilian population in the early stages. They had a very limited policing role, and their efforts were focused primarily on fighting troops outside PK18, initially on the arterial roads where Gbagbo's troops maintained a presence and then on other areas of Abobo and Abidjan. As such for the most part the interaction that shaped change in attitudes over time towards the IC were restricted to observation of their behaviour patrolling PK18 and at checkpoints.

But the IC did make some public announcements. While their media presence was limited initially, there was a France 24 interview with Commander Bauer shortly after Black Saturday in which he stated their aim to oust Gbagbo. Prior to that, the IC communicated with the local population directly using vehicle-mounted loudspeakers, announcing their victories and stating the dangers of leaving. The overall idea seems to have been to generate the impression that threats outside PK18 were greater than those inside. The communications were primarily about threats from other armed forces rather than from the IC themselves so I return to this in the protection section below.

The communications of the Gbagbo regime had the opposite intent. They declared PK18 a 'red zone' and calling on those loyal to the regime to leave or be considered an

enemy, transparently specifying that their targeting criteria would be spatially defined. These communications, by mass-sending of text messages, through the media and disseminated through personal networks, provided information about the threat faced. For instance:

> *Personally, I have friends of the Gbagbo clan who came to tell me that the situation would get worse and I had to go out with my family. They themselves have received information during their various political meetings and wanted to warn me.*
>
> *Civilian interview 29 October*

> *We were regularly sent SMS like "if you're an Ivorian and you love your country, support Gbagbo ..." or "Gbagbo militiamen shot a pregnant woman because she was Dioula ...".*
>
> *Civilian interview 27 Oct 2012*

The bulk of the publicity in the media and through text messages countering Gbagbo's narrative were from Ouattara and the FRCI rather than from the Commandos. Clearly there were strategic objectives to the communication of threat information, trying to change perceptions of their own party and the others, as well as trying to shape civilian actions. But with non-violent communication there is the issue of threat credibility. People may or may not believe that you will carry out your stated intention to use violence:

> *I stayed because I did not believe these rumors of the destruction of Abobo. For me it was something that could not be done and that people were exaggerating. For me, a normal person cannot make the decision to destroy an entire town without qualms. I did not think it possible.*
>
> *Civilian interview 29 Oct 2012*

If destruction or removal of people or assets is the objective, threat communication is not necessary and may be counter-productive. But if a change in perceived threat is the objective, non-violent communication may be lower cost than violence. However, it may be necessary to also exercise violence in order to communicate intentions to use violence with more credibility.

Violence against civilians

Violence has two immediate effects - damage to the subject of violence, and communication of the direct threat; I focus here on the threat effects in line with the theme of the chapter. The IC, over time, took control of the whole of PK18. This control, alongside the rich information they had from loyal locals, including particularly those of Dioula ethnicity, and long-standing presence in the area from many in their own ranks, gave them a high level of targeting capacity. The IC's targeting criteria seem to have been related particularly to membership of state institutions – especially the military – or other demonstrable affiliation to the Gbagbo regime, so criteria were sometimes behavioural and sometimes collective. In line with Kalyvas' prediction of denunciations to emerge with control of an area, civilians provided information to the IC and even acted themselves to punish those perceived to be allied to Gbagbo.

> *Many of (the 'pro-Gbagbo') were the first to go after the announcement of the intended destruction of Abobo... Those who remained were targeted by 'pro-Ouattara' civilians and the CI during the searches, because they said they were hiding weapons. Individuals who were identified were searched by people, usually neighbours with whom they lived. Sometimes these people were targeted because they were Bete (ethnicity), others were not strongly Bete but had displayed their positions during the presidential elections in Côte d'Ivoire. It was very clear that the pro-Gbagbo risked their lives by remaining in Abobo during the crisis.*
>
> *Civilian interviewee 23 October*

So suspicion was placed on those with ethnic or political ties to the regime. This resulted in searches, a process of establishing whether political behaviour or identity corresponded to active involvement with the FDS. Another (somewhat unusual) incident highlights the links between behaviour and identity:

> *I was threatened with death because I walked around wearing a Gbagbo*
> t-   *shirt, so I had to leave.*
>
> *Survey respondent*

Here the behaviour of demonstrating political identity was the reason that this respondent was threatened, though actual violence was not used in this case. Of

course most people went out of their way to hide any political affiliation (especially Gbagbo affiliation in Abobo once the FDS lost control), so limiting the information available to combatants and other civilians. However certain civilians were unable to hide their affiliations due to local knowledge of their identity.

> *I am military (FDS) and I am in an area where there are many Dioula. The Invisible Commandos killed my dog and sprayed his blood on my door. I understood that I was a dead body for them so I left with my family.*
>
> *Survey respondent*

Here an act of violence was used to communicate that the Invisible Commandos' targeting criteria included the household in question, and that they had the capacity to target them. Violence, more powerfully than other forms of threat communication, demonstrates propensity for violence: that they are willing to kill the dog may suggest they are willing to kill or injure humans. Clearly in this instance, if the objective of violence was for the household to leave, the violence was 'successful'. But the capacity to target effectively on behaviour seems not to have been consistent: information seems in at least some cases to have been imperfect. In cases of targeting where the subjects were not members of the military or police the Commandos demonstrated less certainty in their use of violence.

> *The relationship with CI was very difficult at the beginning. We had raids from soldiers ...who accused us of hiding... a cache of weapons... They came to threaten people living here several times on this issue. They broke the doors ...and conducted searches and never found anything. ... I myself was taken by these men...they accused me of helping the FDS and hiding weapons. I was tied up and beaten for several hours to try to extract information before being released.*
>
> *Civilian interviewee 29 October*

This Christian member of the community was targeted seemingly due to his religion rather than his behaviour. Such collective targeting proxies for behaviour in the absence of information, and so it seems here, although it is possible that information, accurate or otherwise, was also behind the targeting. Violence was used as an attempt to obtain information. Threat is of course a central component of torture - violence is used alongside verbal communication of intent for additional violence. Torture was

widely used by the Invisible Commandos (HRW 2011), a view confirmed in interviewing an ex-combatant in the IC who said they tortured people in PK18 in order to extract information about the positions of military opponents and the locations of weapons.

Despite the undoubted frequent use of torture and maltreatment, the collective targeting of Christians or ethnicities associated with Gbagbo was not systematic nor the primary reason for displacement. Yet despite the establishment of control, targeting in many cases comprised at least some element of identity rather than being purely behavioural. Where violence is allocated according to behaviours, we might expect the violence to be made known to others and the reasons for the violence to be communicated - i.e. for there to be public pronouncements alongside public violence. That way the behaviours that will be punished will become known to others, and compliance becomes a viable strategy for civilians to protect themselves. Where identity predominates as targeting criteria, concealment of identity and negotiation of identity may present alternative options to avoid threat, but changing identity is more difficult than changing behaviour. I return to these in the following chapter.

Violence against physical assets

Looting was rife in PK18, both of businesses and of private homes. The threat of looting was of great significance to households, and while acts of looting are acts of violence according to the definition used in this thesis, the nature of the threat is quite different in terms of its impact on civilian behaviour. The targeted households were initially the same police and FDS houses that were targeted for weapons. However the majority of the looting occurred after Black Saturday once the population had left.

> *The IC's were more concerned with Gbagbo's departure, they said they would not tolerate thieves but nothing was done to prevent looting.*
>
> *Civilian interviewee 27 October 2012*

> *...the IC looted shops and some houses abandoned by their owners were emptied of their contents. Nobody did anything to stop the looting.*
>
> *Civilian interviewee 30 October 2012*

There is little clarity about the organisational level within the Commandos at which various forms of looting were permitted. Both ex-IC members interviewed as well as a number of civilians said that it was the houses and businesses of known collaborators that were raided by the IC for weapons and food. But this does not account for the 142 (20%) of the 715 surveyed households who, across ethnic and religious divides, lost at least one of the items on the asset portfolio in the survey, including TVs, radios, DVD players, cooking pots, fridges and other household items[3]. Amongst these households, on average 68% of pre-crisis assets listed on the questionnaire were looted. In many of the households that were looted, typically everything listed on the asset portfolio was taken except mobile phones. Such opportunistic looting was denied by the two IC members, one of whom claimed that looting was punishable by shooting on sight.

If that is true, and if this looting was conducted, as seems likely, by members or affiliates of the IC this reflects the weak capacity of the organisation to enforce its own rules. There was some suggestion that looting increased following the Commandos' break of the Maca prison, which is not counterintuitive. Other civilian interviews suggested that the IC attempted to police PK18 but as their fighting responsibilities increased and moved away from PK18 they were less able to fulfil this policing role. If the claims that looting was not centrally tolerated are not true, this reflects a different form of weak organisational capacity. If they required either personal enrichment or organisational financing from looting this reflects an absence of other, less detrimental, funding streams. In either case there was a great deal of looting, and in the few cases where the victims felt that they knew who had perpetrated the looting, they attributed it either to 'jeunes du quartier' or to the Invisible Commandos, and said that looting was perpetrated during March or April after the establishment of control and the departure of most of the civilian population. No looting by any other forces was apparent in the data.

The targeting criteria used for physical assets are also interesting. Certainly the patterns of looting indicate some ethnic targeting (54% of those survey respondents looted were of southern ethnicity, against 37% of all respondents) and, while looting was more common in the south-central areas of PK18 going towards Anankoua Kouté, the distribution of looting incidents did not otherwise vary greatly across sites. It seems the IC and other perpetrators of looting based their targeting criteria on the response of civilians to the direct threat to life, as many houses were targeted on the basis of their being empty. In part this was because many of those who left initially were those loyal to Gbagbo, but once a house is empty it may of course be difficult to know the political

allegiance of the previous occupiers, especially if neighbours are hiding or have also left. Overall, while there is evidence of targeting criteria, the overall pattern of looting observed does not suggest that the prospect of being looted or otherwise would be in any way transparent to civilians.

3.5 Reducing Threat

I have outlined how four types of actions of armed groups produce threat to civilian populations. But the actions of armed groups also protect civilians, reducing threats that they face both from their own actions and other groups' actions. This section outlines the protective role of armed groups in PK18 with a focus on two of the previous types of action: violence against armed actors and non-violent communication.

In the previous section I described how the combat between the Invisible Commandos and the FDS had increased threat to the civilian population. This combat emerged because of the presence of the Invisible Commandos in PK18, and their attacks against Gbagbo loyalist troops in the area. Yet while the presence of the Commandos undoubtedly increased spatially-targeted threats to the PK18 population, and identity-based and behavioural threats to certain minorities within the population, it also protected the majority of civilians of 'northern' identities in PK18 from collective and behavioural threats. Such threats came, generally speaking, from mobilised youth militias and, to a lesser extent, mercenaries operating through much of the rest of Abidjan which was under Gbagbo-loyalist control. While such groups operated around the periphery of PK18, especially from the Ebrie Village of Anonkoua-Kouté on the south-eastern edge, and attacked PK18 civilians surveyed near the area, such groups were rare in PK18 and Abobo generally. This was due in part to the overall ethnic composition and political tendencies of the population, and also in part to the emergence and eventual controlling presence of the Invisible Commandos.

> *Having found that many soldiers had deserted, FDS have been aided by the militia, and it was these people who were very dangerous for the population. I am not from the north but the militia were many massacres among the Dioula. When they met a Dioula, they assumed them to be a Ouattara supporter or an IC and they might be killed without justification. These militias were many in Yopougon but very few in Abobo.*
>
> *Civilian Interviewee 23 October*

On taking control of PK18, Anonkoua-Kouté was attacked and human rights abuses were alleged to have taken place there perpetrated by the Commandos (HRW).

Although this narrative is disputed in Varenne (2012), it is certain that the village was attacked around the time of Black Saturday and this effectively removed the threat that had been posed by informal armed groups operating from the village that affected northern civilians in the southern fringes of PK18.

At a yet more localised level, the presence of armed groups may both produce and reduce threat. In the following example, the actions of (probably informal) armed groups produced a threat to a church and the displaced people sheltering there. The senior commander of the most powerful and formal armed actor was approached to provide security:

> *...After numerous raids by armed men on the church, we went to see ... IB himself to secure the church and the people living there. We received their agreement and two guards were stationed outside the church for protection. We were even given a freephone number where we can call in case of problems.*
>
> *Civilian interviewee 29 October*

This illustrates complexity in armed groups' provision of protection through their presence, and this is true also of the second mode of protection, information sharing. I have discussed how the role of information in civil wars has been found to be important in the capacity of armed groups to target civilians effectively. Such information is in the hands of civilians, who exercise agency in deciding with whom to share that information. But the example of the IC operations in PK18 suggests that it is important that armed groups also have information, and exercise agency in sharing that information with civilians. First, the armed groups may know when and where they will engage with enemy forces, and can share that information with civilians. Civilians are often hiding inside, so lack information about when and where violence will occur. Armed groups are more likely to have information on what is happening outside; they not only control their own violence but also may have knowledge of other groups' likely use of violence.

> *When the bombing began, people were afraid because of the intensity of the fighting... After the CI gave us a signal that announced when we should not leave the house, there were three shots (two machine guns and firing heavy weapons) that can announce the fighting. This is usually people could leave in*

the morning to get supplies to the market and once heard the third shot, they
hurried to the church or to their homes.

Civilian interviewee 29 October

Armed actor to civilian information sharing may be formal or informal. Many households had contacts in the FDS and police who were able to warn them when attacks were to be made against PK18. Such information may well be seen as protective. However it is difficult to distinguish threat communication intended to threaten from information sharing to protect civilians by informing them of threat. For instance, telling civilians of an impending attack on an area and encouraging them to leave might loosely be termed a protective action, but the removal of civilians serves a strategic purpose in isolating rebels from the civilian population. Commando actions in protecting civilians staying in PK18 could be seen as more benevolent, but of course these also served a strategic purpose in helping the IC avoid isolation. Differentiation between threat communication and protective information sharing seems possible based only on the intent of the action which is indeterminable. All that may be said with confidence is that accurate information regarding the nature of threat may help civilians avoid that threat. It might be suggested that accurate threat information provided by one armed group regarding the actions of a competing armed group might be considered purely protective in nature.

Overall, the presence of the IC had a complex impact on the violence that civilians in PK18 were exposed to. For suspected pro-Gbabgo activists, the presence of the IC resulted in a serious threat to life and selective targeting for use of torture and killing was not uncommon. But for many residents, the emergence of PK18 as a 'safe territory' for the IC meant that the threats of selective violence that eventually emerged from pro-Gbabgo militias in other areas of Abidjan were absent in PK18. But the violent conflict involved in attaining this safe territory presented a very serious non-selective threat to everyone in PK18, and 85% of households ultimately displaced in whole or in part. I return to such civilian responses to the changing environment in the next chapter.

3.6 Conclusions

This chapter has presented an account of how armed group actions shaped the civilian threat environment in the context of the emergence of the Invisible Commandos and their 'Autonomous Republic of PK18'. The main question the chapter addresses is how the actions and violence of armed groups shape the setting within which civilians make decisions. The chapter began by setting out the conceptual framework for armed actor-side production of threat, through the targeting criteria, targeting capacity and propensity for violence of armed groups. These, in turn, are shaped by the interrelated factors of contestation and control, and organisational capacity of the group. Taken together, these provided an overview of the meso-to-micro links in terms of the shaping of threat to civilians. Some aspects of the organisational capacity of the Invisible Commandos were briefly discussed, and this is extended in the next chapter with reference to mobilisation processes that form part of the reverse, micro-to-meso, link.

The data analysis examined civilian-side perspectives and impacts of four types of action taken by armed groups in PK18: violence against armed groups, non-violent communication, violence against civilians and violence against assets were analysed using primarily civilian-side data. The analysis illustrated the nature of the relationships between these various actions and threat consequences for civilians. Two actions, violence against armed groups and non-violent communication, were also analysed for their role in protecting PK18 civilians.

The chapter has served the purpose more of illustrating a framework than building an argument, yet still some conclusions may be drawn. First, armed groups may engage in various forms of violence and other communication that produce threat. Narrow views of violence as being motivated by desire to change behaviour, generate profit, or attain strategic advantage miss the fact that armed groups may be motivated by all three simultaneously. Even one act of violence may serve the three purposes. Rather than speaking of motivation, then, it may be more instructive to analyse targeting criteria, targeting capacity and propensity for violence. The three concepts integrate important aspects of existing theories at the micro level into one framework, linked to the meso level with organisational and strategic factors. And, especially where understanding civilian response is the intention, it is necessary to build this deeper understanding of the dynamics of armed groups' use of violent and non-violent strategies.

Second, some useful insight into the nature of threats faced may be attained through observation of four behaviours of armed groups that generate threat: violence (against each other, civilians, and physical assets) and non-violent communication. Third, armed groups may serve a protective function in at least two ways - the communication of threat information and other useful information to civilians in order that they might better avoid it, and the use of violence and threat against other groups that threaten the civilians.

Fourth, and lastly, civilians in PK18 faced a range of direct threats. The targeting criteria for important threats to life (shelling by the FDS) were spatially-defined, targeted supposedly at IC targets, which meant that all households within this small area were likely to have perceived a degree of direct threat to life. This was made more complex for some by behavioural or identity based threats from the IC and 'civilian' militia on both sides. Additionally, there was the threat of looting and communication of threat information by both sides both for the purpose of protection and propaganda. These together comprise the armed-actor-determined side of the threat environment, within which civilians made decisions to protect themselves. It is to these decisions I turn in Chapter 4.

Chapter 4:

Civilian Responses and Indirect Threat

Abstract

Understanding the impact of wartime violence on civilians has been a central aim of much of the research effort focused on civil wars (see e.g. Miniou and Shemanynaka 2013, Serneels and Verpoorten 2013) and various emerging literatures seek to explain responses to violence or the threat of violence that mediate its impact (see e.g. Kalyvas 2006, Guichaoua 2009). But still relatively little is known empirically about the range of civilian protection strategies within conflict, and there have been few attempts within the civil wars literature to map conceptually the connections between threat and civilian response. This chapter seeks to answer the question of what strategies are available to civilians, and what the implications are of selecting those strategies, both for themselves and for armed groups.

This chapter builds on the conceptual framework in the introduction, and the previous chapter on the production of threat, to detail the range of strategies which households may use in order to protect themselves from direct threats. In outlining the literature, I argue that existing conceptions of household protection strategies may usefully be categorised as avoidance, compliance, and instrumental strategies, and these strategies may have trade-offs in terms of exposure to different direct threats or exposure to indirect threat. The first two analytical sections discuss these civilian protection strategies and trade-offs respectively, using evidence from the experience of PK18 residents and ex-combatants. The third analytical section discusses the strategy of mobilisation for protection, and discusses the role of threat and protection in shaping the rise and fall of the Invisible Commandos.

The chapter finds that civilians have scarce resources that may be used to reduce threat in situ, or they may displace. Whether managing threat in situ, or fleeing from threat, they face serious trade-offs in both direct and indirect threats. For those with social connections to armed groups mobilisation may be one option to overcome the various threat dilemmas.

4.1 Introduction

In the last decade or so the importance of civilian agency in understanding civil wars has gained prominence in the civil wars literature, while substantial research effort has continued to be invested in understanding the impacts of war on civilians. Yet the importance of agency in mediating the impact of war on civilian welfare has not been investigated. This paper seeks to contribute to the redress of this omission. In doing so I ask two questions: what are the strategies that households use to protect themselves from wartime violence? And what are their implications?

Wartime violence has well-documented impacts on civilian welfare, and also drives civilians to make decisions to protect their assets, often most visibly through displacement of household members away from the threat of violence. Such protection strategies of civilians have a substantial role in mediating how wars ultimately impact on civilian welfare. Significant research efforts have been dedicated to analysis of welfare impacts of conflict that are rooted wholly or partially in this mediating impact of protection strategies (for instance the literatures on welfare impacts of wartime displacement reviewed in Ruiz and Vargas-Silva 2013). While specific protection strategies such as displacement (Adhikari 2012, Bohra-Mishra and Massey 2011, Steele 2011, Lozano-Grazia et al. 2009, Lindley 2009, Czaika and Kis-Katos 2009, Engel and Ibáñez 2007), collective action (Arjona 2014), and cooperating with armed groups (Kalyvas 2006, Utas 2005) have increasingly received research attention, these protection responses, and therefore the causal mechanisms by which conflict impacts on civilian households, are rarely addressed holistically or considered as being part of a perhaps interlinked set of strategic wartime decisions. This chapter seeks to contribute to the literature by presenting a description of protection strategies used by households in Abidjan during the 2011 post-election crisis in Côte d'Ivoire. In particular, the chapter describes the composition of the threats faced by households and to describe the relationship between threats and protection strategies.

This chapter also makes a contribution through the use of a dataset from a research context dissimilar to those usually found in the literature. Qualitative researchers have focused on the life histories of individuals through protracted conflicts (Utas 2005) and social structures during war (Wood 2008, Lubkemann 2008), and, even at the 'micro' level of conflict research, economists tend to analyse regional or national level

datasets. A gap exists between these two levels of analysis. The data collection effort that underlies this paper focused on an attempt to comprehend detailed conflict dynamics within a subsection of one suburb – a *quartier* called PK18 in the Abobo suburb of Abidjan, which hosted a rebel group called the Invisible Commandos for a few months during the fight to oust President Laurent Gbagbo. Semi-structured interviews with 17 households and three ex-combatants sought to build a detailed picture of conflict dynamics in an area of just a few square kilometres. In an attempt to understand displacement decisions, 505 households were then surveyed across five purposively selected areas of PK18, and then a further 210 households selected from one of the five areas, of about 0.25 km2. In the latter 210 questionnaires, additional open questions were included about strategies for dealing with wartime threats. This presents a rare opportunity to analyse civilian decision-making within a high-intensity conflict using quantitative data but at a 'nano' level. This narrow focus applies temporally as well as spatially, as the intense period of fighting that prompted almost all of the displacement lasted less than a week. Additional merit in the data may be found in its origin in sub-Saharan Africa, something of a rarity in a field dominated by studies of violence and civilian response in Latin America and Asia.

The chapter proceeds as follows: the second section outlines the relevant literatures, focusing particularly on key concept of protection. Using the same data as the previous chapters, the subsequent three analytical sections discuss the empirical findings from PK18 covering three areas: civilian strategies for reducing threat; the trade-off implications of these strategies; and lastly participation - the strategy of not being a civilian. The sixth section concludes.

4.2 Literature and Concepts

Protection is an increasingly important concept in the humanitarian policy arena (see for examples Baines and Paddon 2012, Bellamy and Williams 2011). A paper by Bonwick (2006) brings together the policy interest in protecting civilians with the reality that civilians follow strategies to protect themselves, and outlines the three categories of strategies civilians use to protect themselves: threat avoidance, submission to threat, and resistance to threat. Generally though, academic focus on civilian self-protection strategies tends to be on specific strategies such as displacement studied in isolation, with some exceptions that I return to below. First I shall outline a framework for the holistic understanding of protection strategies, for which I broadly follow Bonwick's categorisation, though developing some aspects for the sake of clarity. Within that framework I outline the available literature and cite sections of Bonwick's corresponding categories.

My framework is rooted in the concept of threat outlined in the introduction. The objective threat created by armed groups pertains to a particular class of individuals or capital assets in a given location at a given time. A household has a perception of this threat, based on information and uncertainty as to the objective threat, and the characteristics of the individuals and capital assets of the household. Three strategies may be derived from this understanding of threat: civilians may try to change the characteristics of the individual or asset such that it is not within the targeted class; they may avoid the location and time of the threat; or they may try to change the nature of the threat. These may be termed compliance, avoidance and instrumental strategies respectively. The ability of the household to pursue any of these strategies depends first on information and uncertainty as to the nature of the threat - obtaining information and certainty is an important component of all protection strategies.

Avoidance strategies have been subject to research in at least two fields. First, displacement research almost always frames displacement as being in part due to the avoidance of violence. Displacement decisions research usually takes as its starting point the analysis of the respective role of protection and economic incentives to displace, and findings tend to suggest that both have a role in driving the decision to displace away from conflict-affected areas (Davenport et al. 2003; Moore and Shellman 2004; Moore and Shellman 2007; Rubin & Moore 2007; Bohra-Mishra & Massey 2011; Lozano-Grazia et al. 2009; Steele 2011; Czaika and Kis-Katos 2009; Engel and Ibáñez

2007). Avoiding threats by staying indoors has been less frequently analysed in displacement research, though it forms part of the 'threat of victimisation' crime literature. In response to fear of crime, people may pursue avoidance behaviours and defensive behaviours (Ferraro 1995, in Rader et al. 2007), the former involving changing patterns of movement and behaviour, for instance avoiding certain streets at night, staying indoors more often and so on. These behaviours have been found to not only to stem from fear but also to have a circular impact on fear of crime, with avoidance strategies intensifying fear (Liska et al., in Rader et al. 2007), perhaps due to the increase in information and uncertainty that may follow from staying indoors. Bonwick (2006: 274) describes avoidance strategies thus:

Their first line of defence may be to avoid the threat. At its most basic, this means running away. Around 25 million people are internally displaced, and a further 17 million are refugees beyond their own borders. However, flight is not the only option. People change their movements; they avoid taking particular routes, or travelling at night. In northern Uganda, thousands of 'night commuters' seek refuge in shelters in main towns every night, because staying in their villages is too dangerous. Communities develop early-warning systems, networks of information to warn them of danger before it arrives. People hide their assets so as not to draw attention to themselves. In Colombia, many villagers, trapped between the army, the guerrilla forces, and the paramilitaries, feel that they will be safer if they do not associate with anyone, in particular with humanitarian agencies or human-rights groups.

Compliance strategies are those where the nature of individuals and physical assets are changed such that they no longer fall within the targeting criteria of the armed group. Such strategies are easiest when the targeting criteria are based on behaviour, as they are in Kalyvas' (2006) theory, which is focused around civilians acting to protect themselves during conflict. The choices civilians make to cooperate with armed groups ("defection" or "collaboration") and to share information about the behaviour of other civilians ("denunciation") is driven in part by the desire to avoid threat of violence by the dominant armed group by ensuring there is no doubt about their allegiance. Participation in an armed group is a compliance strategy when motivated by desire to reduce threat from the recruiting group. Research such as that of Utas (2005) and Debos (2011) has illustrated the protective benefits as well as risks of various levels of association with armed groups, though such actions may also have instrumental effects on threat. Displacement could similarly be considered a compliance strategy if following specific orders to displace but as displacement even in such cases involves

moving away from the location of the threat, for simplicity I classify displacement as avoidance in all cases. Bonwick (2006: 274-5) describes compliance strategies as submitting to the threat:

...people also submit to the threats. Taxes, official or unofficial, are paid...There is a vast literature on gender-based violence which frequently talks of marriage with 'the commander': a relationship which on the part of the woman is voluntary only in the narrowest sense, but is seen as 'less bad' than any other option available. In Afghanistan, joining the militias is often the only way of making a decent living and providing a modicum of safety for oneself and one's family. And in many, many places, people simply do what they are told to do by those who hold the power and the guns.

Under the definition I have used, and assuming the absence of forced recruitment, Bonwick's 'joining the militias' for safety is not a compliance strategy but rather an instrumental strategy to reduce threat.

Instrumental strategies are those where the threat is tackled directly, and civilians' efforts made to change the targeting criteria, targeting capacity or propensity for violence that comprise the threat. 'Defensive' strategies in the crime literature (Ferraro 1995, in Rader et al. 2007) represent examples of the latter - buying a guard dog, gun or security system reduces propensity for theft of property by increasing the potential cost of attempting theft[13]. Other ways of adjusting propensity for violence, where such violence is spatially targeted, include non-displacement from that area. The cost of destroying a targeted building may be increased if it is full of civilians. Improving targeting capacity is the other motivation, along with compliance, for Kalyvas' (2006) defection, collaboration and denunciation behaviours - here the motivation is to strengthen one armed group relative to another which is a threat by, for instance, helping them target civilians who support the opposition. Of course this also has the impact of decreasing targeting capacity of the opposition. White flags and other (perhaps verbal) signifiers of civilian status may also serve as instrumental strategies by providing information to the armed group that supports their capacity to fulfill their targeting criteria. Changing the targeting criteria themselves may be more challenging and requires engagement with the armed group either directly or through third parties,

---

[13] Criminal acts tend to target the low-cost, and so these defensive strategies may also be considered compliance in that they exclude the household in question from, for instance, households targeted because they have no alarm system. Where efforts to increase the costs to perpetrators of violence have the effect of exclusion from the targeted group, these are considered instrumental strategies.

for instance those that might enforce international legal frameworks governing legitimate targets during war. For instance, Bonwick (2006: 271) suggests that people may stay safe during wars by:

...reducing the level of threat, for example through persuading military commanders to control their troops...

This is clearly a strategy of pressuring senior members of an armed group to better enforce their own targeting criteria. This is reminiscent of Schaeffer's model of threat reduction through 'accommodation and compromise'. Yet a subtle distinction is evident: it is evident that Schaeffer's suggestion is more appropriate where violence is targeted behaviourally, and Bonwick's where violence stems from weak organisational capacity. This points to one of the central arguments of this chapter: that optimal protection strategies depend on the nature of the threat faced. On instrumental strategies, Bonwick (2006: 275) also suggests:

... sometimes people will confront the threats that they face, and fight back. Many of the tens of thousands of armed gangs that dominate the inner-city areas of Haiti originated as self-defence units for communities that felt under threat. They are now as much a part of the problem as they are a part of the solution.

Households may work together to gain the capacity to threaten violence against others, including existing armed groups. Guichaoua (2009) discusses how the Oodua People's Congress militia was formed in part to provide protection to its members in an insecure environment. Kalyvas and Kocher (2007) examine how relative risks to non-combatants explain how the collective action problem in mobilisation is overcome. The militias emerging at present in violence-affected regions of Mexico are gaining international media attention and such militias also emerge in wartime. Arjona (2014) and Kaplan (2013) emphasise the importance of civilian institutions in explaining the capacity for civilians to work together to protect themselves during wars.[14]

So at least three protection strategies – compliance, avoidance, and instrumental – have been researched but these have tended to be in isolation: the relationships between these strategies and between the strategies and threat have not been explored in detail. One exception is Lindley (2009) which examines a situation where

---

[14] Of course such collective action, in common with the other strategies, may be motivated in whole or part by factors other than protection

the nature of threat changed over time in Mogadishu, meaning that threat avoidance in situ was harder and many chose displacement. Another is Steele (2011) which notes the differing experience in rural and urban areas of the Colombian municipality of Apartado. Collective and selective violence were attempted in both locations, but in rural areas Steele finds that civilians were able to overcome obstacles to collective action and resist the perpetrators, and so avoid the need for displacement.

There remains, then, considerable scope to investigate the relationships between these three categories of protection strategies as well as to investigate other protection strategies undertaken by civilians in the context of war. And, as stated above, there is also scope to explore the nature of threat itself so as better to understand the role of displacement and other protection strategies. The aim of this paper is to highlight these two gaps in the literature with a description of threat conditions and protection responses in PK18, and I hope to demonstrate the importance of building a more complete understanding of threats and responses. But not only is protection strategy selection a question of selecting the most efficient method for reducing threat, there are also trade-offs to protection.

The Side Effects of Protection Strategies

Protection strategies emerge in order to reduce threat to specific assets, but in attempting to reduce one threat this may increase threat to other assets. As Justino (2013) has noted, there are trade-offs to protection strategies. I mentioned previously that collective action or armed group association may increase threat exposure as well as providing protection. For instance in the example provided by Utas (2005), associating with an armed group may provide protection while that group is dominant, but increase threat once that dominance is lost. So the first trade-off is in increased prospect of asset destruction or removal stemming from attempted protection strategies. A second trade-off involves the prospect of asset *deterioration* rather than the direct destruction or removal discussed so far. Assets need to be maintained in order that they do not deteriorate: for instance humans need at least food, shelter, water and access to healthcare. The concepts of access and availability of such essential goods and services are familiar from the famines literature (Sen 1981) and although rarely found in the conflict literature they are instructive to illustrate the

mechanisms by which violence indirectly impacts on households[15]. Access is the physical or financial ability to obtain essential goods and services, while availability, included in the access function, relates to the supply of such goods and services. As households and businesses seek to protect their human and capital assets from destruction or removal, access and availability of essential goods and services becomes a problem for households, and the prospect of asset deterioration (for example malnutrition or disease) emerges. The second trade-off, then, is between the *direct* threats of asset destruction or removal perpetrated by armed groups and *indirect* threats of asset deterioration that result from asset protection strategies of the household itself as well as other households and businesses[3]. And to reiterate, the first trade-off is between *various direct* threats to one or more assets of the household. I shall explore these with reference to examples from PK18 in the proceeding section.

Before moving on though it is instructive to consider the mechanisms by which threat may be reduced by protection strategies. A reduction in an armed group's targeting capacity or a change in its targeting criteria each represent instrumental shifts in the threat households are exposed to, which may be attained through collective action or cooperation. Displacement represents avoidance rather than any attempt to tackle the determinants of threat directly. But displacement is not the only avoidance strategy, threats may also be avoided through the restriction of personal mobility – for instance by hiding indoors or by selecting carefully times to move outside; Lubkemann (2008) highlights this often-overlooked conflict outcome of households becoming 'displaced' *in situ*. The responsiveness of threat to protection efforts I refer to in this paper as the elasticity of threat. The fourth section describes these concepts in more detail with reference to trade-offs in PK18, while the next section introduces threat reduction strategies in PK18.

---

[15] Barrs (2010), in a humanitarian policy report, presents an impressive inventory of the various strategies undertaken by civilians, and which highlights the importance of protection beyond physical safety, with lack of access to and availability of 'life-critical sustenance' and 'life-critical services' being far often more dangerous for conflict-affected populations.

4.3 Reducing Direct Threat

This section discusses the concepts outlined above in an empirical context, and in doing so serves two purposes. First, I seek to clarify some of the concepts outlined previously, highlighting part of the range of threats civilians faced in a recent context of urban shelling and some of the choices civilians made managing these threats. Second, the theoretical outline above has focused on how threat functions regarding one asset belonging to a household, and how protection resources of the household may be used to protect their assets; while the examples discussed here focus on the complexity of threat. Households have multiple assets that are under threat, and assets that protect are also threatened. This creates trade-offs in managing threat. The description also demonstrates how protection resources operate beyond the household level.

Avoidance Strategies

Avoidance strategies in PK18 may broadly be split into two categories: *in situ* avoidance and displacement. *In situ* avoidance involves exploiting spatial and temporal variation in threat while remaining in or near the home. Displacement occurs when individuals move away from the home for some duration, though exactly how long and how far they might be away before being considered displaced may be subject to some debate - debate that should also consider their usual regular patterns of movement[16]. Data were not collected systematically on other avoidance strategies, although it was clear from interviews that people were taking action to avoid threat. One interviewee said he did not leave the house for five days. Another said that earlier in the crisis women who went to buy food did so by back roads in the very early morning (and sold that food at greatly inflated prices). Overall the impression is one of populations captive in their own homes, particularly during the week of intense fighting:

> *People were all confined to their homes, no one had the courage to go outside...*
>
> *Civilian Interviewee 30 October*

Of the households sampled (non-representatively) for the survey, over 85% were displaced in whole or in part during the conflict. Of those households, displacement

---

[16] In the dataset used here, people self-defined whether individuals within the household were displaced or not, as in this context there was little ambiguity.

was typically for a period of several months. The vast majority of people who left did so during the week of intense violence. For many, displacement became the best option because their preferred protection strategy of staying indoors became unsafe due to the intensity of the fighting:

> *The shelling was so heavy it reached the point that it was no longer safe even being in the house.*
>
> *Civilian Interviewee 30 October*

> *We left because the fighting became severe throughout the week. It was impossible for us to stay in our homes any longer. There were too many shots.*
>
> *Civilian Interviewee 29 October*

> *Bullets that were fired could pierce the roof.... It was not safe even in our homes.*
>
> *Civilian Interviewee 29 October*

Threat avoidance then was an important part of the portfolio of protection strategies for the vast majority, if not all, households. Avoidance *in situ* was apparently possible for many in the period of insecurity during the crisis that escalated with the first action of the IC on 16 December 2010, but a combination of the temporal intensity of the violence, and the fact that the nature of the violence diminished the protection provided by the structure of the home meant that many households moved to threat avoidance through displacement.

Compliance Strategies

Civilians in PK18 also undertook compliance protection strategies. There are examples of identity-based compliance, where individuals try to conceal physical evidence of their political allegiance:

> *The pro-Gbagbo ...who were left had problems with the CI. They were usually chased by soldiers and had no peace. Those who have lived in the area all the time of the crisis, have lived in fear. They were very discreet. They lived in hiding and afraid that someone denounces them to the CI. They avoided talking about politics or show their political opinion to others. There are people*

> who even erase all traces of Gbagbo from their home (photo, newspapers, etc.).
>
> *Civilian Interview 26 October*

The same was true for some of those against Gbagbo in the early days of the crisis. When the FDS were still able to enter PK18 to search homes for weapons evidence of support for Ouattara. One interviewee even described people being suspected based on the TV channel they were watching, so clearly people were very sensitive to the political identity they portrayed to their neighbours and to the controlling armed groups. So while behavioural adaptations were made these tended to be in support of identity compliance. There is little evidence that the Commandos required any particular behaviour from those in PK18. Active support seems to have been voluntary rather than provided under duress. Local women would cook and provide food for the Commandos in the early days while combat was ongoing in PK18, before the IC established food supplies after gaining control. There was no systematic taxation system imposed at any stage:

> They never came to me for money, but sometimes when you go through some checkpoints they're wondering if you can give them money to drink water. You are not obliged to give. If you have and you really think that you are able to contribute, you do, otherwise you do nothing but give you're safe to refuse. And if you give money, you give what you want. It can be 50CFA or 100CFA.
>
> *Civilian Interview 26 October*

> At first we visited families asking for a nominal sum to buy coffee for the night, it was not therefore obliged who had could not give anything. Some gave us 100 FCFA to 200 FCFA... The population also helped us by giving us information about the positions of our enemies. Women volunteered to cook for us every day with provisions that we brought to the camp.
>
> *Regular ex-combatant interviewee*

From the evidence of many civilians and two ex-combatants it seems that, due to the absence of coercion, active support for the Commandos, insofar as it was a protection strategy, may be considered purely an instrumental strategy to support the actions of the Commandos rather than compliance. Of course if there were instances of those suspected of allegiance with Gbagbo contributing money or information voluntarily to shape perceptions of their identity this would be a compliance protection strategy. For

business owners, compliance protection strategies were necessary to prevent looting as it seems the Commandos ran, at least at some small scale, a protection racket:

> *At first we had food to eat in the camps but then when we started to run out we looted stores to retrieve food (oil, rice etc..). Entrepreneurs who do not want their businesses to be destroyed paid us to protect their premises.*
>
> *Regular ex-combatant interviewee*

Instrumental Strategies

Instrumental strategies may be focused on changing the threat faced by one armed group, or changing the dynamics between two armed groups. In the context of one armed group, preventing looting was the most frequently mentioned instrumental strategy. Staying to prevent looting was instrumental in that costs to the perpetrators were increased by the presence of a household member. This instrumental strategy was quite effective: looting occurred in many cases when houses were empty[17].

> *...at some point, I wanted to leave but my wife didn't follow me - she was more courageous. She wanted to stay to watch over the house. So I went back with her not to leave her alone.*
>
> *Civilian Interviewee 29 October*

In this household, the wife wanted to protect the house and its contents, while it seems the husband may have stayed in turn in order to offer his wife some measure of protection. This protective role of individuals within the household with respect both to other individuals and capital assets is one that has not been researched or highlighted, yet it appears to be an important factor in intra-household protection strategies. For instance in at least one household, the men escorted the women and children to the edge of PK18, found them transport, then returned to the house to watch over it.

Household protection resources and the allocation of protection is complex and little researched, yet it is more complex still if two armed groups are involved. Here, the instrumental strategy is to reduce threat faced from one group by increasing the threat to that group by a second group, as modeled by Kalyvas and others. The instrumental strategies in Kalyvas' model are 'denunciation', 'collaboration' and 'defection'. The latter

---

[17] As mentioned in a previous footnote, changed targeting criteria based on increased costs of perpetrating violence are best classified as successful instrumental strategies rather than compliance.

was not observed in the data, but the first and second of these certainly occurred in PK18:

> *Those ("pro-Gbagbo")who remained were targeted by people "pro-Ouattara" and CI during the searches, because they said they were hiding weapons. Individuals who were identified were searched by people, usually neighbours with whom they lived. Sometimes these people were targeted because they were Bete, others were not strongly Bete but had displayed their positions during the presidential elections in Côte d'Ivoire.*
>
> *Civilian Interviewee 23 October*

So neighbours identified and sometimes searched their neighbours purportedly in order to check that they were not actively supporting the FDS. There are also many accounts from the interviews suggesting civilians collaborated with the Commandos, providing them with positions of FDS soldiers. However this view of collaboration was not universal, at least during the most intense fighting:

> *The intensity of the fighting was that civilians do not have the courage to take action against one of the two forces fighting each other.*
>
> *Civilian Interviewee 30 October*

It is certain though that the CI received significant support from a substantial section of the civilian population, and was treated benignly by much of the rest. Such instrumental involvement on the part of civilians in the production of threat returns us to the theme of Chapter 3, and represents the overlap between threat production and threat reduction. I explore this in depth in this chapter, but first turn to the concept of indirect threat and threat competition that often require trade-offs and make managing threats complex.

4.4 Trade-offs and indirect threat

Indirect Threats

So far I have discussed how protection strategies may change the direct threats civilians face. However protection strategies also have other effects. Here I discuss some of the indirect threats produced by protection strategies in PK18 that represent trade-offs in implementing particular protection strategies.

There are three processes of production of indirect (access and availability) threat to a household - those that stem from a household's own protection strategy, those that stem from others' protection strategies, and those that stem from impact. The threats are manifested in two ways: as outlined previously, indirect threats involve access or availability issues for goods or services required maintain human life or capital assets of the household. I focus on human life indirect threats.

Availability is a function of the supply for a good, comprising: the direct threat to the good in the supply chain; violent acts in the supply chain; protection responses taken by businesses in the supply chain; and demand for goods in the community. I shall focus this discussion of indirect threats on food, which survey and interview responses suggested was the most significant maintenance good or service during the crisis.

On the infrequent occasions journalists entered Abobo during the crisis, they noted the absence of food in the markets. Interviews in PK18 suggest that many businesses, including food shops, locked up during the crisis, at least in part in an effort to protect their goods from looting.

> *After fighting broke out and became violent. Abobo was constantly bombarded and it frightened the population. Also because of the fighting, the markets were no longer stocked and famine began to set in... The lack of food and fear are the two main reasons for the massive displacement of the population.*
>
> *Regular ex-combatant*

Looting against businesses was prevalent by the IC after they controlled PK18. Removing the stock from businesses clearly delays their ability to trade once relative calm is restored, and the failure of the Commandos to protect property rights of food

traders was likely to delay investment in new stock. There were humanitarian interventions that provided food in PK18, distributed through the IC and the Catholic Church, but these were relatively small contributions and also rather late.

Food supply was interrupted long before the IC gained control as it was very difficult to move around on the main roads – the main road towards Abidjan featured a range of checkpoints manned by various official or unofficial armed groups. High value assets such as food supply trucks would have been at risk of being requisitioned by armed groups for the contents as well as the vehicle. Demand for food in communities in PK18 will certainly have dropped off as people stayed indoors and left altogether, but supply was a problem long before the mass-exodus of PK18 residents in the week of Black Saturday, and for many it was a contributing factor in the decision to leave.

Taking, second, a household's own strategies: theoretically, indirect threats may result from any of the protection strategies taken, whether they are avoidance strategies, compliance strategies or instrumental strategies. In reality, PK18 indirect threats were most likely to stem from avoidance strategies.

Access issues stem from lack of financial or physical access to goods, including their availability. Food access issues also factored into decisions to leave. Depleted cash reserves and the inability to earn more money left some households unable to buy food. Prices certainly increased, two interview respondents suggested a bag of rice cost five times more during the crisis than it had done before. The direct threat to those who left their homes to seek food was, at times, very considerable, an issue I shall explore in some depth below. The location of food relative to households in PK18 was often quite distant – one interview respondent mentioned groups of women walking long distances together through back streets to the central market in Abobo in order to access food. I shall now outline these direct and indirect threats in more detail, focusing particularly on how they interact and the implications of this for households.

Impact

Protection actions may also have direct impact on the household, just as violence does. The forced sale of assets to pay for food or to pay off an armed group, or the provision of an older child to fight in the armed group[18], have a clear impact on the household's portfolio. Assets are effectively exchanged for a reduction in direct or

---

[18] whether this would be counted as the loss of a labour asset would depend where the recruit was stationed, if they were paid and could transfer money home, etc.

indirect threat. The forced sale of assets was present in 105 of the 715 households surveyed. This was 19% of households where households split or all stayed, and 11% of households where everyone left together. The histograms in Figure 4.1 and 4.2 show that as a proportion of their total number of pre-crisis capital assets, the losses to forced sale were unsurprisingly relatively small compared with losses to looting.
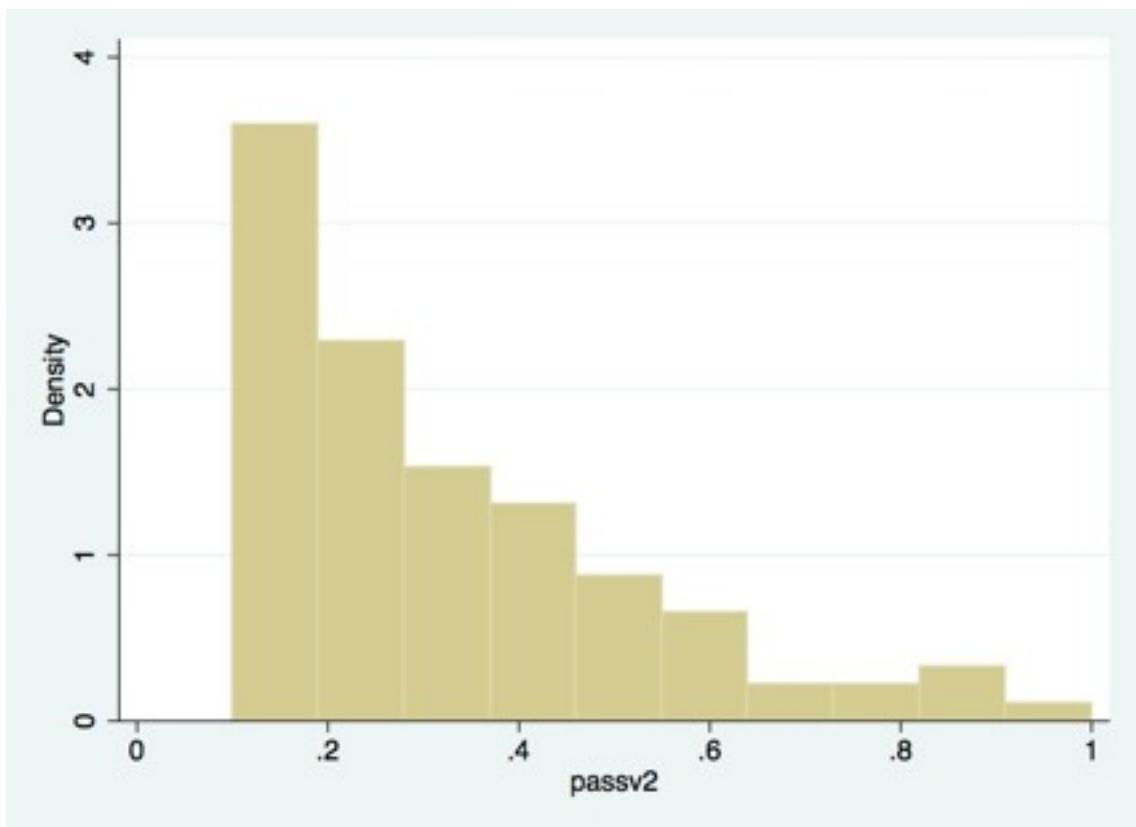
Figure 4.1: Histogram showing proportion of pre-crisis assets sold during the crisis, amongst those who sold assets.
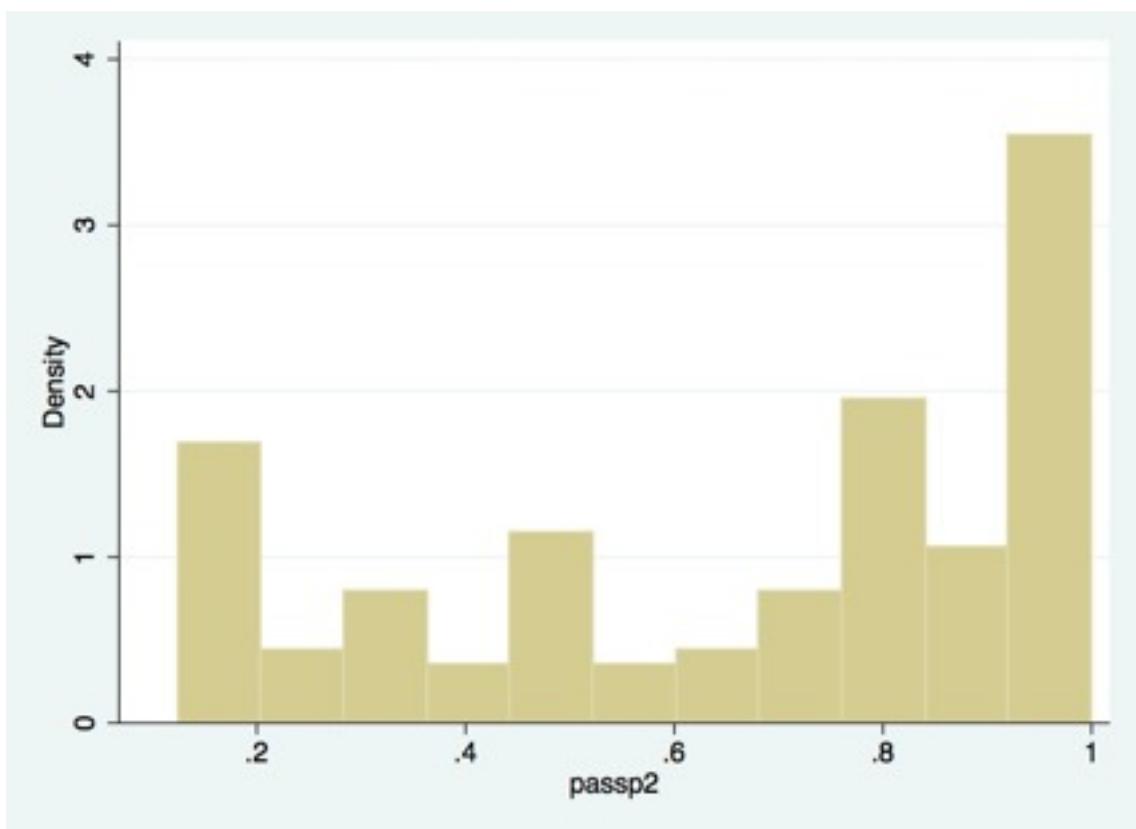
Figure 4.2: Histogram showing proportion of pre-crisis assets looted, amongst those whose assets were looted.

Threat Dilemmas

One conclusion that may be reached thus far is that households have protection resources which they use to protect themselves and their assets, which echoes 'defensive' strategies from the crime literature all involved the acquisition of protection resources (dog, alarm system and gun were the examples provided). For the relatively poor residents of PK18, the building they live in is one such important resource, enabling people to hide at least from spatially-targeted violence when the intensity is relatively low. The individuals within the household may also be protection resources, in so much as they are able to negotiate with armed actors, prevent children coming into the line of fire, source food for other family members, and so on.

I have outlined above the complexity of the nature of various threats faced by households. In this section I detail how complex, coexisting threats create strategic dilemmas for households in deciding which strategies to pursue in protecting their human and capital assets. I do not seek to produce an exhaustive account of threat dilemmas, but outline three of the main categories of dilemma as examples of competing demands placed on protection resources. First, direct threats to human assets *in situ* competing with direct threats to human assets in the process of relocation; second, competing direct threats to human and capital assets; and third, competing direct and indirect threats to human assets *in situ.*

Threat dilemma 1: physical assets vs people

> *My wife asked me to evacuate the children so we brought them to my sister's house and then we returned because of the thieves – when you left the house they would steal from you. My wife told me she didn't want to leave me behind so she stayed with me.*
>
> *Survey respondent*

Human assets could effectively protect capital assets from looting; that is to say the threat of looting was elastic to households protecting assets in person. But in remaining to protect capital assets the individuals were exposed to direct threats that could be avoided by leaving PK18. Many households were able to overcome part of this dilemma by splitting. Of the 715 households surveyed, 37% of households split in this way, while 12% all stayed and 51% all left together[5]. Many of these 'splitting'

households were in the central area of PK18, which was less intensively shelled than the peripheral areas especially near N'Dotre and Agripac checkpoints; and many of those splitting seem to have faced a lower level of spatially-targeted, avoidance-inelastic threat. But the dominant threat concerns were similar across PK18, across all survey areas the ranking of threats in the questionnaire suggested the two threats of indiscriminate violence – shelling in the home, and stray bullets in the home – were first and second ranked reasons for thinking of leaving the household (even if they ultimately stayed), while the fear of the home being looted if empty was the highest ranked reason for thinking of staying (even if everyone ultimately left). This illustrates the importance of considering capital assets, not just human assets, in analysing displacement decisions.

Threat dilemma 2: threats in situ vs threats en route

> *It was difficult (to decide whether to leave) because there were people who left and who died on the route, so we waited until the fighting had died down and we left.*
>
> *Survey respondent*

A second issue in managing threats for households in PK18 was the fear of violence *en route* out of PK18. In PK18 direct threats to life existed *in situ* (within the house) as well as on leaving the house in the local area and en route to other destinations (outside). This presents the dilemma of where to position the individual human capital assets of the household in order to protect them, when the process of relocation to safer places might involve threat equal to or greater than that faced *in situ*. For those in PK18 in February 2011, there were direct threats to human assets in the house, and outside, targeted spatially as well as on the basis of individual behaviour or personal characteristics. Once out of PK18, the prospect of spatially-targeted violence was much reduced as relatively little fighting was taking place elsewhere in Abidjan or in most other areas of the country. But the process of relocation involved leaving the shelter of the house and so spatially-targeted violence – for instance stray bullets and shrapnel – was perhaps more likely to cause damage to human assets of the household. Additionally, leaving the house involves exposure to armed groups and so increases the prospect of being targeted based on individual behaviour or characteristics that might be observed by armed groups at checkpoints or on the roads.

Threat dilemma 3: direct threats in situ vs indirect threats in situ

Once there was no one left my son and I went ourselves to search for food. They threatened to kill us one time so we went out rarely but as we have to eat we were obliged to go out even though there was no security.

Survey respondent

A third issue in threat management is similar to the second in that it involves a choice between staying in the house and moving outside. But here the competing threats are indirect and direct threats to human life, faced by those seeking to manage threats within the conflict zone rather than move out of it. As outlined previously, the main indirect threat to human assets in PK18 was inability to access food. The threat dilemma is whether to put human assets of the household at risk in order to find food. The trip to find food might take a few minutes or a few hours and presents various forms of uncertainty, including, first, the lack of information regarding new threats en route that may not be evaluated from the house itself, for instance if the route is not visible from the house. And second, the uncertainty as to whether food will be obtained despite the risks taken to try to find it.

One interviewee, having sent away his wife and children, did not leave the house for five days. Hiding indoors was a very prevalent tactic, but depending on domestic reserves there emerges eventually a need to acquire food and, where it has been cut off, water. The prospect of lasting material damage to adults through relatively short periods of food deprivation is perhaps minimal: while there is, ultimately, a certain prospect of death, the progression of deterioration in the physical condition is a process rather than event. If food is reliably available in the local area despite the violence, the dilemma is relatively straightforward: it is simply a case of the uncertainty of violence against the certain slow decline in physical condition. At some point the need for food will outweigh the uncertain threat of violence en route to the food.

But managing the threats of lack of food against exposure to violence is made more complex when food availability is unreliable. When the timing and location of food availability are less predictable, and this uncertainty coincides with the uncertainty of violence, decision-making is more difficult. When food is not found in the usual locations, additional time and distance of movement is required to find food, which increases threat exposure. At the height of the crisis, local businesses and markets in

PK18 were closed and food had to be brought in by households, often acting together, from the centre of Abobo. The extent of movement required then presents similar issues to the first dilemma outlined above.

The descriptions of three types of threat competition illustrates the complexity of threat: households have multiple assets which they need to protect simultaneously, potentially from a number of different direct and indirect threat sources. Acting to protect one asset may increase threat to another. Attempting to understand the protection strategies of households under threat therefore must include some understanding of what assets civilians have, and the factors they consider in deciding which assets to protect. One such factor is likely to include the duality of asset roles – that assets subject to threat may also be protecting other assets from threat. The next section discusses the role of non-household assets in protecting households.

4.5 Participation

The discussion so far in Chapter 3 and this Chapter 4 has worked on the assumption that civilians and armed actors are distinct groups, even if they may cooperate. This section moves beyond this assumption, and in doing so enables analysis not only of how becoming an armed actor and gaining capacity to threaten others may be protective for individuals, but also links this household level analysis with meso-level political dynamics. This second development allows for analysis of the emergence and demise of the Invisible Commandos, a large scale civilian mobilisation and demobilisation over a period of just five months.

Varenne (2012) concludes that the Invisible Commandos were the self-defense militias of Abobo, and indeed in large part this was the case. But there were three main categories of 'members' of the Invisible Commandos. First, there were those who were the initial instigators of the IC, the core group close to IB. Second, there were former rebel fighters of various allegiances who had military training and social connections to the rebel networks. Third, there were untrained youth from the local area who joined the Commandos. Beyond these members there were other 'jeunes du quartier' who formed checkpoints and operated within the protective sphere of the Commandos without being part of the organisation, although in reality who was a 'commando' and who was not is not entirely clear. The argument here is that at each of these levels of

the organisation, protection played some role in the mobilisation process, and that the levels of mobilisation and protection are interconnected.

A year after the death of IB, his private secretary gave a media interview which shed some light on the emergence of the Commandos. The Commandos in late 2010 were in Abidjan but dispersed around the capital, and under suspicion. They were effectively unarmed, but they had military training and many were known to the security authorities:

> *We had fighters ...in the ten municipalities of Abidjan and Anyama. Since the CECOS had heard that ex-combatants lived in parts of the economic capital, it was deemed appropriate to relocate many of them. We grouped in Abobo PK 18 where...Colonel Bauer lived. In other municipalities, CECOS removed our men who never come back.*
>
> *Ben Rassoul (2012)*

So the Invisible Commandos had been spatially a quite disparate group but under threat from CECOS they gathered together in one of the most remote parts of Abidjan, where one senior member lived. While effectively civilians they were vulnerable to attack when isolated, so what Ben Rassoul (2012) describes as a 'sleeper cell' was forced into active mobilisation due to the targeted behavioural threat they faced as individuals. According to the same interview they then became armed actors by using a borrowed Kalashnikov to surprise those policing the installation of a new director-general of the RTI (national broadcast media) on 16 December 2010. That day they acquired 9 more Kalashnikovs from the fleeing police, and a few days later obtained more from troops coming to find them and so on: "Gradually, we built an arsenal of combat." (Ben Rassoul 2012). This process of attempts to destroy the commandos backfiring and instead strengthening them culminated in the events of Black Saturday described previously.

Just as protection formed part of the mobilisation process for the Commandos as an organisation, so it was for its members:

In the Invisible Commandos, there was no recruitment but memberships. People have voluntarily agreed to join the movement. There were no wages, youth did not require payment or even the promise of payment.

Senior ex-combatant

There was no pay for the Commandos, though they were cooked for by women volunteers, some of whom were known through social networks in the community. Some sections of the Commandos sought small, and seemingly genuinely voluntary contributions at checkpoints and door-to-door to buy water, tea and coffee. Financial motivations were not central, then, to mobilisation. The process of the formation of the enclave also made it dangerous to leave because of open fighting in the streets, the risks of passing through the loosely defined and fluid spaces between the IC and the FDS, and the targeted violence that many Dioula feared if leaving Abobo. One ex-IC combatant who lived just outside PK18 in an area with many Gbagbo loyalists described how this situation led him to participate:

> *Since 2002, I had contact with the New Forces in Bouaké but I was not a fighter. I attended their camp but I did not have access to weapons. During the post-election crisis, some dissidents of the New Forces were in Abobo. Those I knew in this group told me to be ready and they will sign me to fight. But with all the attacks against the people of the north, I decided, with my brother to flee Abobo. We failed because the young people who manned the checkpoints were checking identity cards, so it was risky for us to cross. Having not succeeded, we decided to reconnect with our former Forces Nouvelles friends, to see if we can join them. After several refusals (because we were too young), we insisted until we managed to join the Invisible Commando. Also it should be noted that the injustice suffered by many Dioula motivated our choice.*
>
> *Regular ex-combatant*

So because PK18 was becoming a space that provided some measure of protection for northerners even during the violent process of establishing full control, this encouraged recruitment into the Commandos. This particular combatant's decision whether to flee or participate was clearly strongly influenced by existing social networks, and he was permitted to join the Commandos in a proper fighting capacity.

An important factor in the mobilisation of local youth was undoubtedly the control of territory already beginning to be established by the Commandos: the actions of the Commandos combined with the physical features of PK18 had already made FDS penetration into the interior of PK18 difficult when mobilisation began. Youths formed

gangs and checkpoints on the smaller mud tracks with the knowledge that a trained military force was backing them up, and possibly followed the example set by the Commandos themselves with their checkpoints on the main central road of PK18. They were able to mobilise to protect themselves against the youth of Anakoua Kouté because such mobilisation would not be a behaviour that could be targeted for punishment by a more powerful armed actor such as the FDS or CECOS. Other areas of Abidjan had opposed Gbagbo in the elections but were nevertheless overrun by the FDS and pro-Gbabgo youth at least in part due to the absence of an effective opposition force to provide protection for those willing to mobilise. In addition these other communes were less isolated and had better roads which made them much easier to control. The youth mobilisation across Abobo supported the development and control of the IC central command too, so there was a two way protective relationship between the central mobilisation of the Commandos and the peripheral mobilisation of youth militia under their sphere of influence.

Protection and the desire to oust Gbagbo were unifying drivers of mobilisation across all levels of the IC. But participation had another important driver for the central group of IB loyalists. They had some motivation, perhaps rooted in long-standing relationships, to reunify as a group, to drive the political agenda of their leader and perhaps ultimately benefit him and themselves should they be successful. This separate motivation at the heart of the Invisible Commandos contributed ultimately to its demise, as once Gbagbo was ousted and with the FRCI effectively in control, the threat that had driven mobilisation amongst all but the core central 'sleeper cell' diminished, while the threat to that core remained alongside their desire for political influence. Essentially this diminished the organisational capacity of the group as they lost the ability to mobilise their forces.

I now address this issue of organisational capacity of the Commandos and how it was affected by control of territory and external political events. After winning the Battle of Black Saturday, IC control was established over the key Agripac checkpoint and arterial roads. Thereafter, IB came to PK18 from near the Ghanaian border and the approach of the IC to the civilian population changed significantly. He set up headquarters in the Cité de Police – the relatively grand former police residential development – and began work trying to leverage the success of the Commandos into realising his political ambitions. IB took local civilian relationships more seriously than the Commandos had up to that point. He set up a civilian-military liaison committee, which started distributing food in the community, and public meetings were held with the local population.

Although the population of PK18 was hugely diminished from its pre-crisis level, he was seemingly setting out to establish some forms of local governance that might add to his political credibility.

Figure 4.3: Cité de Police . The red roofs and tarmaced roads of the modern police quarter in PK18 contrast with the iron roofs and mud roads of surrounding buildings.

Arguably the IC became a stronger organisation at this time. They were no longer threatened by Gbagbo's forces in PK18, and IB brought with him additional professional soldiers loyal to him from his village, and additional forces liberated from the Maca prison. The appearance of Commandos in public began to be much more that of a formal armed force, with many more uniforms visible in images from this period and balaclavas no longer being worn to hide fighters' identities. He set up a civilian-military liaison committee: the IC began distributing food around this time. He organised regular public meetings held in front of the main villa in the Cité de Police, as well as press conferences. Simultaneously, the position of Gbagbo loyalist forces in Abidjan, and Abobo particularly, were becoming weaker as they lost battles to the Commandos and as the FRCI forces advanced from the North.

Firstly, although the IC were becoming a stronger force and their territorial control was expanding, the FRCI arriving in Abidjan represented another, larger fighting force

fighting against Gbagbo. And because they were under the control of presidential challenger Ouattara and the Prime Minister Guillaume Soro, they had much greater legitimacy in the eyes of the international community as well as the majority of the Abidjan population opposed to Gbagbo. On 11 April, Gbagbo was arrested by the Forces Nouvelles in an operation directed by French UN troops. This changed the external political environment for the Invisible Commandos completely, and undermined the reasons that the vast majority of its members were participating.

Secondly, at around the same time, the strengthening of the IC coincided with its community foundations being undermined. The leadership of IB was divisive within the community and the Commandos: that the central unit of the IC existed in great part to achieve IB's personal ambitions was not obvious to many of its members drawn from local youth – some were unaware for much of the period that IB was involved at all. So IB's arrival in PK18 at the end of March, and his political statements regarding his intention to rule a transitional military government (so threatening Ouattara's position) were viewed as something of a betrayal by those who thought they had been fighting to replace Gbagbo with the electoral victor Ouattara. The junior ex-combatant interviewed said he felt betrayed once he realised IB was pushing for political influence, although he carried on fighting. Others did not:

> *...when people knew that IB's fighting was personal many of its members deserted the ranks, and IB had to bring youth from his village to help in the fight.*
>
> *Civilian interviewee 29 October*

And thirdly, the threat to Dioula and other northerners was greatly diminished in PK18 with the establishment of total control there and increasing FRCI and IC control in other areas of Abidjan. Hence the protective role of the IC was no longer relevant for any but the core central group of the IC. For those close to IB, the FRCI being in control under Guillaume Soro was perhaps as great a threat as they faced with Gbagbo still in charge due to the long-standing rivalry between IB and Soro. At this time, the existence of the Commandos as a significant fighting force was perhaps necessary to keep IB and his associates alive, so the callls on IB to disarm the Commandos were met with hesitation.

Once Gbagbo was arrested, the tension within the IC led to its swift demise. By the time of the 'Autonomous Republic of PK18', IB was claiming to the media that the IC

comprised 5,000 men, though he had clear incentives to exaggerate his own influence and other estimates from within the commandos were closer to 3,000 at the peak. Associated Press journalists' own estimates in mid April were that fewer than 1,000 men were present. Once Gbabgo had been deposed, there was no reason for most of these men to fight the FRCI. This left a relatively small group of IB's close affiliates quite exposed in PK18 with the sparse local population largely indifferent to his presence.

After the arrest of Gbagbo, Ouattara's new regime had been calling on IB to disband the Commandos and join the new national army, the FRCI. IB had resisted these calls, stalling disarmament, and was holding out for a direct meeting with Ouattara. A stand-off emerged, and on 20 April, Forces Republicaines de Côte d'Ivoire (FRCI, former Forces Nouvelles) troops had attacked PK18 and were repulsed after a short battle. They returned the following week and IB was shot dead by the FRCI on 27 April 2011 in the evening.

4.6 Conclusion

This chapter has presented a framework to understand the range of strategic options available to civilians. This framework is built around the theory of threat outlined in the previous chapter, and the strategic options available to civilians are rooted in the characteristics of the particular threat being addressed. So the disaggregation of wartime threats and protection strategies may help to support the development of an understanding of the mechanisms by which wartime violence affects civilian welfare.

The chapter has provided a detailed description of a context in which civilians managed co-existing, competing direct threats to various assets of the household, and in which direct threats also competed with the indirect threats of access and availability of essential goods and services. The analysis also suggested that the effectiveness of protection strategies are dependent on the physical and human protection resources available to households. So household selection of strategy is based on effectiveness of that strategy in reducing threat, which is a function of threat characteristics and protection resources. But strategy effectiveness is not the only consideration, trade-offs also impose (asset) costs, indirect threats and increase in other threats. These create dilemmas in managing competing threats.

Finally, the chapter linked back from the micro to meso level with a description of mobilsation as protection strategy in PK18. For people with varying degrees of ties to entrepreneurs of violence, gathering together in one place, and attaining weapons, was a strategy for reducing identity and behaviour based threats. But this mobilisation was shown to be fragile to the removal of threat, and political motivations of such groups may be jeopardised by changes in the threat environment.

So selection of protection strategies has implications not only for civilian welfare but also - potentially - for macro political outcomes. Consideration of the forms of threat and protection advocated here may inform the as yet under-developed theoretical models in the rational choice displacement literature, a theme I shall develop in Chapter 6. More broadly, further work is needed to build a greater evidence base of strategic dilemmas and protection strategies in order to develop deeper understanding of civilian decision-making in conflict and of the mechanisms by which conflict has impact on civilian welfare.

Chapter 5:

Time to Split? Disaggregating Wartime Displacement Decisions

Abstract

Recently, a literature has emerged that analyses from a rational choice perspective the determinants of variation in the displacement decision. This shifts the focus from the displaced to the observation and explanation of the difference between the displaced and the non-displaced, so moves from the question 'why leave' towards 'why stay'. Yet there is little conceptual or empirical understanding of the decision-making process that results in the observed differences between the displaced and non-displaced.

This chapter describes important characteristics of displacement decisions in PK18 in isolation with the aim of coming to a better understanding of how intra-household displacement choice functions as a protection strategy. It provides an understanding of the displacement process that is leveraged in the next chapter. Three main contributions of the chapter are as follows: first, it looks inside the household 'black box' for displacement decisions; second, it illustrates that both the process of displacement and eventual outcome are important, which has implications for the use of binary outcome variables; and third, it describes differences between displacement groupings according to the main socio-economic variables that have been used in research to date. I provide more detail on each of these in turn.

The results show that the process of displacement matters; that actions as well as outcomes describe important heterogeneity in displacement decisions. The nature of displacement decisions are very different according to wealth, to household size, to age of household head, and to ethnicity. The displaced are a very heterogenous group, and by disaggregating according to process of displacement as well as outcome important aspects of this heterogeneity can be revealed. Finally, the findings suggest that households are actively managing threat rather than responding passively; and support the assertion of the rational choice displacement literature (Adhikari 2013) that - even in situations of extreme violence - there is agency in the decision. In conclusion, the results demonstrate that socio-economic factors may not drive only whether people displace, but how they displace, and how they make decisions about displacement.

5.1 Introduction

The previous chapter outlined the range of civilian strategies during conflict, and analysed the nature of some of these relationships between threats, impacts and strategies. I now move on to analyse one strategy in particular - that of displacement. Wartime displacement is one of the most visible and widespread impacts of conflict, and one that is subject to significant policy effort to help mitigate its impacts as well as research effort to understand the nature of those impacts both for the displaced and their hosts. Recently, a literature has emerged that analyses from a rational choice perspective the determinants of variation in the displacement decision (Davenport et al. 2003, Moore and Shellman 2006, Engel and Ibáñez 2007, Czaika and Kis Katos 2009, Steele 2011, Bohra-Mishra and Massey 2011, Adhikari 2012, Adhikari 2013, Brück et al. 2012). This shifts the focus from the displaced to the observation and explanation of the difference between the displaced and the non-displaced, so moves from the question 'why leave' towards 'why stay'. Yet there is little conceptual or empirical understanding of the decision-making process that results in the observed differences between the displaced and non-displaced.

This chapter describes important characteristics of displacement decisions in PK18 in isolation with the aim of coming to a better understanding of how intra-household displacement choice functions as a protection strategy. It provides an understanding of the displacement process that is leveraged in the next chapter. Three main contributions of the chapter are as follows: first, it looks inside the household 'black box' for displacement decisions; second, it illustrates, in line with Zetter et al. (2013), that both the process of displacement and eventual outcome are important, which has implications for the use of binary outcome variables; and third, it describes differences between displacement groupings according to the main socio-economic variables that have been used in research to date. I provide more detail on each of these in turn.

Lischer (2014: 325) concludes in her analysis of research on the 'root causes' of displacement that: "Rationalist studies could fruitfully use the family or household as the unit of analysis in addition to or rather than the individual." She provides two reasons, that decisions to flee may be a communal or family choice, and that threat may vary between family members: that is to say, dynamics *within* the household are important. Brück and Schindler (2009) also argue that groups other than households are important in wartime decision-making more generally, both groups within

households and groups beyond the household. This chapter goes beyond rational choice displacement studies that so far either treat the household unit as a 'black box' or focus on individuals.

The methodology detailed how this study gathered survey data at the intra-household level on displacement groups. This is the first data of its kind and it is not immediately intuitive how to classify non-binary displacement, i.e. when displacement groups do not correspond exactly to the household unit. The nature of the displacement decision process is explored in depth and four possible classifications of displacement proposed that encompasses variation in process of displacement and/or outcome of displacement. This forms the conceptual contribution of the chapter, which is also supported by empirical evidence from PK18 about how decisions were made.

The main empirical section of the chapter focuses on the differences between the four proposed categories of displacement. Six socio-economic variables are selected for further descriptive analysis of the importance of classification. They are selected based on their salience in the literature and in this PK18 context. The analysis is focused, however, not on these right hand side variables but on the left hand side variable, the displacement classification. The argument is simply to demonstrate that inclusion of process and outcome in displacement decisions reveals significant socio-economic differences that are associated with the four-way classification.

In short, this chapter seeks to justify the use of the four-outcome dependent variable selected for Chapter 6 with three arguments: that it is justified by conceptual analysis of the decision, the nature of the decision, and the characteristics of those making the decision. This paper proceeds as follows. The next section introduces the rational choice displacement research literature, the contribution of this paper and empirical findings to date. I then present analysis of the characteristics of displacement decisions in PK18. The fourth section discusses the socio-economic variables and categorisation of displacement decisions, and the fifth concludes.

5.2 Literature

Lindley (2009) identifies three theoretical frameworks for understanding agency in forced migration decisions. Zolberg et al. (1989) focuses on the link between types of social conflict and migration patterns, giving a focus on how structural contexts dictate migration. Richmond (1995) and, following Richmond, Van Hear (1998) propose models of forced migration that vary along continua between involuntary and voluntary, or alternatively reactive and proactive, migration. But as Turton (2003) notes, such continua suggest an artificial distinction between people supposedly with or without agency: even those 'without' agency may choose whether, when, where and how to move. What Adhikari refers to as 'rational choice displacement research' treats displacement as being a choice made under some level of constraint, rather than a forced outcome of violence in which civilians lack agency to make decisions.

This paper follows this view of displacement as a constrained choice, and may be distinguished from migration by the presence of some perceived threat of violence to human or capital assets of the household. However that is not a distinction that is always easy to make empirically: the presence of violent events at some level of aggregation does not necessarily indicate that that violence presents a direct threat to any particular household. What is clear is that violence affects the operation of markets, and harms returns. It is challenging, then, when using aggregated violence measures, to distinguish between situations in which violence enhances financial push factors for migration (reduced returns), and situations in which violence causes direct or indirect threat to human and capital assets of the household, or indeed from situations where the violence has actually impacted the household.

Nevertheless, this challenge is undertaken by many of the papers in the emerging empirical literature on displacement heterogeneity. This literature studies the causes of variation in displacement outcomes at several levels of analysis: the individual level (Brück et al. 2012, Bohra Mishra and Massey 2011, Adhikari 2013); the (unitary) household level (Engel and Ibáñez 2007, Ibáñez and Velez 2008); the community or village level (Czaika and Kis-Katos 2009, Brück et al. 2012); and the regional level (Adhikari 2012). The findings generally indicate a role for both socio-economic factors as well as violence in causing displacement, but because of the issue of isolating the effect of aggregated violence, and because research contexts often involve rural violence and ongoing rural-urban migration, it is difficult to isolate causal mechanisms or to interpret all results clearly. Compounding this problem is a lack of understanding

of the displacement decision itself, and it is to this area that this chapter seeks to contribute. The lack of understanding stems from at least three sources: the limited contexts researched; the individual or unitary household focus; and the focus on outcomes not processes.

Displacement has to date been modelled based in contexts of selective violence or identity-based violence, mostly in Nepal and Colombia. Only one systematic displacement study exists in an African context - Lindley's (2010) paper on Somalia[19] - and there are no quantitative studies from any African or Middle Eastern context. Conducting research in a new continent is interesting, but more significant is that Lindley's qualitative study is also the only displacement research set in a context of widespread spatially-targeted violence, and the only one in a wholly urban setting, and is the only one researching massive-scale displacement[20], yet has been largely overlooked by the micro-economists studying displacement.

So the analysis of displacement is heavily influenced by the context: how violence is targeted and the duration and location of that violence has a strong impact on how displacement is manifested. For instance, violence in Colombia (Engel and Ibáñez 2007, Ibáñez and Velez 2008) and Nepal (Adhikari 2012, 2013, Bohra-Mishra and Massey 2011) is located often in rural areas, and displacement is often long-term and intertwined with processes of rural-urban migration. The ethnic riots in Kyrgyzstan, in contrast, caused short term displacement of 1-6 weeks (Brück et al. 2012). A context of short, intense violence, displacement and swift return is clearly one in which medium or long term returns to labour are not likely to be a significant factor decision-making. This narrows their research focus to threat variation and socio-economic characteristics of the households that impact on decision-making. Also, displacement in such contexts of intense violence has been under-researched to date, so the chapter makes a contribution in the understanding of civilian response to intense fighting.

This chapter builds on this and seeks to narrow the focus further, through selection of a context in which, like Brück et al. (2012), relative returns to labour are not a salient feature in decision-making, but also one in which threat is more homogenous and violence allocated randomly. This permits the main analysis to focus on the socio-economic characteristics of the household that shape displacement choices. In other

---

[19] Lubkeman (2008) also focuses on issues of wartime mobility, as do other anthropological works including Utas (2005)

[20] Two thirds of the population left Mogadishu during 2007-8 (Lindley 2010)

contexts, these characteristics may also determine returns to labour at destination, as well as determining the probability of the threat of violence (Engel and Ibáñez 2007). So here, rather than analysing the relative roles of economic incentives and threat incentives for migration during wars, I seek to investigate the socio-economic characteristics of the household that contribute to heterogeneity in displacement choice. To narrow the focus in such a way helps in the interpretation of the effect of these factors in a context in which theoretical models have not been well established.

The selective contextual focus of the literature has perhaps contributed to the salience of migration theories in displacement, and the relatively weak theoretical and empirical understanding of the role of violence in decision-making. Migration theories are strong because they rely on contexts where there is no violence affecting decision-making. To make progress in improving understanding on the side of response to violence, it makes sense to research contexts where existing rural-urban migration incentives are absent and violence is intense. The first step is to understand how displacement decisions are made in such contexts, and the sub-household level represents a strong starting point. Analysing not just displacement outcomes but the process that leads to these outcomes provides valuable insight into displacement decision-making, and thus the nature of displacement itself.

So, moving on from the context, a second novel aspect of this paper is the methodological focus on the household and sub-household units, rather than the individual or village levels which predominate thus far in the literature. This level of analysis has theoretical justification. Migration theory presents the foundation for much of the work on displacement decisions. Neo-classical models of migration emphasised individuals' incentives to maximise returns to labour as the driving force behind migration (Todaro 1976). Household economics theories emphasised the importance of placing these individuals within household units, and suggested that rather than individual motivations, decisions may be made at the household level and the members of the household unit allocated to various labour markets in order to increase returns and reduce overall risk exposure of the household (Stark and Bloom 1985), an approach that has been seen to be particularly relevant for developing economies. Analysis of displacement decisions has in many cases focused on whole households moving. This focus on whole households (Engel and Ibáñez 2007) or individuals is attributable either to research design, which I shall discuss below, or homogeneity in household displacement outcomes making analysis of intra-household variation

impossible[21]. One quantitative paper has studied the intra-household level. Brück et al. (2012) report causes of individual-level as well as community level displacement decisions in Kyrgyzstan, although intra-household results are not reported.

Third, the chapter addresses a new dependent variable. The dependent variable is usually binary displacement choice, which is determined by the choice of sampling method. With case-matching research (Adhikari 2013, Engel and Ibáñez 2007) this binary dependent variable is integral to the sampling method, with households selected from displaced person recipient areas matched with households from displaced person source areas. Cross-national studies (Moore and Shellman 2004) and some national studies (Czaika and Kis-Katos 2009), which use net annual refugee flows, of course do not capture any complexity in displacement within households. Even where the data permit analysis of intra-household complexity, the dependent variable is still binary: Brück et al. (2012) capture individual level within households data but do not report intra-household level outcomes. As such, displacement decisions are treated as binary, whether that be at the household or individual level. But, following the household economics migration models discussed above, displacement patterns at the intra-household level may be important. This is the first study to differentiate between those households who displace in whole or in part, or not at all, analysing the process of displacement rather than just outcomes.

Empirical evidence

The literature on displacement decisions focuses on simple unitary displacement outcomes. Such approaches necessarily obscure complexity in the displacement decision. But does that matter? The empirical section of this paper investigates whether and why it does by analysing socio-economic differences between the various categories of the displaced. The paper then goes on to propose that complex displacement outcome is the most suitable categorisation of the displaced. First I outline the empirical evidence to date on categorisation of displacement, and socio-economic distinctions between the categories.

Studies have found contradictory evidence on the role of various socio-economic factors in displacement decisions. This paper selects six variables for analysis of how

---

[21] the scarcity of detailed data on displacement within wartime contexts makes it difficult to establish what intra-household variation in displacement exists

classification of the dependent variable is important, and how binary outcomes used to date may obfuscate important differences between displaced groups. The six variables are: wealth, education, age of household head, household size, ethnicity and religion. The first three are selected due to their salience in the literature on migration and displacement particularly, and the latter three for their particular relevance at the intra-household level (household size) and in the conflict context at hand (ethnicity and religion), and hence their importance at least as controls. It is important to re-emphasise that this chapter does not seek to model displacement or test the importance of these variables in driving displacement; that is left for Chapter 6. The aim here is simply to illustrate the importance of disaggregating displacement decisions by process as well as outcome by presenting descriptive statistics and regressions on different possible constructions of the left hand side variable with the same set of right hand side variables. I now outline the findings in individual and household-level binary outcome displacement research[22]. The four main papers are Engel and Ibáñez (2007), with similar results from the same data presented in Ibáñez and Velez (2008), Adhikari (2013), Bohra-Mishra and Massey (2011) and Brück et al. (2012).

Wealth and Assets

The role of assets in wartime displacement choice is complex, primarily because in some contexts assets are an indicator of probability of being targeted as well as indicating (at least) the costs of displacement, the ability to cope with financial conflict shocks, the affordability of displacement and the possible benefits of moving. Ibáñez and Velez (2008) find that households were targeted because of their asset holdings. Adhikari (2013) similarly finds that land holdings promote displacement, which is interpreted as being due to associated increased threat (although perceived threat is also in the regression). Bohra-Mishra and Massey (2011) investigate a range of asset types, finding that thy generally reduce propensity to migrate. Brück et al. (2012) find that being relatively wealthy compared to others in the community decreases propensity to displace, which is interpreted as being due to the ability of these individuals being able to invest in more effective protection strategies (buying fences or stronger doors). In general, at the household level, there is a contrast between interpretations that put asset holdings as a reason for a household to experience threat and so displace, and interpretations that suggest they are better able to protect themselves in situ due to greater wealth.

---

[22] Bohra-Mishra and Massey (2011) is a multinomial outcome, but these represent different destinations of displacement and I consider them to be binary outcomes

Education

Engel and Ibáñez (2007) expect that education, following migration models, will be supportive of displacement due to the 'standard of living' effect, but with mixed information effects depending on the nature of the situation at destination. Bohra-Mishra and Massey (2011) find that education and occupational skill both increase propensity to migrate during the war in Nepal. However Engel and Ibáñez's (2007) empirical findings suggest that higher level of education *suppresses* displacement when households face high levels of violence. Their interpretation is that more educated people in their Colombian case had lower expectations of the financial situation of the displaced at their destination, attributable to the better information available to the educated. Where there is a lower level of violence, there is a positive (but insignificant) association between education and displacement. Ibáñez and Velez (2008) find that the better educated are less likely to displace, with the same interpretation. Adhikari (2013) includes education as a control but finds no significant relationship with displacement when other variables are included in the model. Brück et al. (2012) find that respondents with a university degree are less likely to be displaced, and those with basic education are more likely to be displaced. So here the conflicting effects are human capital and information access. Both may change economic expectations at destination, in opposite directions, and both may affect threat.

Age of household head

Engel and Ibáñez (2007) find that having an older household head (HHH) has a significantly negative impact on a household's propensity to displace, which they attribute to longer planning horizons and fewer ties to the origin on the part of younger household heads. Similar explanations are given for the same finding in Bohra-Mishra and Massey (2011) and Brück et al. (2012), though Adhikari (2013) includes age as a control, and the impact is not significant.

So overall there is empirical agreement on the effect of age, but education and assets have mixed findings and diverse explanations using a binary outcome variable in contexts of rural-urban wartime migration or displacement. The intention in the second empirical section will be to establish whether the reclassification of the variable used to measure displacement using intra-household displacement decision processes to create non-binary measures can shed some light on these mixed findings, as well as help to justify the use of non-binary outcomes in displacement research.

5.3 Concepts: The Displacement Decision

Is splitting a decision in itself, or is it nested within decisions to stay or to go? There is little available evidence to support nesting either way *a priori*. It may be that households first ask 'should we stay together or not', rather than 'should we leave or not'. While this chapter will not serve to resolve this question, I intend to provide evidence that may support further progress. At the intra-household level, the displacement decision may be modelled as a series of decisions[23], here made at t_0 and t_1 (see diagram below). With each decision, households may decide between taking no displacement action (0) and one of two displacement actions: (1) some but not all of the members of the household leaving, and (2) all remaining members of the household leaving. If there is only one person remaining in the household at any given t, splitting is not an option. This model results in seven possible outcomes after two decisions:
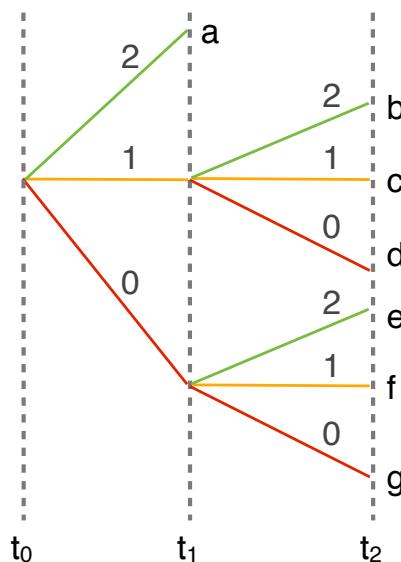
Figure 5.1: Displacement decision tree with homogenous time periods.

- outcome a: everyone leaves all together at t_0
- outcome b: the household splits at t_0 and then all remaining members leave together at t_1
- outcome c: the household splits at t_0 and then splits again at t_1
- outcome d: the household splits at t_0 and then takes no displacement action at t_1
- outcome e: the household takes no displacement action at t_0 and then everyone

---

[23] It may be argued that part of the displacement decision is return, but I do not consider return decisions here, only leaving.

leaves all together at t_1

- outcome f: the household takes no displacement action at t_0 and then splits at t_1
- outcome g: he household takes no displacement action at t_0 or at t_1

What characterises these time periods t_0 and t_1? To answer this, we must first address what causes the household to make a decision whether to stay or go. It might be reasonable to think that a household is caused to make displacement decisions according to new information regarding direct threat. Information regarding indirect threat may function differently - a household may know how much food they have, and how long they are able to go without food. However there are incidents providing new information regarding indirect threat: indirect threat that stems from incidents of violence, and incidents that provide information about availability of essential goods and services.

So do households make decisions according to universal timeframes? That is to say, are t_0 and t_1 the same across a given area, or are they unique to each household? And is a decision made each time new information arrives, or at regular time periods - every day, or every hour? The answer to this question is complicated by a question over whether everyone staying is necessarily a decision, as such. People leaving necessarily involves a decision, but everyone staying may reflect the absence of a decision rather than an active decision to stay.

One important source of threat information may be instances of violence, which, across a small area, might mean that the household is reacting to the same act of violence. However, over a larger area it becomes increasingly unlikely that a single act of violence provokes decisions to be made at all households simultaneously. The same applies for other sources of threat information, although communication of threat through widely-accessed media may create simultaneous decisions over a larger area.

Using a household-centred timeframe, the variation between households as to when t_0 and t_1 occurred is of less consequence than the action taken at t_0 and t_1. Thus the nature of the decision rather than the timing of the decision is of prime concern. This is broadly the approach followed by this paper which, in line with the literature, does not focus on displacement timings. A different approach might be justified with very detailed information on threat and threat information. If timings vary between households, then t_0 is the timing of first displacement action for any given household, rather than the timing of some instance of violence. This reduces the number of outcomes available

from seven to five, because taking no displacement action at t_0 merely postpones t_0 until such a time as option 1 or 2 is taken. If displacement action is never taken, then option e below is the result.
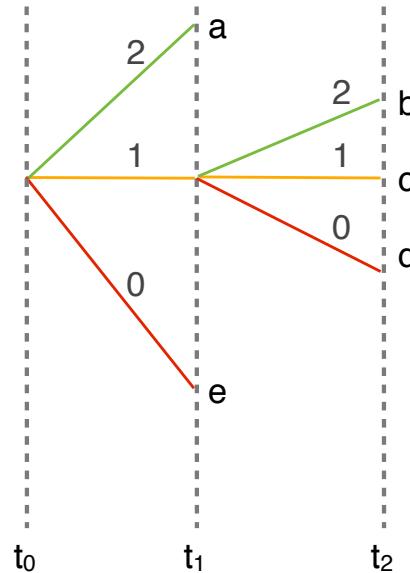
Figure 5.2: Displacement decision tree with household-specific time periods

Now it is only the action of splitting that results in additional displacement decisions, so a decision is only made at t_2 at *c*. But splitting cannot be the final displacement decision except in artificial situations that assume no subsequent time periods. So *c* cannot be a displacement outcome: ultimately decisions to split must lead to either no further displacement action or everyone leaving, which if everyone left one by one will occur at t_n where *n* is the original number of people in the household. So splitting will eventually lead to the equivalent of outcomes b or d replicated at each of the subsequent time periods. This sequence is illustrated in the extended decision tree in the empirical section below.

So displacement may be categorised in various ways, according to outcomes and actions. The most obvious is to examine the outcome once all displacement actions have been made. We might say that outcomes are simply the observable outcome after all displacement actions: either everyone leaves the household (a and b), some but not all people leave the household (d), and no one leaves the household (e). These may be termed *simple displacement outcomes*. Alternatively, we might treat the household as a unit, and refer to households that are displaced or households that are not. Here, the categorisation would be displaced (a and b) and non-displaced (e), while

d may be considered either displaced or not. These I refer to as *simple unitary displacement outcomes.* Next, we might consider the *first displacement action* to be the important differentiator of the types of displaced, as the initial reaction to threat may be particularly significant. Here, b and d are grouped together as 'split', while a and e are simultaneous displacement and no action respectively. And lastly, we might consider the series of decisions by which the outcome was created. These *complex displacement outcomes* would be at least four because a, b, d and e would be differentiated from each other. There could be more than four, as the equivalent of outcomes b and d at t_3 and subsequent time periods if the household split more than once might be considered distinct from b and d. The four main complex displacement outcomes are shown on the table below, alongside the other categorisations.

Table 5.1: Four displacement outcomes and four displacement categorisations

Displacement Outcomes from Decision Tree	Simple Unitary Displacement Outcomes	Simple Displacement Outcomes	First Displacement Action	Complex Displacement Outcomes
a	Displacement	All displaced	Simultaneous displacement	Simultaneous displacement
b	Displacement	All displaced	Split	Staged displacement
d	Displacement [OR No displacement]	Partial displacement	Split	Partial displacement
e	No displacement	No displacement	No action	No displacement

I now move on to present the data and to illustrate these decision concepts with real decisions made by the sample households in PK18.

5.4 Data

Displacement here differs from the left hand side (LHS) variable used in other literature in three ways. First, as outlined already, displacement here is very unlikely to be conflict-related migration. Second, displacement in this context was only relatively short-term. The survey was conducted 18 months after the cessation of violent conflict in PK18, and only in the place of origin, so the displaced captured in the survey were by definition displaced and returned within 18 months. I discuss displacement not captured in the survey later in this section. Third, fine-grained data on timing, intra-household groupings and destination of displacement were collected. The descriptive statistics reveal interesting patterns of behaviour 'within' displacement that suggest there may be problems creating a dichotomous 'displacement' outcome variable, at least in short-term high threat contexts.

Grouping of displacement

Because previous studies have analysed displacement outcomes, not displacement dynamics, they have treated displacement as dichotomous. The survey captured displacement decisions by asking respondents to specify which of the household members resident at the beginning of the crisis and specified on the household roster left together (at the same time and day, travelling by the same route to the same destination). If, for example, women and children left together and first they would all be 'group 1' and the male head of household leaving later 'group 2'. For each displacement group, their defining features of date of departure, destination and route were gathered, as well as secondary displacements, date of return, mode of transport and cost of 'outward' displacement travel per person[24]. I do not analyse destinations or routes here - the distinctions between a household's displacement groupings were usually seen in the date of departure and not route or destination.

As has been detailed above, the data here allow us to look 'inside' displacement decisions, and classification of displacement into the usual binary outcome is not straightforward. The decision tree outlined previously is extended below to encapsulate the full series of decisions for households in PK18. As before, the downward sloping red lines reflect no displacement action taken, the horizontal amber lines are the decision to split, and the upward green line is everyone in the household at that time period leaving.

---

[24] Route data were not captured systematically due to difficulty isolating the many various route options. See methodology chapter for more details.
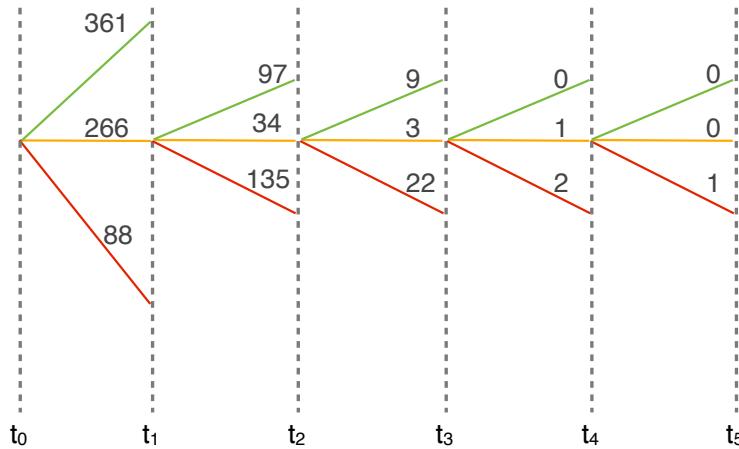
Figure 5.3: Full PK18 sample displacement decision tree.

Taking the first displacement action - around half (361) of the 715 households displaced simultaneously, while one eighth (88) households took no displacement action. This leaves 266 households that split. The table below shows the four possible displacement categorisations with numbers derived from the decision tree. The table uses the most simple of the 'complex displacement outcomes', with four outcomes, to highlight the difference between the categorisations.

Table 5.2: Displacement outcome categories from decision tree

Displacement Outcomes from Decision Tree	Simple Unitary Displacement Outcomes	Simple Displacement Outcomes	First Displacement Action	Complex Displacement Outcomes
simultaneous	627 (or 467 if d classed as non-displaced)	467	361	361
staged			266	106
partial		160		160
stay	88 (or 248)	88	88	88

The table highlights the variation in displacement that is lost by the aggregated categorisations of displacement. Particularly if the data collection had recorded displacement only at the household level, with partial displacement counted as displaced (as in Brück et al. 2012), the binary outcome suggests that for the large majority of the sample displacement was homogenous. Simple displacement outcomes at the intra-household level, and first displacement actions both highlight some heterogeneity, while complex displacement outcomes encompass the heterogeneity of

both first displacement action and displacement outcome.

Also derived from the decision tree, the next table shows the number of displacement actions taken by households in PK18, divided according to the 'complex displacement outcomes' from the table above. This demonstrates the heterogeneity within the complex displacement outcomes, and the number of displacement actions taken broken down by these outcomes.

Table 5.3: Number of displacement actions by displacement category

How do people displace? [in actions]	No actions	1 action	2 actions	3 actions	4 actions	Total [outcomes]
Stay	88	0	0	0	0	**88**
Partial	0	135	22	2	1	**160**
Staged	0	0	97	9	0	**106**
Simultaneous	0	361	0	0	0	**361**
Total	88	496	119	11	1	**715**

Taking no displacement action is limited to the 88 households that all stayed. The majority (496) of households took one displacement action, whether that be everyone leaving or some leaving. The staged displaced account for the majority of the 119 households taking two displacement actions. Only one household took four displacement actions, while 11 took three actions.

5.5 Analysis I: The nature of the decision

This first empirical section analyses the displacement decision, describing three main characteristics of the displacement decision: who within the household makes the decision, when do they decide, and what information do they use to decide. The analysis then moves on to describe the timing of displacement decisions between the different categories of the displaced.

The Characteristics of Displacement Decisions

The decision tree provokes the question as to what is the nature of each decision-making timeframe within the household: are t_0 and t_1 extended periods or of very short duration? In the model above the displacement action and the decision to take that action are united within each single time period, but there may be some gap between decision and action. Is the decision whether to leave made separately from the decision when to leave? If they are separate, what is the sequence: whether to leave may follow from when to leave, or when to leave may follow from whether to leave. Also who is making the decision? Does one actor within the household decide what all household members will do, or does each actor decide for themselves?

The survey questionnaire also gathered data on how displacement decisions were made, which sheds some light onto the nature of displacement decisions t_n, specifically t_0 as the questions were asked about the first displacement action. First, who in the household makes the decision to displace? The questionnaire captured information about the survey respondent and a second main decision-maker in the household. This was in most cases the head of household and spouse. In the first round of 500 questionnaires, questions were asked about decision-making within the household, in general and regarding displacement. The questionnaire enables us to establish whether the decisions were made jointly between the two primary or primary and (usually) secondary decision-makers, or individually.

Respondents were asked two questions:
- Who made the decision for you to displace?
- Who generally makes decisions about household spending?

Their answers have been reduced to: individual, mostly individual or joint, in order to simplify the great deal of complexity in the questionnaire that was necessary due to heterogeneity in the composition of households.

Spending Decisions	Displacement Decisions			
	Individual	Mostly individual	Joint	Total
Individual	193	6	16	215
%	*89.77*	*2.79*	*7.44*	*100*
Mostly individual	6	25	21	52
%	*11.54*	*48.08*	*40.38*	*100*
Joint	39	19	76	134
%	*29.1*	*14.18*	*56.72*	*100*
Total	238	50	113	401
%	*59.35*	*12.47*	*28.18*	*100*

Table 5.4: Cross-tabulation of displacement decisions against spending decisions.

Table 5.4 shows that displacement was usually (59%) the decision of an individual in the household, mostly one individual in a further 12% of households, and in 28% of households a joint decision. These correspond closely to the proportions for spending decisions (though the percentages are not shown on the table - they are 54%, 13%, 33% respectively) although there are more joint decisions in spending than in displacement. The cross-tabulation shows that 30% of those making spending decisions jointly made displacement decisions individually, while only 7% of those making spending decisions individually made displacement decisions jointly. This indicates that there is more likely to be a single decision-maker for the whole household in displacement than in spending decisions.

The next table investigates this further, tabulating decision-making against the complex displacement categories. Both spending decisions and displacement decisions are more likely to be joint for households that split, whether that be partial or staged displacement. This relationship appears stronger for spending decisions than displacement decisions - for instance the 39% of staged displaced are from joint displacement decision-makers, and 44% of staged displaced are from joint spending decision-makers. Corresponding figures for partial displacement are 33% joint displacement decisions and 41% joint spending decisions. Almost a quarter of the simultaneous displaced are from joint decision making households, whether that be

displacement decisions (24%) or spending decisions (25%). Though the numbers are small, those who take no displacement action have the lowest proportion of joint decisions, just 14% for displacement and 15% for spending.

category	Displacement Decisions				Spending Decisions			
	Individual	Mostly individual	Joint	**Total**	Individual	Mostly individual	Joint	**Total**
stay	29	3	5	**37**	29	4	6	**39**
%	*78.38*	*8.11*	*13.51*	*100*	*74.36*	*10.26*	*15.38*	*100*
partial	53	11	32	**96**	45	13	41	**99**
%	*55.21*	*11.46*	*33.33*	*100*	*45.45*	*13.13*	*41.41*	*100*
staged	30	11	26	**67**	24	13	29	**66**
%	*44.78*	*16.42*	*38.81*	*100*	*36.36*	*19.7*	*43.94*	*100*
simult.s	132	25	50	**207**	159	24	60	**243**
%	*63.77*	*12.08*	*24.15*	*100*	*65.43*	*9.88*	*24.69*	*100*
Total	**244**	**50**	**113**	**407**	**257**	**54**	**136**	**447**

Q1 . En prenant votre decision, lesquels de ces facteurs avez vous considerez comme une raison importante pour se deplacer? LISEZ LES CRITERES ET MARQUEZ TOUT CE QUI EST IMPORTANT DANS LA COLONNE [x] **Q1**

Q3 parmi ces raisons importante, quelle etait la *plus* importante NOTER DE 1 A 5, 1 EST LE + IMPORTANT **x**

Q4 . En prenant votre decision, lesquels de ces facteurs avez vous considerez comme une raison importante pour ne pas se deplacer? LISEZ LES CRITERES ET MARQUES TOUT CE QUI EST IMPORTANT DANS LA COLONNE [x] **Q1**

Q6. parmi ces raisons, importante, quelle etait la *plus* importante NOTER DE 1 A 5, 1 EST LE + IMPORTANT **x**

Peur de balles perdues entrant dans la maison

Peur d'etre attaque par les troupes en prenant la route

Peur de balles perdues pendant que vous etes dehors

Peur de recevoir une balle ou un obus dehors

Peur des obus qui tombent pres de la maison

Peur que la maison soit pillee si il n'y avait personne

La detresse causee par les tirs d'obus dans le quartier

Peur de violence au lieu de destination

Peur des troupes armees entrant dans les maisons

peur de l'appearance de loyaute a l'un de deux camps

Q2. aviez vous d'autres raisons de vous deplacer? enumerez trois raisons principales **Q2** **x**

Q5. aviez vous d'autres raisons de vous deplacer? enumerez trois raisons principales **Q2** **x**

people had when they left. The image below captures the relevant section of the questionnaire.

Le depart

Q1	SVP choisssez un groupe de deplacement – peut–etre celui que vous pensez _____ [1–6 GROUPE DE DEPLACEMENT] etre le deplacement le plus important du menage	
Q2	Quand aviez vous decidé le jour ou vous alliez partir? ECOUTER ET CHOISIR UNE OPTION	A : le matin meme, B : pendant la nuit; C : le soir avant; D : l'apres midi avant; E : le matin avant; F : deux jours avant; G : trois jours avant; H : avant ca
Q3	Quand vous etes parti, quelle assurance aviez vous?	A : pas du tout confiant B. un peu confiant C. confiant. D tres confiant
Q4	Quelle autres informations disposiez vous qui vous ont permis de decider le moment opportun [CHOISIR UNE OU DEUX INFOS]?	A : prevenu par les CI; B : prevenu par les FDS; C : Vu d'autres personnes partir; D : informe par des amis hors de PK18, E : informé par des amis a PK18, F : informe par mes voisins, G : pas de bruit de combats

Figure 5.4: Survey questionnaire extract

So when did people decide when they would leave? Half the respondents decided the same morning that they were going to leave, indicating that it was a somewhat rushed decision. A further 23% of the respondents decided overnight before the leaving the following morning. 16% decided the day before, and the remaining 11% two, three or more days before.

Unsurprisingly people generally had very little confidence as they were leaving - more than half (52%) of respondents said they were not at all confident, while 41% were only slightly confident. This may indicate that they were making the decision despite a great deal of uncertainty. The staged displaced were slightly less confident than the other categories.

The uncertainty is reflected in the manner in which people received information regarding when they should leave. Almost three quarters (73%) left when they did because they saw other people leaving, although this was only 66% of the staged and 84% of the partial displaced. In general though there was little variation between displacement categories in this regard. The second most prevalent source of information was the lack of sounds of fighting (22%), and the third information from friends outside PK18 (17%). Information from either armed group was not important to many households, and information from outside PK18 was more used (approximately double the number of respondents) than information from friends inside PK18. This may reflect the lack of information available to those within intense conflict areas.

Timing of displacement

For most households there were only two displacement actions, although for 12 households there were three or more. Table 5.6 below shows mean date of the first action of each household leaving PK18. The mean is the date in spreadsheet format, which is 'translated' into the actual date in the subsequent column. The partial displaced left latest, although within the confidence intervals of the simultaneous displaced. The partial displaced also had the greatest variation in date of first departure, with a standard error of 1.6. The first group of the staged displaced left, on average, four days before the simultaneous. The second group of the staged displaced left, on average, nine days after the first group, and four days after the simultaneous. For those partial which had a second group, they left on average on 27 February, the day after Black Saturday.

	Category	Mean	Date	Std. Err.	[95% Conf.	Interval]
Action 1	Partial	40598.13	24 February 2011	1.602	40594.98	40601.27
	Staged	40593.02	19 February 2011	1.315	40590.44	40595.6
	Simultaneou s	40597.18	23 February 2011	0.834	40595.54	40598.81
Action 2	Partial	40600.76	27 February 2011	0.659	40599.46	40602.06
	Staged	40602.29	28 February 2011	1.114	40600.09	40604.5

Table 5.6: Descriptive statistics of date of groups 1 and 2 leaving by displacement outcome.

The graph below shows timing of first displacement actions for the three displacement outcome categories. Cumulative numbers of displaced is in the Y axis, and date on the X axis with vertical lines marking Monday 21 February and Black Saturday 26 February, which are broadly the start and finish of the intense fighting periods. The curves demonstrate the suddenness and intensity of the displacement following the start of the violence, with the bulk of g1 displacement actions having taken place within five days. It is difficult to identify significant variation between displacement outcomes and departure dates from the graph, though the trend from the previous table is evident: that the partial displaced stayed longer until leaving suddenly after the 21st, while a greater proportion of the staged displaced had left in the week running up to the 21st.
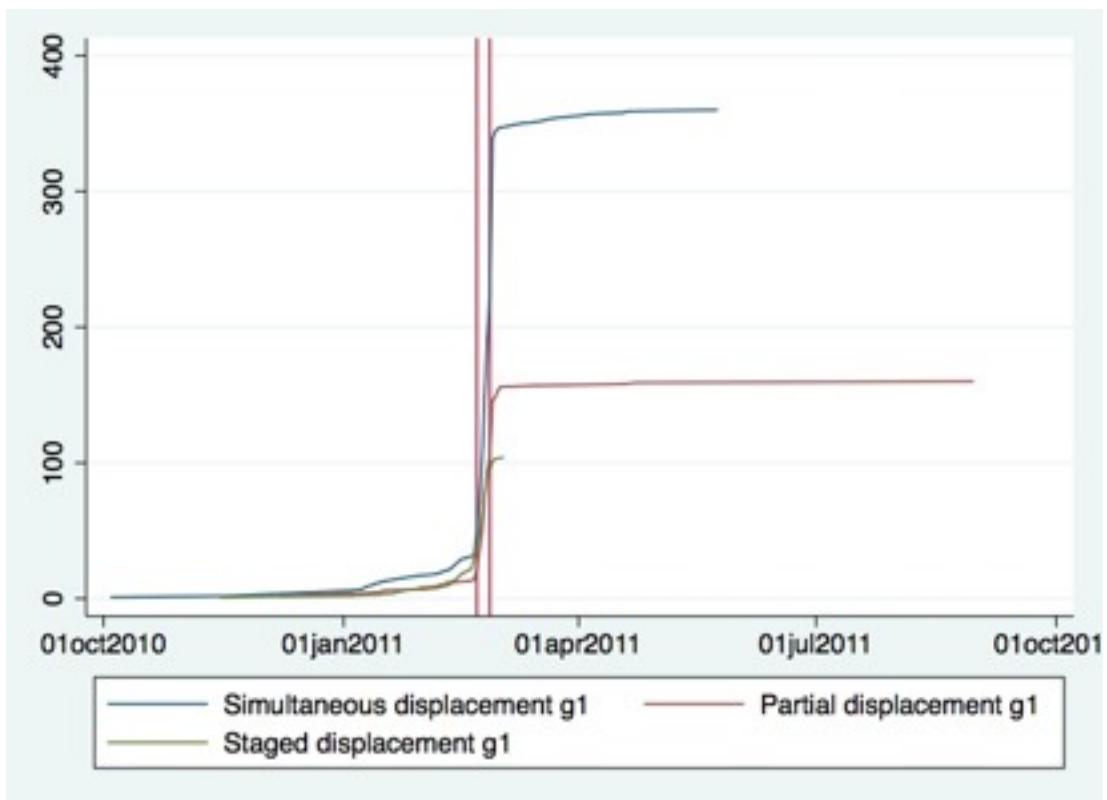
Figure 5.5: Timing of group 1 displacement by displacement outcome.
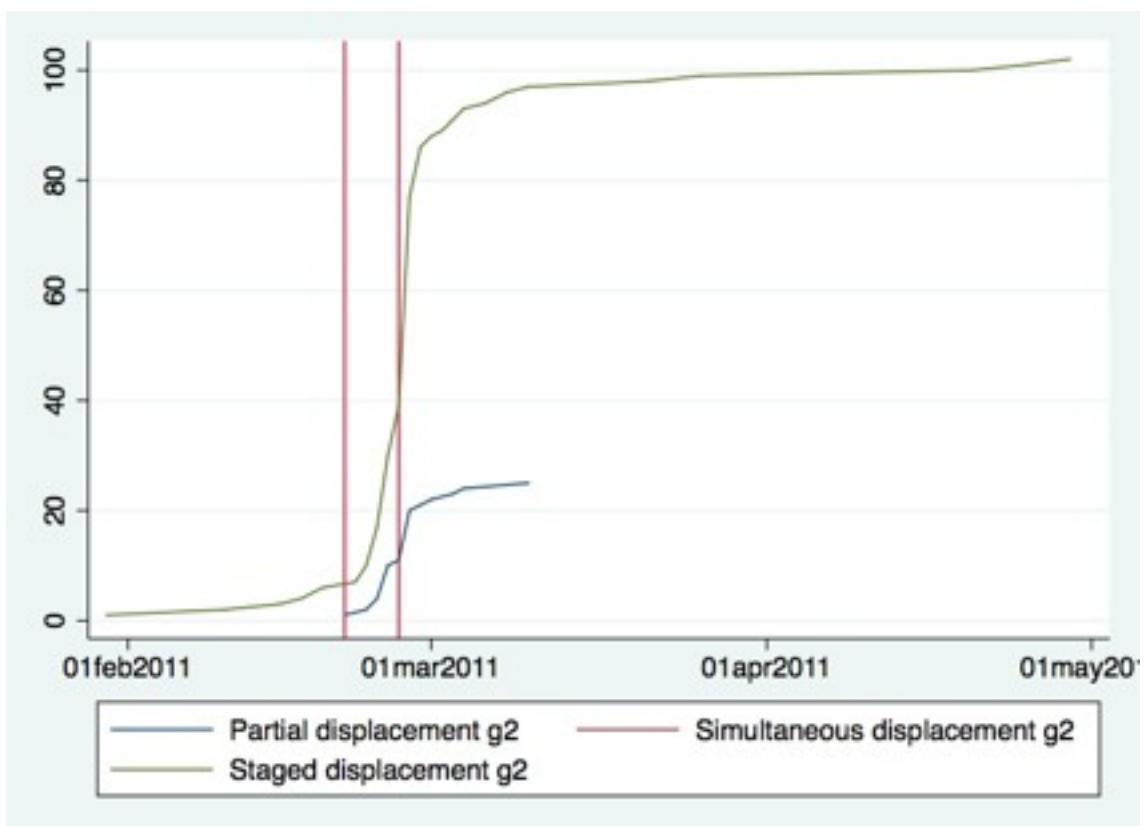
Figure 5.6: Timing of group 2 displacement by displacement outcome.

The second graph to the left shows cumulative numbers of g2 displaced over time, with the same two date lines marked. The X axis is shorter because of less variation in timeframes for when any second displacement group left. There is no red curve because of course simultaneous displaced have no g2.

While 68% of g1 displacement actions had occurred on or before Black Saturday, and 94% by the end of the Sunday, g2 displacement actions were unsurprisingly later. Just 39% of g2 actions were on or before Black Saturday, and 76% by the end of the Sunday.

The timing between first and second displacement action was a mode of three days, with seven households in which the first and second action was on the same day. The histogram below shows that the majority of second displacement actions occurred within four days of the first displacement. All second displacement later than 10 days are aggregated into one measure which accounts for 20% of the 128 households with at least two displacement groups.
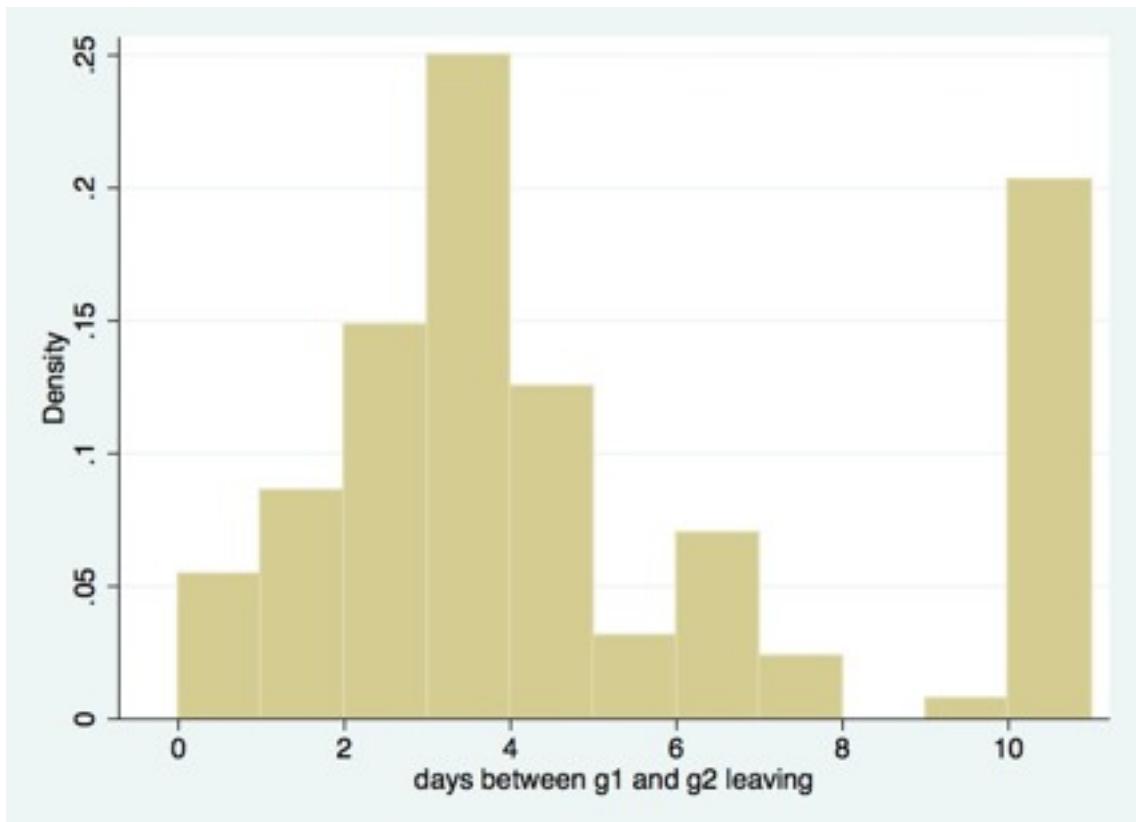
Figure 5.7: Histogram showing number of days between group 1 and group 2 displacement actions. Gaps of more than 10 days are grouped with 10.

5.6 Analysis II: Socio-economic characteristics

This paper aims now to establish whether there is merit in a more fine-grained approach to displacement decisions. The analysis here focuses on whether there are important significant differences between the various categories of displaced outlined above. I seek to establish how people who displace are different from those who do not displace, and how this varies according to how the displaced are defined. The measures by which the households are different are wealth, household size, education and age of household head. I also include ethnicity and religion.

RHS variables

Table 5.7: Descriptive statistics of RHS variables.

Variable	Measure	Obs	Mean	Std. Dev.	Min	Max
Asset Index	**PCA index based on assets of the household at start of crisis, adjusted to 0-1 range.**	**715**	**0.351**	**0.110**	**0**	**1**
HH size	Number of people in HH at start of crisis	715	4.586	1.804	1	12
Education	**Binary measure, 1 if respondent or second had any education**	**660**	**0.789**	**0.408**	**0**	**1**
HHH age	Age of household head	700	43.579	10.387	22	82
Southern	Binary measure, 1 if respondent or second were of southern ethnicity	715	0.366	0.482	0	1
christian	Binary measure, 1 if respondent or second were Christian	715	0.322	0.467	0	1

Six key variables are chosen to describe variation in displacement. Four of these are socio-economic characteristics - asset index, household size, education, and age of household head. These are chosen based on findings in the literature so far, discussed in the introduction, as well as their being important general household descriptors. The other two variables are more related to identity. Chapters 3 and 4 revealed that being perceived a Gbagbo supporter resulted in behavioural or identity based threat. Simplistically, being Christian and, especially, of Southern ethnicities were both predictors of supporting Gbabgo and therefore predictors of being targeted due to perceived allegiance with Gbagbo.

The asset index was constructed using an asset portfolio list from the questionnaire, which identified which of a list of 16 assets the household owned at the start of the crisis in October 2010. The questionnaire extract below in Figure 5.8 shows the assets - the list of 16 assets was selected as appropriate for the area from an asset list used in a national survey. (For example rural and marine livelihood assets were removed.) Because many households had the same five or six assets, the presence or otherwise of a metal door on the house was added to the asset portfolio, and an index created through principle component analysis to create a measure of relative wealth at the start of the crisis. The distribution of the resulting asset index is shown in Figure 5.9.

	Nombres
loc	
timent	

Section A

Q3. Lesquels de ces biens aviez-vous au moment des élections en Octobre 2010? [OUI : NON]
Q4. Lesquels ces biens ont-ils été pillés ou détruits pendant la crise? OUI : NON]
Q5. Lesquels aviez vous vendu pendant de la crise? [OUI : NON]

	Q3	Q4	Q5
Bicyclette			
Vélomoteur/mobylette			
Voiture			
Camionnette			
Réfrigérateur			
Congélateur			
Climatiseur			
Ventilateur			
Cuisinière			
Ordinateur			
Radio			
Télévision			
Antenne parabolique			
Lecteur VCD/DVD			
Téléphone fixe			
Téléphone portable			

Figure 5.8: Survey questionnaire extract

Q6	Q7	Q8
Combien de pieces compte votre appartement? ECRIRE NUMERO	Comment percevez–vous votre situation financière par rapport à vos voisins du meme block? [LISEZ]	Comment percevez–vous votre situation financière par rapport à vos voisins des autres blocks?
	1 Tres mauvaise 2 mauvaise 3 legerement mauvaise 4 pratiquement la meme .. 5 legerement mieux.. 6 mieux.... 7 beaucoup mieux?	1 Tres mauvaise 2 mauvaise 3 legerement mauvaise 4 pratiquement la meme .. 5 legerement mieux.. 6 mieux.... 7 beaucoup mieux?

Figure 5.9: Histogram showing distribution of values of the asset index.

Household size is a simple measure of the number of people in the household roster, defined in the question as people who were living in the household at the start of the crisis. The mean household size was 4.6.

The **education level** of the household head and second respondent was recorded and coded into no education, primary, secondary or tertiary. The highest level of either was coded into one variable, and, then coded into a binary variable, with a mean of 0.79. (Using the categorical rather than binary variable makes little difference to the results.) There were numerous missing responses in this section of the survey, perhaps reflecting the complexity of that module.

HHH age: as described in the earlier analysis, decisions were made by one individual, and most often that was the household head (HHH). The average age of the household head was 44 years.

Southern is a binary variable based on the ethnicity of the respondent or the other main decision-maker. Ethnicities were grouped into the four main groups: Akan, Voltaic, Kru and Mande. If either was Akan or Kru, these were 'Southern'. Mande and Voltaic

groups were labelled 'Northern'. By this measure, 39 households were northern *and* southern, and these retain the score of 1 for Southern, making 37% of respondents Southern. **Christian**, similarly, is one if either respondent or other decision-maker considered themselves Christians, and otherwise 0, making 32% Christian. The correlation between Christian and Southern is 0.58.

Analysing variation in these six variables across the various categorisations, then, will illustrate the socio-economic characteristics of the categories as well as how threat may vary across categories. More detailed analysis of other variables and causal relationships will follow in Chapter 6.

Table 5.8 illustrates most variation between displaced and non-displaced on the identity variables - Christianity and Southern. Just 18% of the non-displaced respondents were Christian, against 36% of the (binary) displaced. Looking at simple displacement outcomes reveals that 41% of the 'all displaced' outcome' are Christians, and just 24% of the partial displaced. Complex outcomes demonstrate that 48% of the staged displaced are Christian.

Ethnicity follows a similar pattern, perhaps unsurprisingly as 67% of the Southern households were Christian, and 77% of Christian households were Southern. Of the non-displaced 19% are southern, while 31% are binary displaced. Complex outcomes reveal 59% of staged displaced are southern, 42% of simultaneous, and 29% of partial.

Differences are less pronounced in the other variables between displacement categories, and follow different patterns. While the biggest differences in identity variables are between simple outcomes (the staged and simultaneous against the partial and non-displaced), for household size and asset index those who split in the first displacement action are larger and richer respectively. The staged displaced appear better educated than other categories, and the non-displaced older than those who split, and the simultaneous younger than those who split.

Table 5.8: Means of RHS variables by displacement outcome categorisations, with standard errors.

		I		II		III		IV	
		Binary		**Simple Outcomes**		**First Action**		**Complex Outcomes**	
		0=all stay 1=any displacement		0=all stay 1=some displaced 2=all displaced		0=no action 1=split 2=simultaneous		0=no action 1=partial 2=staged 3=simultaneous	
		Mean	Std. Err.	Mean	Std. Err.	Mean	Std. Err.	Mean	Std. Err.
Asset									
	0	**0.330**	**0.014**	**0.330**	**0.014**	**0.330**	**0.014**	**0.330**	**0.014**
	1	**0.355**	**0.005**	**0.364**	**0.009**	**0.381**	**0.007**	**0.364**	**0.009**
	2			**0.352**	**0.005**	**0.336**	**0.006**	**0.406**	**0.012**
	3							**0.336**	**0.006**
HH size									
	0	4.667	0.274	4.667	0.274	4.667	0.274	4.667	0.274
	1	4.563	0.071	5.062	0.132	5.206	0.110	5.062	0.132
	2			4.394	0.082	4.091	0.084	5.418	0.189
	3							4.091	0.084
Educatio									
	0	**0.764**	**0.050**	**0.764**	**0.050**	**0.764**	**0.050**	**0.764**	**0.050**
	1	**0.801**	**0.017**	**0.779**	**0.035**	**0.823**	**0.025**	**0.779**	**0.035**
	2			**0.809**	**0.019**	**0.785**	**0.023**	**0.888**	**0.032**
	3							**0.785**	**0.023**
HHH age									
	0	46.361	1.322	46.361	1.322	46.361	1.322	46.361	1.322
	1	42.906	0.415	44.283	0.832	44.403	0.652	44.283	0.832
	2			42.441	0.477	41.807	0.530	44.582	1.055
	3							41.807	0.530
Southern									
	0	0.194	0.047	0.194	0.047	0.194	0.047	0.194	0.047
	1	0.415	0.021	0.290	0.038	0.412	0.032	0.290	0.038
	2			0.457	0.024	0.417	0.027	0.592	0.050
	3							0.417	0.027
Christian									
	0	0.181	0.046	0.181	0.046	0.181	0.046	0.181	0.046
	1	0.364	0.020	0.241	0.036	0.337	0.030	0.241	0.036
	2			0.406	0.024	0.384	0.027	0.480	0.051
	3							0.384	0.027

Regression Analysis

In order to understand the relationships while controlling for the effect of the other variables, rather than just each variable's independent relationship, I use logistic regression analysis. I do not specify a theoretical model as I am simply investigating relationships between the various displacement categorisations on the left hand side (LHS) and a range of socio-economic variables on the right hand side (RHS). The empirical model may be expressed as:

DISPLACEMENT = B0 + B1 ASSETS + B2 HH SIZE + B3 EDUCATION + B4 HHH AGE + B5 ETHNICITY + B6 RELIGION + SITE CONTROLS + ERROR TERM

The LHS variable used varies in each outcome, with the table below (repeated from Table 5.2 earlier) demonstrating the four LHS variables used. In order to enable easy comparison of coefficients across models, the 'all stay' category is used as the reference, as the same 88 households form that group across all categorisations of displacement. Because of this variation in LHS, the regression moves from a binary logit in the first LHS to a multinomial logit with ternary outcome in iterations presented in columns II and III, and a multinomial logit with four-way outcome in IV.

Table 5.9: PK18 displacement outcome categories

Displacement Outcomes from Decision Tree	I Simple Unitary Displacement Outcomes	II Simple Displacement Outcomes	III First Displacement Action	IV Complex Displacement Outcomes
all stay	88	88	88	88
partial		160		160
staged	627		266	106
simultaneous		467	361	361

Results

The results must be interpreted with some care. Again, the focus of this analysis is not so much on the regression coefficients as on the variation between the models. The coefficients may suffer from omitted variable bias amongst other issues, but the

regression allows for an illustration of correlation between the RHS and LHS variables controlling for other RHS variables across the four constructions of the LHS.

Asset index: The binary outcome demonstrates that the displaced are richer than the non-displaced, though this is significant only at 10%. The simple displacement LHS variable (column II) supports this relatively weak relationship at least for the partial displaced with a slightly increased coefficient, but no difference is found between those all displaced and the non-displaced. Column III shows grouping the staged with the partial rather than with the simultaneous increases the significance to 1%, and the fourth column illustrates that the strongest relationship is between staged displacement and wealth (coefficient of 5.8 significant at 1%), while a relationship also exists between. There is no significant difference between those who all displace simultaneously and those who do not displace. Grouping by outcomes that do not include actions (I and II as opposed to III and IV) clearly obscures the strength and nature of this relationship between displacement and wealth.

Education: No significant relationship exists between the binary measure of education and displacement at any level of categorisation. The same is true if the four-level categorical measure of education is used. The sign of the relationship, though, is negative for all groupings relative to 'all stay', except for staged, contrasting with the descriptive statistics suggesting the lowest education for the 'all stay' category.

Age: Column IV shows all displacement categories are younger than those taking no displacement action, with negative coefficients. Unsurprisingly, then, this appears in all aggregated measures of displacement.

Household size is significant and positive in columns III and IV, which suggests that, as with the asset index, displacement actions seem to have a relationship with household size that may be hidden by looking only at simple displacement outcomes. The 5% significant finding in column III appears to be driven by the staged displaced being larger than the households that all stay.

Ethnicity: The binary outcome (column I) suggests that more of the displaced are of southern ethnicity, yet the complex outcomes reveal the association is with simultaneous and staged displacement, and not partial displacement (column IV). This interesting finding that the partial displaced are no more likely to be of southern ethnicity than those that all stay is obscured if looking only at the first displacement

action, but is also evident in the simple displacement outcome. Complex outcomes reveal the coefficient is more than double for the staged displaced relative to the simultaneous displaced.

Religion: Column I suggests that the displaced are more likely (at 10% sig.) to be Christian than the non-displaced, but Column IV suggests that only the Simultaneous displaced are more likely to be Christian than the base outcome of all stay.

The goodness of fit tests are difficult to evaluate for multinomial models, but especially for comparing between different LHS variable constructions. The count R2 is high for the first, binary regression and reduces as more outcomes in the LHS are introduced. This does not indicate a reduction in goodness of fit, as the count R2 is based on the difference between predicted outcomes and actual outcomes, and the more possible outcomes there are, the lower the count R2.

The results overall demonstrate significant heterogeneity between the complex displacement outcomes that supports their being treated as separate categories. But why does it matter that the categories are different? People end up displaced and the binary regression largely picks up the overall differences between displaced and non-displaced. The main reason is that still relatively little is known about the causes of heterogeneity in displacement decisions. Much more work is required theoretically and conceptually to develop models of why people displace. Importantly for this thesis, and for other work on displacement choice, disaggregating displacement helps in understanding the micro-foundations of displacement decisions. Stark socio-economic distinctions between the various categories of displaced groups based on process and outcome suggests that, to date, important factors may have been missed theoretically and empirically in the analysis of displacement choice.

Table 5.10: Regression results for four different displacement dependent variable constructions.

	I	II	III	IV
	Binary	**Simple Outcome**	**First Action**	**Complex Outcome**
Base outcome (0) is the 88 households that All Stay				
1	Par., Sta. & Sim.	Partial	Staged & Partial	Partial
Asset Index	**2.717***	**3.226***	**4.420*****	**3.518****
HH size	0.061	0.173	0.259**	0.193
Education	**-0.044**	**-0.061**	**0.067**	**-0.038**
HHH age	-0.040***	-0.038**	-0.046***	-0.040**
Southern	0.856***	0.534	0.975***	0.551
Christian	0.583*	0.195	0.394	0.199
Constant	3.681***	1.477	1.180	1.340
2		Staged & Sim.	Simultaneous	Staged
Asset Index		**2.502**	**1.340**	**5.763*****
HH size		-0.005	-0.151	0.390***
Education		**-0.039**	**-0.163**	**0.384**
HHH age		-0.041***	-0.038***	-0.057***
Southern		0.990***	0.774**	1.658***
Christian		0.731*	0.741*	0.656
Constant		3.778***	4.682***	-1.081
3				Simultaneous
Asset Index				**1.444**
HH size				-0.146
Education				**-0.150**
HHH age				-0.038***
Southern				0.782**
Christian				0.747*
Constant				4.638***
Observations	646	646	646	646
Count R2	0.89	0.67	0.61	0.56
BIC	-3740.7	-3065.8	-2980.6	-2620.6

* p<.10, ** p<.05,*** p<.01 - standard errors clustered at block level.

5.7 Conclusion

The aim of this chapter has simply been to describe the displacement decision rather than to explain it. I have described how decisions may comprise a process of actions that lead to outcomes, and proposed categorisations on the basis of actions as well as outcomes. I also described how decisions were made within the household - who was involved and what information households used in deciding when to leave. These factors appear to vary between the proposed displacement categories.

The results show that the process of displacement matters; that actions as well as outcomes describe important heterogeneity in displacement decisions. The nature of displacement decisions are very different according to wealth, to household size, to age of household head, and to ethnicity. The study of the causes of displacement is still in relative infancy as an academic field, and it is still important to know what it is we are trying to understand. The displaced are a very heterogenous group, and by disaggregating according to process of displacement as well as outcome important aspects of this heterogeneity can be revealed. Data on heterogenous displacement process would be quite easy to collect in survey research, and it may be worthwhile doing so. Finally, the findings suggest that households are actively managing threat rather than responding passively; and support the assertion of the rational choice displacement literature (Adhikari 2013) that - even in situations of extreme violence - there is agency in the decision[25].

In conclusion, the results demonstrate that socio-economic factors may not drive only whether people displace, but *how* they displace, and how they make decisions about displacement. And understanding how people displace may help in understanding why they displace, an issue to which I now turn in Chapter 6.

---

[25] The existence of the splitting phenomenon has implications for the theoretical understanding of displacement decisions. It is suggestive that there are various displacement thresholds for different household members, as I discuss in Chapter 6.

Chapter 6:

Flight into the Danger Zone: Explaining displacement decision variation

Abstract

What explains variation in displacement outcomes? Previous studies have analysed the importance of violence and of socio-economic factors. Perceived threat has rarely and only recently been analysed as a cause of variation in displacement decisions, and its measurement presents some empirical challenges. This paper uses a novel measure of various perceived threats using ranking of perceived relative importance. Additionally, the chapter uses a novel dependent variable for displacement research, and analyses the relationship between these complex displacement outcomes and three possible causal mechanisms: perceived direct threat, indirect threat, violence impact, as well as the mediating protection factors. The chapter further represents a rare investigation into causal mechanisms underlying displacement decisions using a dataset in which traditional migration forces in the displacement decision are very limited.

Overall, the results demonstrate that all three channels - direct threat, indirect threat, and impact - are related to displacement outcomes. As expected, the complexity in the production of these through the actions of armed groups, the households in question and in other household and market responses makes establishing the causal mechanisms very difficult. The protection resources of wealth and household adults were shown to be correlated with staged displacement, and the protection 'liabilities' of young children were similarly positively associated with staged displacement. The same is true of the partial

displaced, except that wealth is not significant and the coefficients are smaller for the other protection factors. So even where migration factors are not likely to play any role, socio-economic characteristics of the household are important factors due to their role in facilitating protection strategies.

6.1 Introduction

So if, as found in the previous chapter, it is useful to distinguish between four displacement decision categories, what is it that explains these household choices? The literature has tended to ask whether it is migration factors or threat that drives displacement decisions. This paper takes a step backwards and asks instead *how* violence affects displacement decisions. From the descriptions analysed in the previous chapter we already know a little about some of the socio-economic characteristics of those in each of the four displacement decision categories. In this chapter I present a model of why households might follow different displacement decisions, generate hypotheses about the relationships between threat, indirect threat, impact and displacement, and test these hypotheses using the PK18 data.

Explaining variation in displacement outcomes is a small, expanding area of civil wars research. Similar findings have been reached across papers regarding the role of both socio-economic and threat factors in the displacement decision, rooted in the work of Engel and Ibáñez (2007) use of adapted migration models. The literature suffers from two main weaknesses. Causal inference is usually not attempted due to the inability to exclude endogeneity issues. Second, generating hypotheses and interpreting results is difficult because of the various conflicting roles of socio-economic household characteristics. Both of these problems are caused at least in part by the insubstantial theoretical foundations on the side of threat and the impact of violence. The aim of this paper is to address the reasons for variation in displacement choice using the comprehensive micro-foundations for displacement decisions built in the other chapters of the thesis.

The previous chapter described the relationship of some important household characteristics with the displacement decision. Variables that also related to threat were included, but were not the focus of the analysis. This chapter seeks to explore in more depth the measurement of threat, and the impact of threat on displacement. I have already explored in some depth the types of threat in PK18 in the conceptual chapter previously. To reiterate from the previous chapters: violence is the imposition of asset cost, and direct threat is the prospect of such a loss. Indirect threat is the prospect of asset losses (including household members) through lack of access and availability of essential goods and services. Chapter 4 illustrated how threats are

multiple and competing. This chapter discusses these issues with a more quantitative empirical focus, and then moves on to analyse the role of different forms of threat in driving displacement decisions.

As Czaika and Kis-Katos (2009) have noted, if displacement had a simplistic relationship to incidence of violence, then it would always be homogenous. And so because heterogenous displacement outcomes are observed, then at least two possible causes exist: non-random allocation of violence; and socio-economic factors in the decision. Rational choice displacement research seeks to explain displacement heterogeneity, examining the causal role of these two factors. But there are conceptual challenges in distinguishing between socio-economic factors and violence. There are two main reasons for this. As Engel and Ibáñez (2007) suggest, in certain contexts socio-economic factors may determine the allocation of threat – for example the targeting of wealthy households. The other reason is the complexity of the relationship between violence, socio-economic welfare and civilian response. The introduction and subsequent chapters have sought to clarify these relationships, and this chapter represents the application of a clear conceptual understanding of the causal mechanisms to a dataset in which traditional migration forces in the displacement decision are very limited.

The chapter proceeds as follows. First, three mechanisms by which violent acts may lead to displacement are outlined: direct threat, indirect threat (access and availability), and impact. I explain that the levels of these are driven not only by violent acts but also by civilian protection responses on the part of the household in question and other households and firms. This creates additional complexity in each of the three mechanisms, making empirical and conceptual distinction between 'economic' and threat drivers of displacement difficult. The literature is discussed and empirical evidence to date presented before a model of displacement decisions is presented. The subsequent data section describes the construction of variables, hypotheses and descriptive statistics. The fourth section presents the empirical analysis and results, and the fifth concludes.

6.2 Concepts and Literature

Endogeneity issues in displacement research

I reiterate from the introduction that violence has two direct effects: it is a direct cost imposed on the household through the destruction of assets; and it represents communication about the nature of direct threat (targeting criteria, targeting capacity and propensity to use violence). Violence has two additional indirect effects. The household itself may respond with asset protection strategies (described in Chapter 4) and others in the area may follow their own protection strategies. These protection strategies may lead to indirect threat to households through lack of access to and lack of availability of goods and services needed to provide for the human assets of the household. But this model described previously in Chapter 1 operates under the asset protection assumption: that threat is sufficient that households focus solely on the protection of assets. In reality, in many contexts and when a conflict goes on for a long period of time, fluctuations in violence intensity over months and years means people are not likely to be making decisions under that assumption. That is to say they will also focus on returns to labour and returns to capital, not just preventing their destruction or degradation. Where returns to assets are part of the decision, this may be referred to as conflict induced migration. Where the decision is wholly focused on protecting assets from direct or indirect threat, this is displacement. The studies below do not exclude the possibility of conflict induced migration, except for the as-yet-unpublished Brück et al. (2012).

1 Action	Violent Action			
2 Result	Costs imposed on households by acts of destruction or removal GOAT STOLEN BY ARMED GROUP	Change perception of direct threat INCREASED FEAR OF VIOLENCE	Access indirect threats (stemming from impact) CASH STOLEN SO CANNOT BUY FOOD	Availability indirect threats (stemming from impact) FOOD TRUCK STOLEN SO SUPPLIES DISRUPTED
3 Action	Protection Action 1			
4 Result	Asset costs either directly self-imposed by households, or, imposed by indirect threats GOAT SOLD TO BUY RICE, or, GOAT DIES DUE TO LACK OF MEDICINE	Change perception of direct threat REDUCED FEAR OF VIOLENCE	Access indirect threats (stemming from protection) REDUCED EARNINGS AND HIGHER PRICES SO CANNOT BUY FOOD	Availability indirect threats (stemming from protection) SUPPLIERS STOP SENDING FOOD TRUCKS SO SUPPLIES DISRUPTED
5 Action	Protection Action 2			

Figure 6.1: Five step model of causal mechanisms from violence to protection actions, with examples in capitals (derived from conceptual figure in introduction)

Taking only the actions of armed groups without civilian protection response, there are three channels from violence to displacement: impact, direct threat and indirect threat (access or availability). These are represented respectively in orange, green and yellow in the diagram above. The effects of violence are manifested in one or more of these three ways, which may lead to a protective response by civilians. (This may be more easily interpreted with reference to the conceptual diagram in Chapter 1.) The same channels exist following on from a civilian protection response, but the three factors are then subject to influence by the violent action, and by the protection response of households, and by the protection response of others.

Displacement research seeks to understand the specific protection action of displacement. It does this by observing whether displacement ever forms one of the series of protection actions taken by civilians. Observed displacement is a protection action that may be part of a long series of protection actions, and so the possible

causal channels from various acts of violence over time create a complex range of channels from violence to displacement.

The two main empirical challenges that result from this complexity are distinguishing between 'economic factors' and violence as drivers of displacement, and (relatedly) distinguishing between impact and direct threat effects of violence. Economic factors, or migration factors, are essentially reduced earnings, which under the asset protection assumption are considered only as indirect threat, but in less intense, longer, rural conflicts that form the bulk of the literature they are important drivers of conflict-induced migration. Violence data at the household level is a measure of the impact of violence (as distinct from direct or indirect threat) but impact is endogenous to displacement due to threat, while violence data at the aggregate level is a better exogenous measure of direct threat, but says little about the complex mechanisms by which violence leads to displacement. I have discussed this second problem already in Chapter 5, so I turn now to discuss in some depth the conflation of direct threat and impact.

Conflation of direct threat and impact

Distinguishing empirically between threat of violence and incidence of violence is difficult. There are two main strategies that have been used to attempt to distinguish between them. Adhikari (2012) measures *perceived (civilian-side) threat* by including a survey question asking people about their fear of violence at the time of displacement. This represents a clear step forward in attempting to distinguish between impact and direct threat, but is problematic in that it is only subjective perception of threat that is distinguished from incidence of violence. The other strategy is to include measures of *objective (armed group side) threat*: that is, some measures of how violence was targeted, and whether households fit into the targeting criteria of the armed groups present. This is included in Adhikari (2013). To the extent that this strategy still relies on some measurement of violent incidents it also has the challenge of potentially conflating the economic consequences and threat of violence. It is possible that if the area of study is sufficiently small, this latter problem may be avoided because market failure stemming from conflict will affect a wide area, even if, as with direct threat, people's ability to mitigate varies.

In evaluating the causal role of violence in displacement decisions, the issue of endogenous relationships between violence and displacement are important. Broadly, the endogeneity may be caused by two factors: reverse causality and/or simultaneity (co-determination by some third factor). Reverse causality is an issue with respect to

physical assets of the household: if people leave their physical assets are more likely to be looted. But they are less likely to be harmed themselves as people flee from danger to relative safety, or at least intend to. An increase in displacement therefore increases probability of looting and decreases probability of violence to household members. So threat[26] determined by armed groups is the third factor that co-determines both displacement and violence. There are two parts to this endogenous relationship, the duration of exposure to threat in a given area, and the variation of allocation of threat.

We should expect if violence is allocated randomly in space 1, and no violence exists in space 2, that those who move to 2 quicker are less likely to suffer violence. Additionally, as Schaeffer (2010) suggests, the presence of fewer targets at the origin, once some households have displaced, may augment this impact depending on the process for randomly selecting targets. But if violence is allocated non-randomly in space 1, then those who perceive that they are more likely to suffer violence are more likely to displace. We may refer to these causes of endogeneity as *threat exposure* (those who move are less likely to experience violence) and *target variation of threat* (those who are inclined to move are so inclined because they are more likely to experience violence) respectively.

This has covered the human side of households. When violence is in the form of looting of capital assets, the sign on *threat exposure* is reversed: those who move are more likely to be looted due to absence of protection, assuming random allocation of looting. The sign of the *target variation* endogenous relationship remains the same, but the reason is reversed: displacement may increase propensity for targeting of empty houses when looting is non-random.

So measuring incidence of violence, or realised threat, may be problematic. The nature of the problem depends on the nature of the threat as discussed here, but also on the level of aggregation in measurement. The next section discusses the measurement of threat and violence in the literature.

---

[26] This is objective (militia-side) threat rather than perceived threat. This threat is not represented on the conceptual diagram, but it is this threat that drives the allocation of violence - the actual probability of being affected rather than the perceived probability that drives response.

Measurement of threat or violence in the literature

Rockmore (2011) makes the point that for the majority of the population experiencing war it is the threat of violence that drives behaviour change. Yet the threat of violence is difficult to measure, so many of the studies use measures of violence either as a proxy for threat (Davenport et al. 2003) or as an alternative to threat. Of course violence has a relationship with threat of violence, but the precise nature of that relationship is dependent on, as argued previously, the targeting criteria, targeting capacity and violence propensity, as well as the scale at which violence is measured. In summary, if violence is measured by direct experience at the household level it represents a cost imposed and a threat communication.

Household measures

Adhikari (2013) presents pioneering measures of threat at the household level. A survey of households asked respondents to say on a scale of 1-4 (not important-very important) how they perceived six threats: physical threat to harm the respondent; threat of political coercion or curtailed political freedom; forced recruitment; threat of murder of a family member; threat of physical or mental torture; threat of sexual humiliation. Broadly these correspond with the definition of direct threats here (with only political coercion probably excluded). Adhikari also measures violence. For human assets, a binary variable is coded one if any of a similar range of abuses as in the threat section actually occurred to the individual. For capital assets, crop or animal loss, destruction of the home, and loss of land are measured and all have a positive association with displacement, which is explained as a push factor but may well in fact additionally be a consequence of displacement.

Engel and Ibáñez (2007) and Ibáñez and Velez (2008) use questions about whether the household received a death threat as a measure of direct threat, and whether the household knew about violent events in the hometown or a nearby town as a measure of indirect threat. A similar measure is used by Brück et al. (2012: 10), although their questions are phrased "Do you know someone who experienced...?" Their indirect threat measure has the merit of stemming from the perception of the household.

Receiving a death threat is clearly time variation endogenous with displacement, though this will only result in underestimation of the importance of threat. In the Brück et al. (2012) context of displacement and return, knowing someone who experienced certain forms of violence does not necessarily mean that this knowledge was formed before displacement when information access may have been poor. It does, though,

suggest that violence was occurring in the social networks of the household in question. Because the information may have been gathered before, during or after displacement, this measure is not time variation endogenous but it may correspond less well to perceived threat if knowledge was formed *ex post*. The main benefit of the household measures is the ability to distinguish to some extent between threat and cost impacts of violence. This is exploited by Adhikari (2013) but less so by Brück et al. (2012) and Engel and Ibáñez (2007) - indeed as discussed in previous chapters the latter do not include direct threats in the regression due to endogeneity concerns.

Community measures

Adhikari (2013) measures whether any industry present (an 'industry' is such if it employs more than 10 people in the village) was destroyed in the community. This, like the individual measures specified above, has a positive relationship with displacement. Again, the direction of causality is unclear, though this is perhaps less likely than household losses to be caused by displacement, and may be clarified with further information[27]. Czaika and Kis-Katos (2009) measure conflict at the village level - a binary variable coded one if the village head reports occurrence of conflict in the previous year[28]. This does not necessarily imply either violence or threat of violence, and the definition of conflict was left to the respondent village heads to decide. Violence data (casualty estimates) were collected by the same means but are not used in the chapter. The variable includes a time dimension, but the conflict out-migration may have occurred at any time in the previous three years, while the conflict variable is only for the previous one year.

Regional and district measures

Bohra-Mishra and Massey (2011) use an index of incidents of violence (bomb blasts, casualties from bomb blasts, and casualties from major violent incidents) each measured in the district and in surrounding districts. Time is the main component of their study, as they have these violence data by month, combined with migration data from a monthly panel survey, so they analyse the impact of violence in time *t* on migration in *t+1.* The endogeneity concerns are reduced but the study says nothing about the mechanisms by which violence causes displacement, and unfortunately variation in wages across time is not captured. The *intensity* of violence however has

---

[27] No information is available in the paper or supplementary material on the measurement of industrial destruction.

[28] in addition to their community measures, Czaika and Kis-Katos (2009) use a conflict cluster variable which is set to one if at least 20% of villages within a subdistrict report conflict.

interesting impacts, which I shall return to below.

Adhikari (2012) studies cross-sectional violence and displacement measures for the 75 districts of Nepal aggregated over the whole period of the war. The violence measures are the total number killed and the total number abducted in each district, and the destruction of public infrastructure. Economic factors are captured by the economic empowerment index of each district. Engel and Ibáñez (2007) also include indirect threat measures at the regional level, with dummies for presence of subversive groups and other military forces to approximate perceptions of safety.

District-level studies avoid the endogeneity problems of household measure studies because the measurement of violence is separate from the measurement of displacement. But in doing so it becomes almost impossible to differentiate between conflict induced migration and displacement, as defined here. Nor is it easy with such data on violence rather than threat to make progress in determining the causal mechanisms at play due.

Two main areas for progress are clear at the micro end of the measurement spectrum. First is that types of threat have not been differentiated - where measurement of threats differentiate these were aggregated into one index variable. This allows for the possible complexity in how threat may be driving displacement. Rather than a blanket measure of threat severity at origin as in Adhikari (2013), threat may vary in terms of how it is targeted and where at origin it is targeted, two issues that are addressed here. Second, violence against assets has been treated as an economic driver of displacement rather than a potential consequence, with potential confusing impacts on the interpretation. The data here is supported by qualitative evidence (presented in an earlier chapter) that strongly suggest violence against assets was a consequence of displacement, so it is analysed as such.

Threat measures in PK18

As I have discussed in previous chapters, the context here was one in which violence was targeted spatially, collectively and behaviourally. I refer to collective and behavioural violence as selective violence here as the data do not permit distinctions to be drawn. The opportunity exists here to discriminate between the nature of the threats people thought were important in their decision rather than the existing options of: subjective perceived severity of the threat; incidence of death threat; knowledge of incidence of violence; or aggregated measures. As I shall illustrate in the next section,

the data will allow for establishing, for the individuals in the household, whether the prospect of spatially-targeted violence or selective violence were important factors in displacement decisions; and for the physical assets of the household whether they said the possibility of looting was important in their displacement decision. The capacity of these measures to avoid some of the endogeneity concerns will be discussed.

Modeling displacement

Scholars in displacement or conflict induced migration research model displacement in two ways: relative utility displacement models (Engel and Ibáñez 2007), or threshold displacement (Bohra-Mishra and Massey 2011). The threshold model has yet to be articulated, but is supported by empirical findings, as I shall describe below. Relative utility models are similar to migration models in that the costs and benefits of staying are weighed against the costs and benefits of leaving to a particular destination, and displacement occurs once utility at the destination is greater than at the origin. They differ from migration models in that some measure of threat or violence is included in the model as a cost at origin and destination. Threshold displacement models, on the other hand, assume that people do not leave unless a certain level of threat is reached in situ. Or: "There is a cost associated with one's decision to stay put, such that the individual will rather flee than stay once the perceived cost (of staying) outweighs attachment to home" (Adhikari 2012: 594). Bohra-Mishra and Massey (2011) find support for a threshold model in their analysis of displacement in the Chitwan province of Nepal. The effect of violence is curvilinear, with violence having a negative effect on out-migration at low to moderate levels, and increasing out-migration at higher levels. Morrison (1993) finds a similar threshold effect in Guatemala.

In reality these models are very similar, but in threshold models the benefits associated with the destination are not considered (i.e. they are held constant across households). So much of the supposed distinction may be found in the poorly articulated difference between displacement and conflict induced migration. There are at least two possible distinctions: whether relative factor returns are included in the decision, and time horizons. The former I have discussed already with reference to the asset protection assumption. The latter has been discussed with reference to Engel and Ibáñez's idea of two forms of displacement: reactive and preventative. The former is an impulsive decision to avoid death at origin, the latter a more considered decision of risks at lower levels of violence. Arguably time horizons and consideration of factor returns represent

the same distinction[29]. In any case the possibility of displacement and conflict induced migration co-existing may be removed through appropriate selection of context[30].

Thresholds, then, are important. But what are they? Adhikari's (2013) description quoted above of the threshold model focuses on the costs of displacement - people do not want to leave because of attachment to home. In other words, the reduction of threat resulting from displacement is weighed against the costs of displacement. But another (non-exclusive) possibility, supported by the qualitative work earlier in this thesis, is that there are threats outside the home. This alternative possibility forms the bulk of the interpretation of Bohra-Mishra and Massey of their findings, which is worth articulating in full:

In sum, our results thus support a threshold theory of migration and violence. Apparently, only in situations characterized by high levels of violence do people see no option but leaving. Under conditions of extreme violence, threats to safety are perceived to exceed the risks of travel to a new and unfamiliar destination. At lower levels of violence, however, the risks of movement outweigh those associated with staying home for a variety of reasons. First, levels of violence may be much higher in other parts of the country, and by staying home, people avoid elevated risks elsewhere. Second, actions taken by insurgents and the state often create unsafe traveling conditions owing to a proliferation of strikes, protests, blockades, security checks, curfews, and roadblocks. Third, civil conflict is often associated with a breakdown of formal authority, creating a dangerous public sphere through which people must travel, one in which robbery, looting, assault, kidnapping, and other violations are common. For these reasons, unless violence reaches certain levels, people are more likely to confine themselves to the safety of their homes, family networks, and surroundings they know and trust.

(Bohra-Mishra and Massey 2011: 422-3)

---

[29] Over time, as conflict ebbs and flows, a growing proportion of people will be concerned with making money and not just protecting themselves from violence.

[30] Threshold and relative utility models are not only theoretically similar. Indeed the empirical observation of violence threshold effects on 'displacement' may be explained by homogenous relative benefits of conflict-induced migration across households. This may on first consideration appear unlikely, but over time the effect of certain levels of violence may spread across markets through the accumulated protection strategies of businesses and households, rendering economic sectors unviable. Hence, relative utility models may explain the observation of threshold effects.

So threat in situ may be weighed against the costs of displacement, and against the threats en route to a refuge. Given the prevalence of the finding of thresholds in the literature, and the conditions in PK18 described previously, there are grounds to attempt to formalise a model of displacement that takes into account these two possible thresholds. The model outlined below has three zones: inside the home or other local shelter; surrounding that is the 'danger zone'; and beyond that is a third zone of refuge.
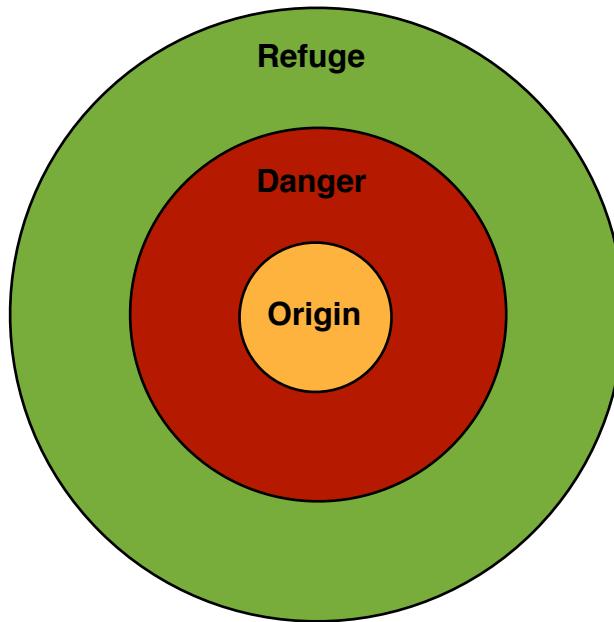
Figure 6.2: Three zones in the displacement model.

Origin

The origin is the home or other indoor shelter (for example, church or air raid shelter) in the vicinity used to provide protection from threats. Inside there may be food and water as well as shelter. Armed actors and other civilians may know where you are if inside, if they have access to information, which may influence the level of threat at origin. Generally being inside is safer than the danger zone but in certain situations being inside may be higher threat than being outside - if buildings may collapse, or if personally targeted in a known location, or if certain structures are targeted, or if a building is set on fire. The threat at origin to the household human assets is expressed as TO_i.

Danger zone

Danger zone is outside the home or other shelter, and before reaching refuge or going back inside. The danger zone is uncertain, especially outside the immediate

environment surrounding the home. There is less protection from spatial targeted violence, and the chance of identification or misidentification.

Without displacement, entry into the danger zone is occasionally required to overcome indirect threats to the household (access to and availability of goods and services to maintain human assets). This threat to those household human assets entering the danger zone if staying is expressed as TZ_{is}. Passing through the danger zone is required by all human assets displacing. In that case, TZ_{id} is the danger zone threat to household human assets displacing.

Refuge

The refuge is another shelter beyond the danger zone. Perceived threat here TR_i is expected to be lower than the threat inside the origin.

The Danger Zone in the Abidjan Crisis

Although this threshold model of displacement is rooted in empirical findings in the literature, it also reflects the reality of war zones as represented in qualitative work such as Lubkemann (2008) and in news reports from war zones from Gaza to Syria and beyond. Two brief examples may illustrate the applicability of the model in Abidjan particularly.

My research assistant lived quite far from PK18 in another commune of Abidjan, where pro-Gbagbo militias patrolled the streets. He stayed throughout the crisis. He lived on the third floor of a building with small windows facing onto the street but with limited visibility due to other buildings. The back of the building faced open scrubland. If he wanted to go out, he would first look to see if anyone was in the streets. He would then call to his neighbours in the adjacent rooms with a view to the scrubland to check if that was clear. On passing to the rear walkways and staircase, he would call down to neighbours on lower floors with a better view of the street to see if it was safe. Only then would he cautiously go to the main entrance of his own building.

The building I stayed in during the research fieldwork was in Adjame, yet another commune of Abidjan. It had four floors, and I was on the top floor. The landlady lived in large rooms on the ground floor behind solid metal gates, and her daughter in law's family lived adjacent to me on the top floor. The open communal walkways and

staircase here fronted the hilltop building and looked across the valley and over the lagoon. Bullet holes were still visible in the front of the top floor rooms. The daughter in law remained living in these rooms until one day she found a bullet on her bed when she went upstairs to sleep in the evening, crawling along the balcony walkway to her room. Thereafter, the whole family remained on the ground floor.

These two examples from areas of Abidjan where fighting was much less intense demonstrate how the boundary between the danger zone and the home is not entirely clear cut - parts of the home may become the danger zone and the shelter reduce to just one or two rooms of the household. Second, it illustrates the care by which civilians gather threat information before proceeding into the danger zone, a point that I return to in later analysis.

Displacement dilemmas

This section incorporates the qualitative findings articulated in chapter four into the model. Using the three-zone model of threat, some other definitions may be made:

- The asset protection assumption holds when TZ_i is sufficient to make people stop seeking returns to labour.
- TZ_{is} + TO_i is the anticipated localised threat (ALT): expected threat levels in origin that include journeys outside into the danger zone to alleviate indirect threat.
- Households have a preference to leave when TZ_{is} + TO_i is greater than the costs of displacement.

But displacement does not necessarily occur despite a preference to leave, as I shall return to later. I turn now to two of the protection dilemmas related to displacement covered in the previous chapter.

Violence en route

For some, threat at origin TO_i is greater than TZ_{id}, and in those situations there is no 'en route' displacement dilemma - it makes sense to leave. But, given the house provides some protection, in many cases $TZ_{id} > TO_i$. As TO_i rises, the desire to be in the refuge grows, but this benefit of threat reduction in the medium is weighed against the immediate increase in threat required. All else being equal, and ignoring TZ_{is} for simplicity, displacement thresholds could be a function of one, two or three of the zonal

threats.

$$Displacement\ Threshold\ =\ f(TO_i)\ \text{(2)}$$

$$Displacement\ Threshold\ =\ f(TO_i, TZ_{id})\ \text{(3)}$$

$$Displacement\ Threshold\ =\ f(TO_i, TZ_{id}, TR_i)\ \text{(4)}$$

In the first case, there is some limit of threat that the household will tolerate in situ before leaving. This might be rational if there is no knowledge of threat conditions outside the house, or when TO_i is intolerable regardless of TZ_{id}. More likely, the displacement threshold is a function of threat at origin and in the danger zone, perhaps when $TZ_{id} = TO_h$. Third, the household might consider whether the reduction in threat attained from moving to the refuge TR_i - TO_i is worth the rise in threat of passing through the danger zone TZ_{id} - TO_i. In further iterations of the model below I shall assume the second is the case - that two zones are considered.

Direct vs Indirect

Movement outside the home is required to access essential goods and services in order to prevent indirect threats. So entering the danger zone is required just once for displacement but perhaps occasionally for physical access to food[31]. For food access the number of occasions and the duration of movement outside will depend on the availability of food, but only one person per household or even per several households is required to collect food. For water more people may be required due to the weight, and for services such as healthcare the specific person may need to relocate. For displacement, all people displacing clearly must move outside the home.

The implications for displacement are as follows: if entering the danger zone is required in any case to access food or other goods and services, households may decide to carry on to a refuge. The likelihood of this will depend on the extent to which $TZ_{id} > TZ_{is}$.

---

[31] And, if required, to work for financial access to food if returns to labour are available without displacement. I ignore this possibility for now.

Human Assets vs Capital Assets

To discuss the third dilemma, I introduce two new elements. First, the threat to capital assets, which are assumed to be immobile at origin, is expressed as TO_c. Second, the household also has protection resources P_i that may be allocated to the reduction of threat to human assets and capital assets. These refer to human protection resources - the protection resource of the building is inferred in TO_i. P_i may be allocated to reduce TO_i, TO_c, or TZ_{id}. Depending on the endowment of P_i, it may be allocated to one or more of these simultaneously. Protecting TOh and TOc may be easier to achieve simultaneously with a lower endowment of P_i as they are in the same location - a dilemma exists when trying to protect TO_{ic} and TZ_{id} with low levels of P_i as they are in different locations.

The model

Engel and Ibáñez (2007), an early and influential paper in the literature, proposes a displacement model based on migration models with the inclusion of a threat function. For a household *i* at location *n* considering moving to destination *d*, the probability of displacement is a function of the perception of safety at the origin S_{in} and the perception of safety at a possible destination S_{id}, the economic status of the household at origin $Y_{in,}$ and destination $Y_{id,}$, migration and information costs $C_{i,}$ and household characteristics that influence migration preferences, Z_i.

$$Pr_i(D_i=1)=g(S_{id},S_{in},Y_{id},Y_{in},C_i,Z_i)$$

(5)

Economic status is not defined in detail beyond 'income and quality of life'; while *migration costs* include 'loss of goods at the place of origin or family ties at the receptor location'; and *household characteristics* are defined as 'socio-demographic characteristics of the household (that) determine the household's preference structure ...(that) determines how the household evaluates the trade-offs between the increased security from violence and the riskiness of living conditions after displacement' (2007: 342).

The challenge outlined above is differentiating impacts of violence at any location *j* on S_{ij} from impacts of violence on $Y_{ij,}$. As I have said, this chapter attempts to deal with this by excluding S_{ij} and Y_{ij} from the analysis, narrowing the focus to the roles of $C_{i,}$ and Z_i in determining displacement choice. The further benefit of this approach is that Y_i, C_i and Z_i may be co-determined, and this presents a particular difficulty in

interpretation due to the relative paucity of both theoretical work and empirical evidence. I return to the empirical strategy in a later section.

I have argued that the context here allows for controlling for threat, or what Engel and Ibáñez call the perception of safety. The basis for this argument is that PK18 was shelled heavily, and there was intense street-to-street gunfighting. The context of violence is very different to most other studies of displacement choice. Engel and Ibáñez model the threat of violence as being selectively allocated, so those who were not selected faced little threat. And while violence in Nepal was in some cases random (bombings), the intensity of fighting over the areas being studied was lower. Overt fighting had not at that time commenced in other areas of Abidjan, nor across much of the rest of the country. Abobo had been declared a 'red zone' and Gbagbo officials had said it would be wiped off the map. PK18 was the site of an intense four-day battle between the Gbagbo side and the Invisible Commando rebel army based in PK18. With such intense, random violence inside PK18 and relatively little outside, it may be argued that serious threats to life existed for everyone in PK18, which could be avoided at that time outside PK18[32]. So while controlling for threat variation is challenging, the nature of the violence in PK18 suggests that there was some homogenous level of threat faced by everyone that made the perception of safety at origin less than the perception of threat at a destination for all households.

$$Pr_i(D_i = n) = f(S_{in}, C_i, Z_i)$$ *n is an element of N(0,1,2,3)*

(6)

So, in the PK18 context, for a household i, the probability of displacement outcome *n* is a function of the degree of threat to the household in PK18, the costs of displacement, and household characteristics that determine displacement preferences. Displacement will occur when perceived threat reaches a certain threshold, shaped by C_i and Z_i. I return to the nature of the displacement outcome - defined here as a four-way outcome - in the empirical strategy section below.

Specification of the displacement threshold may then be extended to be expressed as a function of the above, but as this study is empirical, and focuses on intra-household displacement decisions that make articulation of a single threshold overly complex, I shall return to define the model according to displacement decisions. Starting from the

---

[32] This ignores for now the targeted threats outside PK18 which made staying preferable for some of 'northern' ethnicities, and targeted threats inside PK18 that made leaving more urgent for some of 'southern' ethnicities.

model used in the previous chapter, and based in Engel and Ibáñez (2007):

$$Pr_i(D_i = n) = f(S_{in}, C_i, Z_i)$$

(7)

Three further adaptations are made to the Engel and Ibáñez (2007) model. First, the way that threat to human life varies spatially according to people's movements is different. There are two zones of threat, and the refuge is not in the model. (Capital assets are assumed to be immobile[33].) Second, threat is not homogenous to the household but is specific to individuals in the household and capital assets in the household. Third, other options for managing threat in situ are allowed, which are captured in TZhis and Ph.

The perception of safety in Engel and Ibáñez's (2007) more general conception of the origin may be replaced by the threat to the household at origin, the threat to the household human assets if displacing through the danger zone, the threat to the household human assets in the danger zone if staying. The costs of displacement are separated into the threat to capital assets at origin (which may be mitigated by Ph) and other costs of displacement (which may not). Household characteristics are separated into human protection resources of the household and other characteristics. So:

$$Pr(D_i = n) = f(TO_{ip}, TZ_{ipd}, TZ_{ips}, TO_{ic}, C_i, P_i, Z_i)$$

n is an element of N(0,1,2,3)

(8)

For household *i*, the probability of displacement outcome *n* is a function of the threat at origin to the individuals of the household, the threat in the danger zone to the individuals of the household if displacing, the threat in the danger zone to the individuals of the household if *not* displacing, the threat to the household physical assets at origin, the costs of displacement, the protection resources of the household, and other characteristics of the household that affect preferences.

Comparing this model to the channels by which violence leads to displacement discussed already. direct threat is included in all formulations of threat. Indirect threat is

---

[33] This is in line with the data collected here. Questions were not asked about jewelry, cash and other mobile high value assets, but about fridges, fans and so on (see previous chapters). Mobile phones were the only important portable asset. Livestock ownership data were not collected, so the possible complication of distinct displacement agency amongst sheep and chickens is avoided.

not included in TO_{ic} because time horizons and household technologies in this context are not sufficient for household physical assets to degrade. It is anticipated that in the PK18 context the importance of indirect threat as a component of TZ is minimal as the duration of passing through the danger zone is insufficient for access to food and water during this period to be a significant factor[34]. The impact channel is included in P if protective assets are degraded (for instance house destroyed or adult killed), or in Z if impact changes the risk preferences of the household.

---

[34] Where displacement entailed, for instance, extended passage on foot through a desert or unpopulated rural areas to reach safety, the importance of indirect threat to TZ would be much greater.

6.3 Data

The data used come from the survey of 715 households in PK18, using a reduced sample of 540 households. The right hand side variables and hypotheses are outlined according to the three main channels by which displacement may be caused: impact, direct threat and indirect threat, as well as protection variables and controls. The previous chapter used six variables commonly used in the literature, and these are included as controls or as protection factors here. Wealth (asset index) is included as a protection resource and protection liability. Household size is similarly included in protection, but split into three variables - the presence of young children and the elderly as protection liability and number of adults as protection resources. Education is discounted due to the lack of strong theoretical reason for inclusion, the decrease in N due to missing education data for some households[35]. Ethnicity and religion are included as threat controls. I discuss impact and direct threat in some detail, before moving on to explain the reduced sample and describe the left hand side variable.

Direct Threat

I reflected in the introduction to this chapter on some of the difficulties in measuring threat, and these difficulties were not avoided by the choice of context here. Rather than asking people to assess the severity of the threat faced, which is open to various forms of bias, the focus was on the importance and relative importance of various forms of threat in their displacement decision. The survey included a module on subjective threat assessment [module D in Appendix I and Appendix II]. Respondents were asked which of five pre-determined[36] push factors played a role in their decision to leave or stay, and which of five pre-determined obstacles to displacement for displacement played a role. These are presented in Figure 6.3 below. There was also space for three additional factors relevant to the decision that the respondent could specify. Of the five-eight important factors in the decision, the respective importance of each in the decision was then ranked. To summarise the questionnaire response 'process' for push factors and then for obstacles:

---

[35] Household head age is also discounted in the specification presented here, although it represents an indication of protection preferences of the household. The specification used in robustness checks in Appendix VI includes household head age, where it is found to be positive and significant for those who all stay relative to the simultaneous displaced. Other results are unaffected.

[36] Based on semi-structured interviews with households and key informants.

- Mark which of five listed issues were important
- Add up to three additional issues that were important
- Rank from 1-5 (or fewer if there were not five important factors)

The relative importance of different types of direct threat in different locations in determining displacement choice has not been gathered before through survey research. The data provide the opportunity to construct variables for TO. Clearly the usual measure of threat severity or intensity cannot be assessed, but the relative importance of threats may be compared on the basis of their targeting criteria, and both inside the home and in the danger zone. The threats may be categorised as spatially targeted or selectively targeted, and as TO_h, TZ_{hd}, or TZ_{hs}. The push factors all fall into these categories, the obstacles do not, with looting (TO_c) being one, violence at destination (TR_h) another, and a fear of 'appearance of loyalty' that does not necessarily represent a threat of violence. The latter is discounted for the purpose of the analysis, as is the violence at destination which has no indication of targeting criteria. The responses to those marked in bold are used to create variables for TO_h, TZ_{hd} and TO_c.

Push factors	Threat type	Obstacles	Threat type
Fear of stray bullets entering the house	TO_i spatial	**Fear of being attacked by troops en route**	TZ_{id} selective
Fear of stray bullets when outside	TO_i spatial	Fear of being shot or shelled outside	TZ_{hd} spatial
Fear of shells falling close to the house	TO_i spatial	**Fear of the house being looted if empty**	TO_c
Distress caused by the firing of shells in the quartier	TO_i spatial	Fear of violence at destination	TR_h (discounted here)
Fear of armed troops entering the house	TO_i selective	Fear of appearance of loyalty to one of the two sides	discounted here

Figure 6.3: PK18 threats categorised as spatial or selective

Clearly the evaluation of threat levels during war is a new field in survey enumeration, and this is a new strategy - perhaps only the second systematic attempt to undertake such work after Adhikari (2013), which had not at the time been published. Generally the section was filled out quite well, but there were some issues. While it seemed clear

during training and in the pilot, this particular module proved quite complex for some of the enumerators. There was variation between enumerators in how the section was completed. Some enumerators would often mark and rank all of the options, while others would mark and rank relatively few. This is not an issue here, as we are looking at which are the most important. Occasionally ranking was not undertaken, which is more problematic. But the main problem was that in some cases, for households that all left the obstacles to displacement were not listed, and for households that stayed the push factors were not listed. It is not clear whether the enumerators did not pose the question, or whether respondents did not understand, though the former seems more likely. Appendix V gives more information on the process by which the data were treated for the purpose of the analysis here, but in summary: if it was clear whether a factor was important to the household, it is treated as such, and if importance was ambiguous the household was dropped.

Compared to the previous chapter which used the full survey sample of 715, this chapter uses a reduced sample which loses a quarter of the respondents due to insufficient data in those cases as outlined above. The reduced sample is 540 households. Proportionally, the exclusions are mostly in the 'no displacement' category, which loses 45% of households. Partial displacement exclusions are only 10.6%. The largest number of losses are in the simultaneous displacement category, which loses 93 households. It would be expected that category 0 and 3 lose most households as these were less likely intuitively to have both 'obstacles' and 'push factors' for displacement. The greater proportion of losses in category 0 may be due to site 2 being the site of a high proportion of category 0 displaced as well as: first, the site of some difficulties in collecting data, as detailed in the methodology, and second, conducted prior to initial oversight of responses that was conducted after the second day.

Table 6.1: Sample exclusions on including threat measures

Displacement Outcome	Excluded	Included	Total
0: No displacement	40	48	**88**
%	45.45	54.55	**100**
1: Partial	17	143	**160**
%	10.62	89.38	**100**
2: Staged	25	80	**105**
%	23.81	76.19	**100**
3: Simultaneous	93	269	**362**
%	25.69	74.31	**100**
Total	**175**	**540**	**715**
%	**24.48**	**75.52**	**100**

The main threat variables are constructed then simply from whether the household perceived selective threats to human assets to be an important factor both at home and in the danger zone. Perceived threat to capital assets is a third factor. The table below shows how many times each was ranked as being important, and the size of N. Losses are smaller in N for TOip and larger for TZ and TOc as it was the obstacles to displacement were more often missed.

Table 6.2: Selection of ranking for relatively important threat

	Ranking	Yes	%	N
TO_i Selective Important	Ranked 1st	49	7.4	659
	Ranked 1st or 2nd	129	19.6	660
	Ranked 1st, 2nd or 3rd	**206**	**31.1**	**662**
TZ_{id} Selective Important	Ranked 1st	97	16.9	576
	Ranked 1st or 2nd	**221**	**38.0**	**581**
	Ranked 1st, 2nd or 3rd	336	56.1	599
TO_c Important	**Ranked 1st**	**269**	**46.7**	**576**
	Ranked 1st or 2nd	403	69.3	581
	Ranked 1st, 2nd or 3rd	486	81.1	599

In this chapter I want to establish whether or not the threat was important to the household relative to other households. As such the proportion ranking that threat as top one, two or three is considered in choosing which ranking to choose for the analysis. The variables chosen are those in bold in the table above. The intention was

to try to achieve an approximately even and similar split between yes and no responses across the three variables. This necessitates taking first, second or third for selective violence at home (31% yes), and first only for looting (46.7%). For selective danger zone threat, first and second (38%) or first, second or third (56%) could be chosen, and I chose the former as it is closer to the proportions in the other two variables[37]. When these variables are combined, the non-missing sample is 540, reflected in the tables above.

Perceived relative importance of selective threat at origin should have an impact on how threat is managed through displacement for at least three reasons. First, the targeting criteria are more likely to be known for selective violence (for example, ethnicity or being in armed forces), creating certainty about the threat. Qualitative evidence suggests verbal and other warnings may have been given in some cases. Second, the house provides little protection from a selective threat, unless people are able to hide effectively. And third, remaining in the house may in fact assist in targeting human assets given sufficient local information, and others in the house who are not the primary target may be identified by their co-habitation with the target. Hence:

H1: if the threat violence allocated selectively at the home is perceived to be relatively important, this is likely to have a positive association with simultaneous displacement and staged displacement.

First, the 'patterns' or 'rhythms' of violence that make threat somewhat predictable over time for spatial violence (for example, lulls in fighting in the mornings) may not occur for selective violence. Second, selective violence might be more predictable spatially if it occurs at checkpoints, but lack of information regarding troop movements and presence for the whole route may make threat highly uncertain. Finally, men may have been particularly at risk at checkpoints. So:

H2: The perceived threat of selective violence in the danger zone may be positively associated with staying (partial displacement and no displacement).

Splitting the household is considered likely, based on previous chapters, to be a strategy to defend against looting. Hence:

H3: Higher perceived threat of looting will be associated with higher propensity to split.

---

[37] The results of the full regression using other constructions of what constitutes an 'important' threat are included in Appendix VI. The results are largely robust to other constructions, with the exception of selective threat at home, which lost significance on using 1st, or 1st and 2nd only. These represented only 7.4 % or 19.6% of the responses respectively.

Impact

The roster section of the survey recorded whether any pre-crisis household member was killed, injured or assaulted during the crisis[38]. The measures of violence are combined into a binary measure reflecting whether any individual in a household was killed, injured or assaulted. Relationships to threat and displacement are unclear, but certainly household protection assets may be affected, injury may require medical treatment increasing unmeasured indirect threat, and risk preferences may be affected. While staying longer may increase likelihood of experiencing violence, once violence occurs some form of displacement action may be more likely. For these reasons:

H4: Incidence of violence is likely to be positively associated with higher propensity for staged or simultaneous displacement, and negatively associated with all stay.

Indirect threat

Indirect threats are measured through analysis of the answers to three questions in the survey beginning: 'In PK18, during the crisis..'. Food access is measured by the response to: '...did you have enough food in your house?'. Food availability is measured by '...was there food available in the *quartier*'. And water availability is measured by '...was water cut off in your house for long?'. The response to each was recorded as 'no' or '*pas evident*' or 'yes'. These were coded into three categories 0,1 and 2 with 2 being highest threat.

As with impact measures, these are clearly endogenous to displacement. People who stayed throughout the crisis in an area affected by violent conflict, which became an enclave controlled for a significant period by the Invisible Commandos, may be more likely to experience food access problems, food availability problems and water shortages. But all three may also promote displacement, and the open-ended questions revealed that many left PK18 because of the lack of food. Generating hypotheses is therefore problematic, but it may be anticipated there is a significant association with displacement outcomes.

Protection resources

The protection resource of the building is considered here, as well as the human protection resources of the household. Taking the latter first, household human assets

---

[38] Looting impact is not included here because of the very strong correlation between houses being empty and being looted. Asset sales impact is also not included here.

are divided into 'protectors' and 'protectees'. It is difficult to do this exactly without far greater knowledge of each household, the individuals within them and possible 'protective' relationships, but for the purpose of the analysis here those 70+ are considered elderly (binary variable if any elderly present at the household level) and those 12 and under are considered young children with the same variable construction. 13-17 teenagers are discounted as it is unclear what role they might fulfil. Then the number of adults (18-69) in the household is a categorical variable from 1-4, one being 0 or 1 adults, 2 being 2 adults, 3 being 3 adults and four being four or more. So adults is a measure of human protection resources, and elderly and young children protectees. It is difficult to predict the role of protectees, as they may make displacement both more difficult and more desirable. But for protectors, we may expect:

H5: A larger number of protectors should allow for household to split and protect capital and human assets, so adults should be positively associated with staged and partial displacement.

The second protection resource is the building the household lives in. Many households in PK18 are 'cour commune' - that is to say they share a communal courtyard that is private to those households and a separate gate opens to the street. Such an arrangement may allow sharing of protection resources, including adults, threat information, food and water without entering the danger zone. These might allow people to stay, but on the other hand if others in the building leave this may promote others leaving too, so it is difficult to predict the relationship.

An asset index was used to measure wealth as in the previous chapter. To the extent that this measures cash resources or access to cash, this is likely to give people the flexibility to buy tickets to displace. On the other hand, more assets may mean a greater loss of capital assets if the house is looted when empty, and it may indicate the ability to afford expensive food, protection money or other possible costs of staying. I therefore do not suggest any hypothesis here, although significant relationships have been established in the previous chapter.

Controls

Education is not included in the regression as it further reduces N (due to poor response rate to the education question) without a clear theoretical connection with

threat and protection, and with no significant findings in the previous chapter. Basic threat controls of block mean estimates of distance to shelling, household ethnicity and household religion are used, as well as the five site level controls.

Splitting hypotheses

Taking these together, it is possible to suggest two overarching explanations for non-unitary displacement outcomes at the household level. First is intra-household threat and impact variation imposed externally - essentially that external forces (the armed group and nature) drive the decision to split. For instance, boys may be targeted in homes, so they alone leave. Or men are targeted at checkpoints so they alone stay. Alternatively, impact of, say, malnutrition or exposure to warfare may be more severe for children than for adults, leading them to be sent away. Or one person might be injured, leading them alone to leave to seek medical treatment. These may be seen as structural causes defined by the direct and indirect threat environment at the place of origin and en route.

The second is that threats and impacts do not vary amongst household members, and splitting represents threat management strategy, an attempt to allocate scarce protection resources amongst the dependents and other assets that need protection. This, then, is agency: civilian-side attempts, by household decision-makers and protectors, to manage threat *in situ.* This might include allocating limited cash to transport tickets for dependents, or sending half the family away to save food rations, or sending children away so that protectors can focus their efforts on protection of just capital assets rather than simultaneously having to protect both children and capital assets. Broadly these 'agency' explanations may be divided into protection opportunities and (non-threat) protection constraints that prevent households following their preferred protection strategy. These two over-arching explanations for splitting will be discussed in the results section alongside the main hypotheses.

Table 6.3: Descriptive statistics for RHS variables

Variable	Description	Obs	Type	Mean	Std. Dev.	Min	Max
Selective Direct Threat at Home	perceived threat to human assets at home. 1 if perceived selective threat ranks top three of push threats.	540	Bin.	0.33	0.47	0	1
Selective Threat in Danger Zone	perceived threat to human assets in danger zone. 1 if perceived selective threat ranks top two of obstacles to displacement.	540	Bin.	0.37	0.48	0	1
Looting Threat	perceived threat to capital assets if human assets leave the house. 1 if perceived threat ranks top one of obstacles to displacement.	540	Bin.	0.49	0.50	0	1
Violence	1 if any death, injury or assault to household members during crisis	540	Bin.	0.08	0.28	0	1
Adults	categorical measure of adults in hh	540	Cat.	2.46	0.91	1	4
Young Children	1 if any children under 12	540	Bin.	0.67	0.47	0	1
Elderly	1 if any adults over 70	540	Bin.	0.04	0.18	0	1
Indirect Threat: Water Availability	measure of indirect water availability threat. 2 if more serious	537	Cat.	0.85	0.90	0	2
Indirect Threat: Food Availability	measure of indirect food availability threat. 2 if more serious	534	Cat.	1.46	0.54	0	2
Indirect Threat: Food Access	measure of indirect food access threat. 2 if more serious	538	Cat.	1.20	0.71	0	2
Communal Court	1 if building has communal courtyard	540	Bin.	0.57	0.50	0	1
Asset Index	PCA index based on assets of the household at start of crisis	540	Cont.	0.35	0.11	0	1
Southern	1 if any southerners in hh	540	Bin.	0.38	0.49	0	1
Shelling Distance	measure of distance to shells landing. mean block estimates in km	530	Cont.	0.32	0.18	0.075	0.75
Christian	1 if any christians in hh	540	Bin.	0.34	0.48	0	1
Site 1 Dummy	site 1 dummy	540	Bin.	0.47	0.50	0	1
Site 2 Dummy	site 2 dummy	540	Bin.	0.08	0.27	0	1
Site 3 Dummy	site 3 dummy	540	Bin.	0.14	0.34	0	1
Site 4 Dummy	site 4 dummy	540	Bin.	0.15	0.36	0	1
Site 5 Dummy	site 5 dummy	540	Bin.	0.16	0.37	0	1

Descriptive Statistics

Left hand side variable

Following from the previous chapter, there are four possible displacement outcomes: (0) everyone stays, (1) one or more of the household stay throughout while others leave, (2) everyone leaves but not all together, and (3) everyone leaves together. The descriptives of this LHS variable are reproduced below with reduced sample information to compare to the full sample.

Table 6.4: LHS variable categories with numbers and proportions comparing reduced sample for Chapter 6 with total sample used Chapter 5.

Displacement Outcome	Reduced Sample	Total Sample
0: No displacement	48	88
%	8.89	12.31
1: Partial	143	160
%	26.48	22.38
2: Staged	80	105
%	14.81	14.69
3: Simultaneous	269	362
%	49.81	50.63
Total	540	715
%	100	100

With the exclusions, the proportion of category 0 displaced has reduced from 12.3% to 8.9%, and the proportion of category 1 displacement increased from 22.4% to 26.5%. Otherwise, the proportions of displacement categories are more or less the same as in the previous chapter.

Right hand side variables

Direct Threat: Table 6.6 shows the highest importance is attached to selective threat at home by the staged displaced, more than half of whom thought the threat of selective violence at home an important reason to leave. Less than 20% of 'all stayed' thought the same, and around 30% of the other categories. Simultaneous and staged both had around 40% ranking selective violence en route as being an important incentive against leaving, against 31% of partial and 33% of all stayed.

Impact: The table below shows the descriptive statistics broken down by type of violence (mean values to 2dp for the whole sample of 715 households), alongside the household violence measure which was included in the regression. These are presented in full here as the numbers are quite low, so only the composite figure is used in the regression analysis.

Table 6.5: Violent incidence by displacement outcomes

	0: None	1: Partial	2: Staged	3: Simultaneous	Total
killing (full sample)	0.00	0.01	0.04	0.02	0.02
injury (full sample)	0.03	0.05	0.11	0.06	0.06
assault (full sample)	0.01	0.04	0.03	0.01	0.02
household violence measure (for 540 households)	0.04	0.10	0.13	0.07	0.08

In the full sample, 11 households experienced the killing of one household member, and one household two household members (2% of households). Some relationship with displacement is clear from many of the testimonies, which will be analysed in the discussion section of this paper, although the reasoning is not explicit. All of the 12 households who suffered displaced entirely except for one household where the one person remaining in PK18 was the father - a combatant who was killed in PK18. Four households displaced in stages and seven simultaneously.

The injury of household members was more prevalent than killing. 41 of 715 households experienced injury of a household member, including three households with more than one household member injured, and three households where a different household member was also killed. In addition, the survey revealed 16 assaults reported against household members, with none of these being multiple assaults in one household. 10 of those assaults did not correspond with reported injuries, while 6 were in households that also experienced one or more injuries.

Overall, 8% of households in the reduced sample suffered some form of physical violence; the rates were highest amongst the partial and staged, and lowest amongst the 'all stayed'.

Indirect Threat: Table 6.6 shows water availability seems to be related to displacement, with the simultaneous reporting lower incidence of water cut-offs than

those who all stayed. Food availability does not vary much with displacement, while food access was less of a problem for the staged than the others, and more of a problem for the simultaneous than the others.

Protection: The lowest score of the adults categorical variable were amongst the simultaneous, and the highest amongst the staged. Young children were more prevalent for the splitting households - partial and staged - with more than three quarters of these households having young children, against 54% of the 'all stayed' and 61% of the simultaneous. Communal courtyards were least prevalent amongst the staged (44%), while they formed the majority of other categories with the maximum being 67%, of the 'all stayed'.

Controls: Ethnicity and religion vary greatly by displacement outcome, with almost 60% of the staged being southern, 40% of the simultaneous, 30% of the partial and 20% of the 'all stayed'. The pattern is similar for Christianity, though the numbers are around 10 percentage points lower for both staged and partial.

Table 6.6: Cross tabulation of independent variables with the dependent variable

Variable	0: None	1: Partial	2: Staged	3: Simultaneous	Total
Selective Direct Threat at Home	0.19	0.29	0.51	0.32	0.33
Selective Threat in Danger Zone	0.33	0.31	0.39	0.41	0.37
Looting Threat	0.29	0.68	0.51	0.42	0.49
Violence	0.04	0.10	0.13	0.07	0.08
Adults	2.56	2.57	2.91	2.24	2.46
Young Children	0.54	0.78	0.76	0.61	0.67
Indirect Threat: Water Availability	1.25	0.90	0.91	0.74	0.85
Indirect Threat: Food Availability	1.46	1.39	1.45	1.49	1.46
Indirect Threat: Food Access	1.17	1.13	0.97	1.30	1.20
Communal Court	0.67	0.61	0.44	0.58	0.57
Southern	0.19	0.29	0.58	0.41	0.38
Shelling distance	0.34	0.33	0.35	0.31	0.32
Christian	0.19	0.22	0.48	0.40	0.34

6.4 Empirical Analysis and Results

As described previously, the displacement decision analysed includes complex displacement outcomes. Based on the finding in the previous chapter, displacement decisions made by each household combine to make displacement outcomes, which reflect the final outcome of displacement prior to return while encompassing heterogeneity in decision making up to that point. The dependent variable therefore has four possibilities that may not be ranked. A multinomial logit is again used here, as in the last chapter, but here the base outcome is simultaneous displacement. This is chosen as it is the largest category and everyone leaving together might best be considered the expected outcome of severe threats of violence. Here there is no comparison between models that made choice of the consistent category of 'no displacement' expedient in the previous chapter. The empirical model is as follows:

$$Pr(D_i=n)=\beta_0+\beta_1 Direct+\beta_2 Indirect+\beta_3 Impact+\beta_4 Protection+\varepsilon$$

(9)

Table 6.7 on the next page shows the count R2 statistics, which suggest that the model fit is reasonable: 50% of outcomes are correctly predicted using only measures of perceived threat, increasing to 60% with the full specification.

Direct threats

Column 1 shows that threat perception is a significant predictor of all displacement outcomes relative to all leaving together. Those who all stay have negative coefficients on each of the selective human asset threats as well as negative coefficient for looting. Perceiving selective threats to the human assets of the household within the home and threats to capital assets are associated with all staying, significant at 10%, but only capital assets retain significance on inclusion of controls (column 3) and in the full specification (column 8).

Perception of threats to capital assets is significant too for partial displacement: here the coefficient is positive and significant at 1%, robust to inclusion of all controls. Staged displacement, on the other hand, has no relationship with perceived threats to assets but is significantly associated with higher levels of perceived selective threats to human assets within the household. In the complete model (column 7) with site controls, selective threat to the household human assets at origin has a significant positive relationship at 1% with staged displacement relative to everyone leaving

together. This reduces to significance at 5% on inclusion of objective threat controls, which probably reflects the role of ethnicity in selective targeting.

So perception of selective danger zone threats as being relatively important is a not significant predictor of displacement outcomes relative to all leaving together. Should this be a surprise in the context? I return to the possible overarching logics of splitting outlined earlier.

First, if direct threat varies between household members this may affect propensity to split. So in that case, perceived selective danger zone threat might be expected to affect propensity to split if targeted based on gender or age; targeting based on ethnicity, assuming ethnic homogeneity within the household, would not cause variation in splitting. The significant result found for perceived selective threat to the household at origin for the staged displaced is interesting. These households split and eventually all leave, and some of the reasoning for this decision may be attributable to their greater fear of selective violence in the household. It may be that the selective threat was heterogenous between household members, certainly there were allegations of sexual abuse during the crisis. Or, extending this logic further to incorporate subjective valuation, when facing an objectively equal threat to all household members, it may be rational to have most desire to protect children, whose welfare may be subjectively valued above other household members.

Table 6.7: Multinomial regression results [LHS is complex displacement outcomes].

	1	2	3	4	5	6	7	8
0: All stay								
Sel. Threat Home	-0.719*	-0.712*	-0.449				-0.537	-0.418
Sel. Threat D. Zone	-0.529	-0.514	-0.544				-0.528	-0.641*
Looting Threat	-0.643*	-0.645*	-0.784*				-0.651	-0.859*
Violence		-0.441	-0.054				0.2	-0.039
Adults				0.363**	0.356**		0.404*	0.364*
Elderly				0.821	0.608			
Young Children				-0.142	-0.086		-0.16	-0.305
Communal Court					0.693**		-0.178	-0.304
Water Availability						0.436**	0.633***	0.589**
Food Availability						-0.056	0.288	0.467
Food Access						-0.141	-0.222	-0.152
Asset Index							-0.973	-0.603
Constant	-1.121***	-1.104***	0.306	-2.235***	-2.261***	-1.142***	-1.568	-1.129
1: Partial								
Sel. Threat Home	-0.212	-0.228	-0.08				-0.071	-0.016
Sel. Threat D. Zone	-0.107	-0.122	-0.191				-0.077	-0.135
Looting Threat	1.068***	1.068***	1.114***				1.043***	1.000***
Violence		0.535	0.667				1.006**	0.975*
Adults				0.549***	0.548***		0.550***	0.530***
Elderly				1.588***	1.480***			
Young Children				0.979***	1.001***		0.986***	0.987***
Communal Court					0.096		0.127	0.12
Water Availability						0.136	0.192	0.134
Food Availability						-0.255	-0.176	-0.146
Food Access						-0.302**	-0.148	-0.176
Asset Index							1.94	1.763
Constant	-1.115***	-1.151***	-0.46	-2.898***	-2.573***	0.144	-3.404***	-3.018***
2: Staged								
Sel. Threat Home	0.796***	0.785***	0.674**				0.860***	0.755**
Sel. Threat D. Zone	0.139	0.131	0.024				0.325	0.208
Looting Threat	0.374	0.37	0.366				0.299	0.212
Violence		0.649*	0.719				1.000**	0.930**
Adults				0.868***	0.830***		0.924***	1.034***
Elderly				0.536	0.45			
Young Children				1.007***	1.115***		1.445***	1.666***
Communal Court					-0.768***		-0.289	-0.143
Water Availability						0.187	0.309	0.293
Food Availability						0.204	0.097	0.015
Food Access						-0.691***	-0.414*	-0.447**
Asset Index							3.542***	3.476***
Constant	-1.771***	-1.821***	-1.855***	-4.162***	-3.396***	-0.701	-5.988***	-7.082***
3: Together	Base	Base	Base	Base	Base	Base	Base	Base
Controls Thr			included					included
Controls Site			included		included	included	included	included
Count r2	0.498	0.500	0.545	0.516	0.527	0.509	0.582	0.587
Observations	540	540	530	715	715	700	533	523

* p<.10, ** p<.05,*** p<.01 - standard errors clustered at block level

A second explanation is based in the concept of 'threat elasticity' outlined in previous chapters. If a threat is of personal violence conducted by known parties it may more easily be negotiated through persuasion, behaviour change or similar low-cost strategies. Additionally, the process by which one becomes aware of the threat may be more subtle than the noise of proximate shelling. It may be through rumours passed through the community, or the look in the eye of a combatant or neighbour passed in the street. The cost of violence threatened may be uncertain, whereas for shelling the cost of violence is unambiguous and it is the probability of violence that contains high uncertainty. Given such a situation of identity or behaviour based threat, it may be possible for protective assets of the household to negotiate - perhaps literally - threats to their own life or lives through behaviour change or other strategies. They are more mobile and have fewer liabilities in place if the non-protective human assets - especially children - are protected through displacement. That ultimately the Invisible Commandos gained control of PK18 may explain the eventual departure of all household members for some of the staged displaced households - there was no longer the immediate prospect of FDS forces regaining control and providing protection, and total control is likely to have increased IC targeting capacity through the familiar Kalyvas (2006) mechanisms.

Scarce protection resources may also account for splitting on the part of the partial displaced. These households were more fearful of looting of capital assets if they left. Even if they did not perceive selective violence against household members, they could still allocate human protective resources to defending the household capital assets while protecting other household human assets through partial displacement. Determination to defend capital assets of the household might explain their remaining in the household throughout the crisis.

I now investigate in more detail the significant relationship found between the perception of capital asset threat and displacement outcomes, focusing on the relationship with wealth based on the asset index. The graphs below show predicted probabilities[39] of outcomes 0 (no displacement) in the first graph, and 1 (partial displacement) in the second graph, as the importance rating of perception of threat to capital assets varies between 0 (blue line) and 1 (red line) given all the covariates. The analysis here then analyses amongst those who stayed (in whole or in part) the relationship between different motivations for staying and wealth.

---

[39] predicted probability calculated by average of probabilities

The first graph shows that as perception of threat of capital assets (TOc1 on the graph label) goes from being not most important (0) to most important (1) of the obstacles to displacement there is no significant difference between the probability of people all staying relative to people all leaving together. The downward curve suggests that the likelihood of no displacement is negatively correlated with wealth.
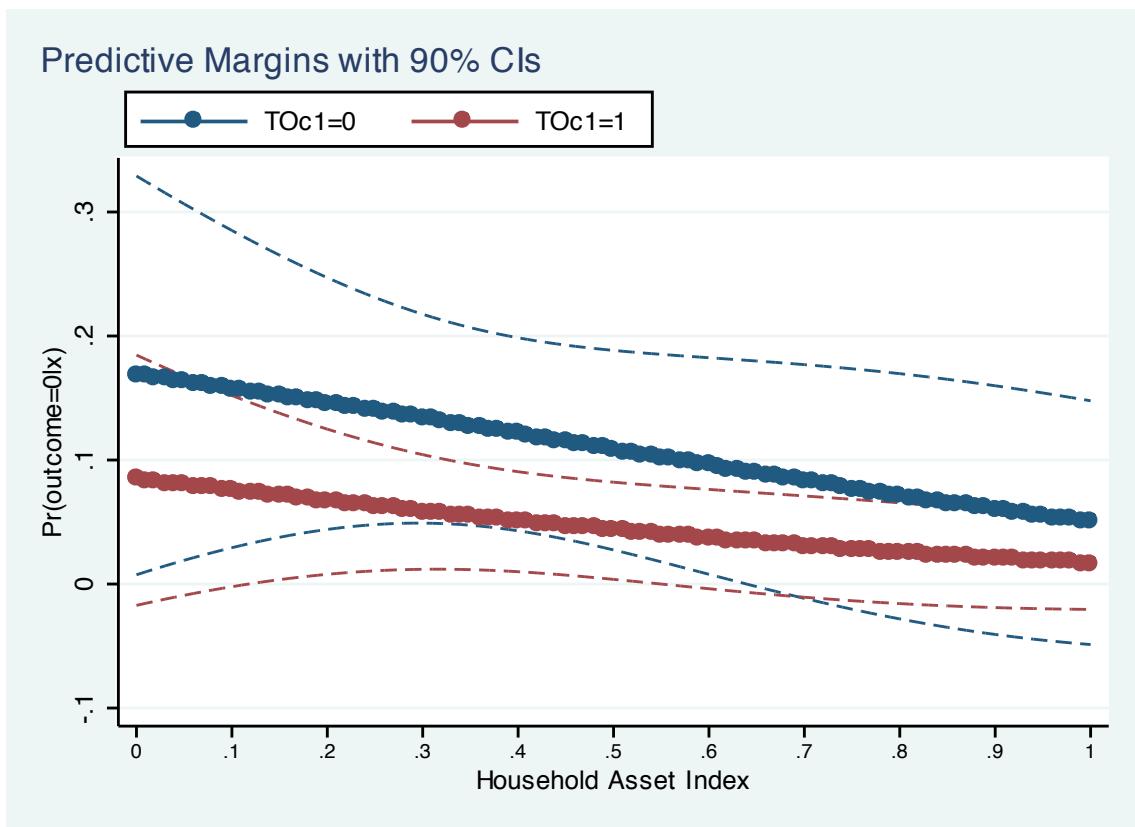
Figure 6.4: Predicted probability of no displacement by perception of threat to capital assets
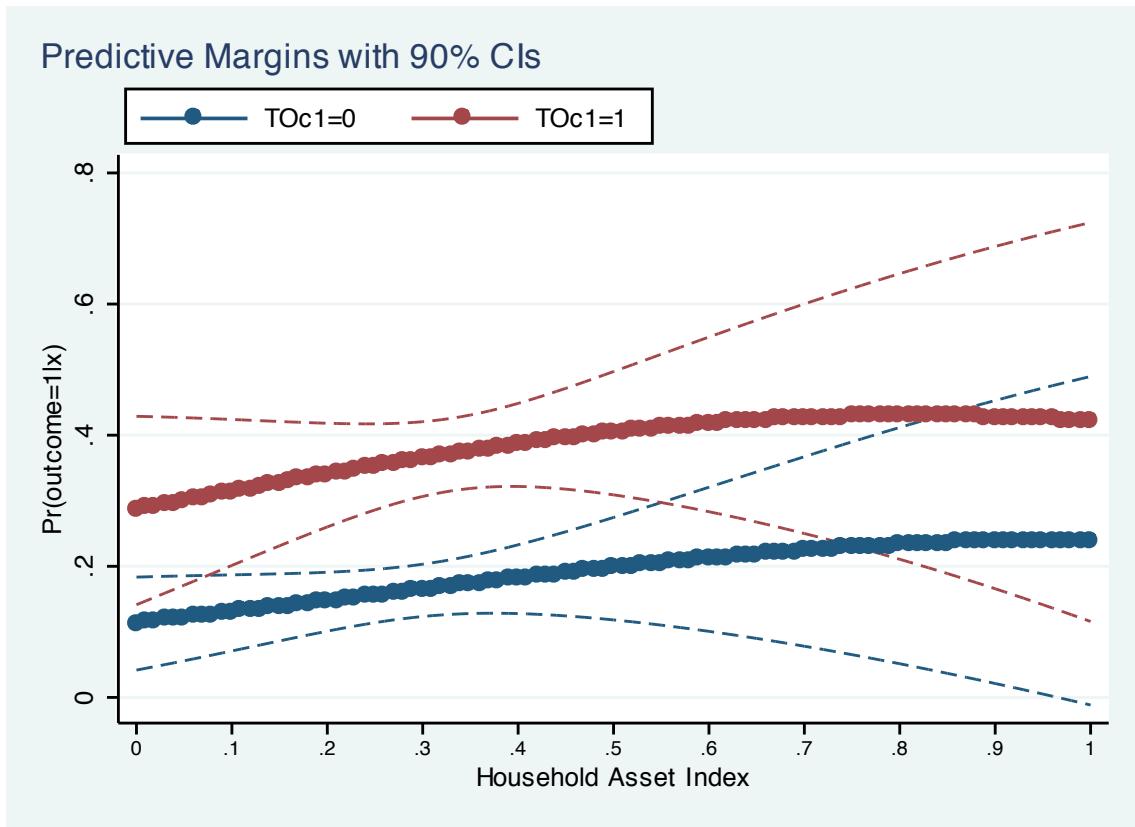

Figure 6.5: Predicted probability of partial displacement by perception of threat to capital assets

The second graph shows that as perception of threat to capital assets goes from being not most important to most important, for those with an asset index between .07 and .55 there is a significant difference between the probability of partial displacement relative to people all leaving together. The majority of the respondent population is in this range on the asset index (see histogram in previous chapter), so the lack of significant difference between the curve outside these boundaries may be explained by larger standard errors stemming in part from smaller population. The largest gap between the standard error plots is at around the mean value for the asset index 0.35 (the s.d. is 0.11).

So for the majority of the population, especially those around the mean asset index, there was a higher propensity for a member of the household to stay, while others left, if they perceived asset threat to be the most important obstacle to displacement. The upward trend on the curve suggests that the propensity for partial displacement increases slightly with the asset index. For those who *all* stayed, the opposite relationship was found, with poorer households more likely (though not significantly at 10%) to be worried about looting. It is difficult to establish the mechanism of causality though: does having more assets drive perceived threat just because of having more assets? Two other factors might be confounding: if greater objective threat based on having more assets drives perceived threat, or if wealth is more important to someone they will rate threats to assets as more important and have spent more effort in wealth accumulation.

Violence

The regression results (column 2) show that violence experienced by the household has relatively little relationship with displacement outcome (relative to simultaneous displaced) when included alongside only perceived threat factors. That is that staged displaced are more likely to be the victims of violence (significant at 10%). The inclusion of objective threat controls in column 3 removes this significance. However in the full specification of the model in columns 7 and 8 show a strong significant positive relationship with displacement outcomes 1 and 2 - partial and staged - relative to simultaneous.

Returning to the conceptual framework, there is no clarity as to how incidence of death or injury would determine displacement outcomes. Incidence of violence to any

household may be endogenous with staying longer in PK18, but following incidence it is likely that at least part of the household will leave either due to the reevaluation of threat levels at origin or due to the requirement to treat injury. Given the weak relationship found in the regression, it is instructive to consider some of the evidence from open-ended questions in the survey. A more comprehensive table of open responses from those affected by violence is presented in Appendix IV , but I now analyse in detail three of the violent incidents that led to the death of a household member:

> *We were at the house on Black Saturday and a shell landed in our bedroom, which caused the death of my younger brother. I fled to take refuge in a* foyer*.*
>
> *Survey respondent*

Here the shell landed on the respondent's house, killing his brother. The impact is the death of his brother and the damage to the house, which is a shelter and a place to hide. The immediate flight reflects either the impact or the re-evaluation of direct threat. The removal of protective assets such as shelter, through the impact of violence, changes the overall ability to protect against threat.

> *The shooting got worse, and my daughter was shot in the neck and died on the way to the hospital.*
>
> *Survey respondent*

Here the violence link to displacement is clearer. The hospital is outside PK18, moving their daughter to the hospital required moving through the danger zone, so the indirect threat to the daughter resulting from the impact of violence outweighed the increase in threat of leaving the house. It is not clear whether there was also a role of re-evaluation of threat following their daughter being shot.

> *We left because they came and killed my son in front of the courtyard.*
>
> *Survey respondent*

As in the first case it is not clear from this respondent whether the departure was attributable to the increase perception of threat attributable to the act of violence. But clearly in this case the violence was allocated according to behaviour or identity, rather than spatially as in the previous two cases. Still, the mechanisms are unclear. The son may have been an important protective member of the household either through ability

to access food and water, access protection networks or deliver protection himself. He may have been a decision-maker who had been inclined for his family to stay. The need to leave may stem from the need to deal with funeral arrangements, or from the increased perception of direct threat - indeed he may have been killed in part deliberately to threaten the rest of the family.

The responses of the injured households above often reveal a combination of possible increase perception of targeted threat as well as and the indirect injury threat, both stemming from violence, as well as indirect food-related threats.

> *I received a bullet to my foot, there wasn't anything left to eat, nor any water and my wife had a miscarriage caused by the firing.*
>
> *Survey respondent*

> *My nephew was attacked and also the problem of ethnicity.... And there was no food.*
>
> *Survey respondent*

Just three households which reported injury did not displace, and none where someone was killed. None of the testimonies from those three households reveal how the injury was managed without displacement, only that the reasons for not displacing were quite serious. For instance:

> *We wanted to leave because of the shelling, the stray bullets. There wasn't any food, there were dead bodies in the streets, but there was no route to leave.*
>
> *Survey respondent*

> *There was the neighbour who had tried to leave but who was raped and killed. Because of that I decided that no one would leave.*
>
> *Survey respondent*

Overall the testimonies reveal a relationship between displacement actions and acts of violence, with a displacement action often following violence, but it is difficult to link these with the four displacement outcomes due to the issue of time endogeneity and the lack of a direct link with any particular one of the three displacement outcomes involving displacement actions.

Indirect Threats

The responses analysed above demonstrate the importance of indirect threats in displacement decisions. Returning to the regression results outlined in Table 6.7, it seems clear trends may be identified between different indirect threats and displacement outcomes. First, lack of water availability is associated with households all staying (column 6). This would intuitively be attributable to endogeneity, but then it would be expected that the partial displaced, like 'all stayed', would experience the problem of water being cut off. It may be driven by sub-site level geographical difference in water availability, or it may be that respondents in partial households who were not the ones that stayed were unaware of water cut-offs. It may also be that the partial displaced were more able to access water despite cutoffs, perhaps due to greater wealth or mobility, and so did not report it. Food availability did not vary significantly between displacement outcomes, which is perhaps surprising: it might be expected that those staying for longer in PK18 would experience issues with food supply. The *absence* of food access indirect threats, on the other hand, is associated with partial and staged displacement, and in the latter case remains significant at 5% on inclusion of the full specification with controls. This may be attributed to some association with greater wealth that is not controlled for by the asset index, enabling greater food stocks and financial access to food despite higher prices. It may also be endogenous to the displacement outcome. Returning to the logics of splitting, there may be intra-household variation in origin indirect threat factors, such as insufficient food supply at origin, or lack of baby supplies or medical supplies.

So because households have split, they require less food, so *in situ* food access becomes less of a problem. That the result is significant with controls for the staged displaced would fit with this logic: if the whole household leaves then access is less likely to be a problem.

Protection

The results here effectively replicate those found in the previous chapter which described some socio-economic factors in displacement outcomes. All categories of displacement are associated with higher numbers of adults when compared to the base outcome of simultaneous displacement. The relationship is strongest, and the coefficient largest, for staged displacement, then partial displacement, and finally 'all

stay', which has a coefficient of 0.3 and is significant only at 10% on inclusion of all controls. The presence of numerous adults in the household may be relevant to splitting either due to the greater ability to overcome protection dilemmas *in situ*, or due to displacement cost or destination factors[40] such as insufficient finances for all household members to leave, insufficient space for the whole family at destination, or relationship problems between, say, the HHH and the in-laws.

Similarly, children and the elderly may promote splitting due to greater protection dilemmas or due to destination factors[41]. The findings in this chapter unsurprisingly echo those findings, with both partial and staged displaced found to have more adults and be more likely to have young children than those who leave all together. Those who did not displace at all also have more adults than the all together displaced, although with a lower coefficient and significant at 10% rather than 1% in the case of partial and staged.

---

[40] Additionally, other decision-makers may be present in the household which is not a logic of splitting as such, but a reason it may happen.

[41] The elderly are dropped from the full regression as there are only 19 households with members over the age of 70.

6.5 Conclusion

This chapter started by describing three links between violence and displacement, before outlining an adapted model of displacement choice. It then moved on to test, for the first time, these three links as determinants of non-binary household displacement outcomes.

Overcoming some of the problems with existing measurement of the role of direct threat, the relative importance households attached to selective threats was used to assess how displacement actions function as a protection strategy. Relative to those who all left simultanously: (1) the staged displaced were more likely to say that selective threats at home were an important reason for displacement; (2) the partial displaced were more likely to to say that looting was important reason for staying, and (3) the 'all stay' were less likely to say that looting or selective threats en route were important in their reason to stay. Examining the role of wealth in these outcomes, analysis using predicted probabilities suggests that for the partial displaced, wealth has a significant positive relationship with fear of looting, while no such relationship exists for those who all stayed.

Indirect threats also have important relationships with displacement outcomes. Households that split (partial or staged) were less likely to face food access threats. This might be due to having fewer people together in the area of food scarcity, or to being richer and having more food stocks available. Alternatively, it might be that food access threats promote simultaneous displacement, while those who all stayed were more likely in time to experience such threats. The latter were also more likely to experience water cut-offs.

Experience of direct impacts of violence has a complex relationship with displacement. The numbers here are too small to reach any firm conclusions regarding the different types of impact of violence. Experience of any type of violent impact is positively related with splitting, but the range of possible interpretations is quite wide, and more research targeted at specific victims of violence and their response would help in understanding displacement effects.

Overall, the results demonstrate that all three channels - direct threat, indirect threat,

and impact - are related to displacement outcomes. As expected, the complexity in the production of these through the actions of armed groups, the households in question and in other household and market responses makes establishing the causal mechanisms very difficult. The protection resources of wealth and household adults were shown to be correlated with staged displacement, and the protection 'liabilities' of young children were similarly positively associated with staged displacement. The same is true of the partial displaced, except that wealth is not significant and the coefficients are smaller for the other protection factors. So even where migration factors are not likely to play any role, socio-economic characteristics of the household are important factors due to their role in facilitating protection strategies.

Chapter 7:

Conclusions

This conclusion discusses three interrelated themes within the area of displacement, and two in empirical displacement research. The three displacement themes are the nature of the displacement decision, the distinction between protection and coping, and the return decision. The empirical issues are the development of threat measurement in future displacement research, and further work in 'nano-level' research using whole population sampling. Before moving on to these, I first summarise the conclusions of the thesis outlined already.

Chapter 3 was about the composition of direct threat, and looked at how armed actors in PK18 shaped the threat environment within which civilians made decisions. An articulation of the concept of direct threat was set out, using the existing related literature, as comprising targeting criteria, targeting capacity and propensity for violence. These components of 'objective', armed-group side direct threat, are shaped by the organisational capacity and the location and motivation of the armed group. Following the conceptual framework, threat may be produced by violent actions or by non-violent communication actions, and the chapter analysed four types of actions in PK18 that produced threat. The chapter then went on to analyse how groups in PK18 also reduced threat by non-violent communication and violence against armed actors. So at least these two of the four actions may have both threat-producing and threat-reducing effects.

Chapter 4 was about how civilians respond to the threat conditions formed by armed actors. Using primarily crime and humanitarian policy literatures, the concept of civilian self-protection was outlined as comprising three strategies, avoidance, compliance and instrumental strategies. Using the data from PK18, the chapter analysed how civilians used these three strategies to reduce threat, but also how their use of these strategies produced indirect threats and even created impact on household assets. Three threat dilemmas that this created in PK18 were outlined, before a discussion of mobilisation highlighted the possibility of civilians becoming armed actors in order to help overcome

threat dilemmas. This section on participation in PK18 analysed the links between micro, meso and macro factors in the Abidjan crisis, highlighting how protection played a role in mobilisation at various levels of the organisation, and how changes in the macro environment split the unifying protection motivation of the Commandos and led to their downfall.

Chapter 5 then moved on to the specific protection strategy of displacement. The main contribution of the chapter was to categorise how displacement functions at the intra-household level using unique data from PK18. A decision tree for intra-household displacement specified at least four possible displacement outcomes that included both the process of displacement and the outcome. An important part of displacement process is splitting the household in order to manage threat dilemmas. Using PK18 data, the chapter then described the nature of displacement decisions, including how the decisions were made within the household, the number of displacement actions taken, the timing of the displacement decision relative to the displacement action, and the timing of displacement actions. The nature of displacement was found to vary between complex displacement outcome categories. I then analysed variation in socio-economic characteristics of the household between the various possible categorisations of displacement, and the regression results indicated that the way displacement is categorised is important, and much of the variation between households may be attributed to process of displacement not just outcome. Particularly, wealth appeared to be associated with the displacement process of splitting more than to simple displacement outcomes.

Then Chapter 6 analysed the reasons behind the variation in displacement decisions. A model of displacement was introduced that incorporated threat in the 'danger zone', the area around the house and en route to, for instance, food suppliers or displacement destinations that households have to negotiate. The regression investigated the relationship between displacement choice and the three channels by which wartime violence might affect protection strategies - impact, indirect threat, and direct threat, as well as the mediating factor of protection resources. For direct threat, a measure of perception of selective threats as being important relative to other factors in the decision to leave or stay was used, along with perception of looting threat as being relatively important. Perceived relative importance of selective threats within the home were found to be positively associated with staged displacement (relative to simultaneous), and looting threats positively associated with partial displacement. The presence of both human protection resources (more adults) and human protection

liabilities (young children) were positively associated with splitting, and with larger coefficients for staged than partial. The findings of the chapter also suggested that wealth functions both as a protection resource and liability.

So what is displacement? I have argued throughout this thesis that displacement is a protection strategy, part of a portfolio of actions households may take to protect their lives and their physical asset when under threat. This is not in contrast to scholars who include migration forces in their analysis of displacement, but it does suggest that distinguishing between what I have referred to as 'conflict-induced migration' and displacement as protection may be both useful and possible. Indeed this is relatively easy at the 'nano' scale - especially when people move away from urban areas that are usually recipients of migrants, and return to those areas on cessation of hostilities. But when data give no indication of time horizons in the decision (during an extended conflict), and displacement patterns correspond to likely rural-urban migration patterns, the task of distinguishing these is problematic. This has been the case in the literature to date, and demonstrating the coexistence of these forms of displacement has been part of the objective of that literature. The provision of evidence from contexts where displacement is purely protective may help to build the conceptual and empirical foundations to assist in researching conflict-induced migration. This thesis has outlined conceptual foundations for displacement as protection, and provided evidence that points to why households make certain displacement decisions.

So what is protective displacement? There are at least two types of protective displacement. (So at least three types of 'displacement' defined as elsewhere to include conflict-induced migration). Some households try to manage threat to their various individuals and physical assets using mobility and in situ protection resources. Other households respond to threat by staying together. Chapters 5 and 6 suggested that this process of managing threat is characterised by the relatively wealthy with more human protection resources as well as more wealth. The perception of threat to assets and of selective threat to household members in the home drive the complex (process-inclusive) displacement outcome. So both threat perception and capacity to manage threat shape the process and outcome of displacement. Amidst the binary displaced of other displacement research will be households who have managed threat in quite different ways. Policy-makers and researchers may do well to investigate these processes so as to bring in an understanding of the two types of displacement to their work. The simultaneous displaced and the non-displaced do not go through the process of splitting, and this indicates they, for some reason, do not attempt to manage

threat differentially across household members. This may be because they lack human protection resources, or financial protection resources. They may have closer ties and fewer decision-makers within smaller family units.

But importantly, both these types of households are responding to very high levels of threat. There are not pre-emptive and responsive households as in Engel and Ibáñez's (2007) classification, there are just households responding to threat in different ways. But of course there may be some level of objective threat variation between these households that is not captured by the threat controls used here. We know that the staged displaced have their first group leave earlier- this may be due to lower displacement thresholds for these first groups (usually women and children) in staged displaced households. Otherwise it is due to variation in the timing of the threat faced - these households perceive higher selective threats that may (a) be predicted with more certainty and (b) have been faced sooner before the intense shelling began. Resolving this question is not possible, but what may be concluded is that different households may have various thresholds for displacement for different people within the household, and thresholds for people who serve a protective function will be determined by the assets or individuals they wish to try to protect. If certain adults wish to stay to protect assets, or to quickly return to earning money on cessation of hostilities, this might be facilitated by permitting safe, protected passage for adults and children leaving and in need of protection en route. If enough of the economically active can remain, this might slow down the 'synchronisation' of coping and protection motivations and the mass-exodus of entire households. It might also permit speedier economic recovery following the conflict, and result in fewer households facing asset losses.

A second avenue for further analysis is the distinction between protection and coping strategies. Asset protection and self-protection generally appears to have been neglected in the literature on development micro-economics generally and in wartime specifically. For the very poor, who live at the margins of viable existence, coping and protection (from indirect threat) may be equivalent on a day-to-day basis. But for most, significant degrees of threat will be required to shorten time-horizons such that they engage solely in protection strategies. Different protection strategies will have varying impacts on longer-term economic coping strategies. Protection through displacement is likely to make coping much more difficult. Cash is spent on transport, assets are abandoned, Social networks are left behind, along with employment opportunities and local information about threat variation. Protection in situ should make coping easier when the threat has passed as long as asset losses were not too serious. Over time,

strategies may be adopted that make coping easier. Planting crops that require little maintenance, for example, reduces indirect threat to the crops if they cannot be tended.

This is where group effects are important. While the majority are managing the threat in situ using protection strategies other than displacement, markets are 'paused' but not destroyed. But if a household's social networks and employment opportunities are also leaving the area, protection and coping become aligned. Where the most effective short term protection strategy is to leave, and the most effective medium-term coping strategy also becomes to leave, this should create a situation where each household's displacement decisions are compounded very quickly into massive-scale displacement. This process, and the intersection of protection and coping decision-making, merits research attention. So it is likely that temporal fluctuations in threat drive associated fluctuations in protection or coping decisions. And it may be supposed that in extended conflicts, the predictability of the threat variation over time and space drives the feasibility of coping *in situ*.

These point to the third theme, that of return. While I have emphasised the importance of return in creating a beneficial setting for displacement research, I have not analysed return decisions in PK18. But return is a fascinating decision in itself, and observed variation in return in other contexts may provide some insight into the prior displacement decision, and important household characteristics. Additionally, return or non-return may comprise part of the initial displacement decision, as well as being in part a separate decision. Take for example the Palestinian refugees of 1948, who keep their front door keys as symbolic of their intention at the time to leave only until the violence died down, and yet remain displaced 65 years later[42]. So within the initial decision there may be intention to return (or at least some hope to return) or some certainty that this departure may be permanent. This may have implications, due to factors such as the nature of the living situation at destination and the amount of assets taken to the destination, for the ability to cope if what was intended to be short-term displacement becomes long term. It would also be interesting to research whether relative intention to return comprises some part of the difference between conflict-induced migration and displacement.

---

[42] Jewish refugees to Israel from Europe in the preceding years had for the most part no such intention to return - many were going to Israel in order to build a new state as well as to avoid violent European anti-Semitism. The case of Israel also points to state-building as the ultimate protection strategy.

Two areas of further empirical development are raised by this thesis: on the measurement of threat, and the whole population sampling in 'nano-level' research. I address each of these in turn. Relative threat measurement presents an opportunity for assessing threat that excludes some of the challenges of existing approaches. The absolute level of objective threat may only be assessed with time-controlled data on violent events that probably requires an even more localised context than that presented here, or abstraction back to some level of aggregation which - I would suggest - may not be very helpful until the causal mechanisms are better understood. Barring either of these possibilities, we are left with subjective threat assessment by households or their neighbours. Ranking of relative threat may be a better way to understand differential displacement response than just the perceived threat assessment (not serious to very serious, for example).

However the move to a still more localised level would be promising for displacement research. In this PK18 context, the displacement picture was complicated by the co-existence of selective and spatial threats to life, and threats to assets. While this provides interesting opportunity to analyse different threats' impact on displacement choices, the attribution of causality would be better served by a context where, for instance, a single shell landed and households responded differently to the threat communication of that single act of violence. This would enable analysis of the way threat perception is determined by objective threat (in a more detailed and comprehensive way than that in Adhikari (2013), as well as how households respond in terms of their movement.

This more localised research method would still be best conducted using whole population sampling. A context of displacement and return demonstrates convincingly the exclusion of migration factors, and so much the better if the violence is even shorter-term and less likely to affect markets. Whole population sampling is better suited to such situations. These may also be situations of mass displacement, contexts that are under-researched and perhaps unsuited to the case-matching methods used elsewhere in the literature. The whole population strategy is yet to be implemented at the national or regional level using household data, yet data exists that might permit such research to be undertaken. If date-specific datasets continue to emerge that enable establishment of sequence from violence to displacement, this will allow the relatively straightforward development of more evidence on the relationship between displacement and violence. The evidence presented in this thesis will provide guidance on some additions that would make ongoing and future data collection efforts more

useful for rational choice displacement research.

Finally, in conclusion I would like to emphasise the importance of the concepts of threat and protection. The concepts are borrowed from terrorism and crime literatures - clearly we in the West protect ourselves from the threats we face. Meanwhile the Ebola virus is spreading through West Africa: how people respond to the threat of infection may not be theoretically dissimilar to the way they respond to the threat of violence; although different protection strategies are of course required, it is a situation in which there is agency in the production of catastrophic threat to life. Threat and protection are very important in the lives of people in the developing world too, and this should be reflected in international development research.

References

`

Abidjan.net 2011, "Affrontements de mardi à Abobo: Des dizaines de Fds tuées dans une embuscade", *Abidjan.net*, 24 Feb 2011. Web 27 Aug 2014. Link: http://news.abidjan.net/h/392498.html

Adhikari, P. 2013, "Conflict-Induced Displacement, Understanding the Causes of Flight", *American Journal of Political Science*, 57(1): 82-89.

Adhikari, P. 2012, "The Plight of the Forgotten Ones: Civil War and Forced Migration", *International Studies Quarterly*, 56(3): 590-606.

Arjona, A. 2014, "Civilian Resistance to Rebel Governance", HICN Working Paper 170, Households in Conflict Network, Brighton, February.

Baines, E. & Paddon, E. 2012, "'This is how we survived': Civilian agency and humanitarian protection", *Security Dialogue,* 43(3): 231-247.

Barir, I., "Why I's Hard to Believe Israel's Claim That It Did Its Best to Minimize Civilian Deaths", Huffington Post: 13 Aug. 2014. Web 29 Oct. 2014, Link: http://www.huffingtonpost.com/idan-barir/israel-gaza-civilian-deaths_b_5673023.html

Barrs, C.A. 2010, "How Civilians Survive Violence: A Preliminary Inventory", The Cuny Centre Policy Paper, Arlington, Virginia, November.

Bellamy, A.J. & Williams, P.D. 2011, "The new politics of protection? Côte d'Ivoire, Libya and the responsibility to protect", *International Affairs*, 87(4): 825-850.

Ben Rassoul, T. 2012, "Côte d'Ivoire: Un an après retour sur 'le Commando Invisible' des nouvelles révélations sur la mort d'IB", Interview by Félix D.Bony. *Over-blog.fr,* 27 April 2012. Web. 27 Aug. 2014. Link: http://cotedivoire-lavraie.over-blog.fr/article-cote-d-ivoire-un-an-apres-retour-sur-le-commando-invisible-des-nouvelles-revelations-sur-la-mo-104151180.html

Besley, T., & Ghatak, M. 2008, "*Property Rights and Economic Development"*, [Draft Chapter for Volume IV of the Handbook of Development Economics edited by Dani Rodrik and Mark Rosenzweig]. Web 2 Sep 2014. Link: http://econ.lse.ac.uk/staff/mghatak/handbookBGdec08.pdf

Blattman, C., & Miguel, E. 2010, "Civil war". *Journal of Economic Literature*, 48(1): 3-57.

Bohra-Mishra, P. & Massey, D.S. 2011, "Individual Decisions to Migrate During Civil Conflict", *Demography*, 48(2): 401-424.

Bonwick, A. 2006, "Who really protects civilians?", *Development in Practice,* 16(3-4): 270-277.

Bosi, L. 2013, "Safe territories and violent political organizations", *Nationalism and Ethnic Politics*, 19(1): 80-101.

Brown, G.G., & Cox Jr, L.A.T. 2011, "How probabilistic risk assessment can mislead terrorism risk analysts", *Risk Analysis*, *31*(2): 196-204.

Brűck, T., Kroeger, A. & Vothknecht, M. 2012, "Who has to leave and why? Displacement in Kyrgyzstan: Evidence from a New Micro-Level Dataset", Unpublished Paper. Web 27 Sep 2014. Link: http://www.academia.edu/2098747/Who_has_to_leave_and_why_Displacement_in_Kyrgyzstan_Evidence_from_a_New_Micro-Level_Dataset

Brück, T., Justino, P., Verwimp, P. and Avdeenko, A. 2010, "Identifying Conflict and Violence in Micro-Level Surveys". Economics of Security Working Paper 38, Berlin: Economics of Security, July.

Brück, T., & Schindler, K. 2009, "The impact of violent conflicts on households: What do we know and what should we know about war widows?", *Oxford Development Studies*, *37*(3): 289-309.

Chambers, R., & Conway, G. 1992, "Sustainable rural livelihoods: practical concepts for the 21st century". Institute of Development Studies Discussion Paper 296, December, 1991.

Czaika, M. & Kis-Katos, K. 2009, "Civil conflict and displacement: Village-level determinants of forced migration in Aceh", *Journal of Peace Research,* 46(3): 399-418.

Daily Telegraph 2011, "Soldiers open fire on women protest in Ivory Coast", *Daily Telegraph*, 4 Mar 2011. Web. 21 Oct 2014. Link: http://www.telegraph.co.uk/news/worldnews/africaandindianocean/cotedivoire/8360781/Soldiers-open-fire-on-women-protest-in-Ivory-Coast.html

Davenport, C.A., Moore, W.H. & Poe, S.C. 2003, "Sometimes you just have to leave: Domestic threats and forced migration, 1964-1989", *International Interactions,* 29(1): 27-55.

Debos, M. 2011, "Living by the gun in Chad: Armed violence as a practical occupation", *Journal of Modern African Studies,* 49(3):409-428.

Engel, S. & Ibáñez, A.M. 2007, "Displacement due to violence in Colombia: A household-level analysis", *Economic Development and Cultural Change,* 55(2): 335-365.

Fiddian-Qasmiyeh, E., Loescher, G., Long, K., & Sigona, N. (Eds.) 2014, *The Oxford Handbook of Refugee and Forced Migration Studies*. Oxford University Press, 2014.

George, C., & Solomon, J. 1996, "Representational models of relationships: Links between caregiving and attachment", *Infant Mental Health Journal*, *17*(3): 198-216.

Guichaoua, Y. 2010, "How do ethnic militias perpetuate in Nigeria? A micro-level perspective on the Oodua People's Congress", *World Development,* 38(11):1657-1666.

Guichaoua, Y. 2009, "Self-determination group or extra-legal governance agency? The multifaceted nature of the Oodua people's congress in Nigeria", *Journal of International Development*, *21*(4): 520-533.

Human Rights Watch (HRW) 2011, *"They Killed Them Like It Was Nothing" The Need for Justice for Côte d'Ivoire's Post-Election Crimes*. Web 27 Oct 2014. Link: http://www.hrw.org/sites/default/files/reports/cdi1011WebUpload.pdf

Hultman, L. 2012, "COIN and civilian collaterals: patterns of violence in Afghanistan, 2004–2009". *Small Wars & Insurgencies*, *23*(2):245-263.

Humphreys, M., R. Sanchez de la Sierra, R. & Van der Windt, P. 2012, "Social and Economic Impacts of Tuungane: Final Report on the Effects of a Community Driven Reconstruction Program in Eastern Democratic Republic of Congo*",* Columbia University June 2012. Web 27 Oct 2014. Link: http://cu-csds.org/wp-content/uploads/2012/06/20120622-FINAL-REPORT.pdf

Humphreys, M., & Weinstein, J. M. 2006,. "Handling and manhandling civilians in civil war", *American Political Science Review*, *100*(3):429-447.

Ibáñez, A. M., & Vélez, C. E. 2008, "Civil conflict and forced migration: The micro determinants and welfare losses of displacement in Colombia", *World Development*, *36*(4):659-676.

International Crisis Group (ICG) March 2011, "Côte d'Ivoire: is war the only option?", *Africa Report* 171.

International Crisis Group (ICG) August 2011, "A critical period for ensuring stability in Côte d'Ivoire", Africa Report 176.

Internal Displacement Monitoring Centre (IDMC) 2014, "Global Overview 2014*"*, Web 22 Aug 2014. Link: http://www.internal-displacement.org/assets/publications/2014/201405-global-overview-2014-en.pdf

Jaspars, S., O'Callaghan, S., & Stites, E. 2007, "Linking livelihoods and protection: A preliminary analysis based on a review of the literature and agency practice", HPG Working Paper, London: Humanitarian Policy Group, Overseas Development Institute, December.

Justino, P. Brück, T. and Verwimp, P. (Eds.) 2013, *A Micro-Level Perspective on the Dynamics of Conflict, Violence, and Development.* Oxford: Oxford University Press.

Justino, P. 2013, "Research and policy implications from a micro-level perspective on the dynamics of conflict, violence and development". HiCN Working Papers 139, Households in Conflict Network.

Justino, P. 2012, "War and Poverty", In Garfinkel, M.G. & Skaperdas, S. (Eds.). (2012).*The Oxford Handbook of the Economics of Peace and Conflict.* Oxford University Press, Chapter 27.

Justino, P. 2009, "Poverty and violent conflict: A micro-level perspective on the causes and duration of warfare", *Journal of Peace Research*, *46*(3):315-333.

Justino, P. 2009b, "The impact of armed civil conflict on household welfare and policy responses" HiCN Working Papers 61, Households in Conflict Network.

Kalyvas, S. N. 2014, "Civil Wars and Organized Crime: Insights from the Intersection of Two Phenomena", Unpublished Paper.

Kalyvas, S. N. 2008, "Promises and pitfalls of an emerging research program: the microdynamics of civil war", In Kalyvas, S.N., Shapiro, I. & Masoud, T. (Eds.). (2008).*Order, Conflict and Violence*. Cambridge University Press. Chapter 16.

Kalyvas, S. N. 2006, *The Logic of Violence in Civil War.* Cambridge University Press. Part of Cambridge Studies in Politics.

Kalyvas, S. N., & Kocher, M. A. 2009, "The dynamics of violence in Vietnam: An analysis of the hamlet evaluation system (HES)", *Journal of Peace Research*,*46*(3): 335-355.

Kalyvas, S. N., & Kocher, M. A. 2007, "How 'free' is free riding in civil wars?", *World Politics, 59(2*): 177-216

Kaplan, O. 2013, "Protecting civilians in civil war: The institution of the ATCC in Colombia", *Journal of Peace Research*, *50*(3), 351-367.

Khantzian, E. J., & Mack, J. E. 1983, "Self-preservation and the care of the self—ego instincts reconsidered" *Psychoanalytic study of the child*, *38*: 209-232.

Keen, D. 2001, "*The political economy of war* "In: Stewart, Frances and Fitzgerald, Valpy, (eds.) *War and Underdevelopment. Vol.1, The Economic and Social Consequences of Conflict*. Queen Elizabeth House Series in Development Studies. Oxford University Press, Oxford, UK, 39-66. ISBN 9780199241873

Keen, D. 2005, *Conflict and Collusion in Sierra Leone*, James Currey (imprint of Boydell & Brewer Ltd.), Martlesham, Suffolk, UK. ISBN 9780852558836

Korf, B. 2004, "War, livelihoods and vulnerability in Sri Lanka", *Development and Change,* 35(2): 275-295.

Kulatunga, S.T.K. & Lakshman, R.W.D. 2013, "Responding to security threats: Livelihoods under protracted conflict in Sri Lanka", *Disasters,* 37(4): 604-626.

Lindley, A. 2010, "Leaving Mogadishu: towards a sociology of conflict-related mobility", *Journal of Refugee Studies*, *23*(1): 2-22.

Lindley, A. 2009, "Leaving Mogadishu: The War on Terror and Displacement Dynamics in the Somali Regions", MICROCON Research Working Paper 15, Brighton: MICROCON.

Lischer, 2014,"Conflict and Crisis-induced Displacement". In Fiddian-Qasmiyeh, E., Loescher, G., Long, K., & Sigona, N. (Eds.). (2014). *The Oxford Handbook of Refugee and Forced Migration Studies*. Oxford University Press. Chapter 25.

Lyall, J. 2009, "Does indiscriminate violence incite insurgent attacks?: Evidence from Chechnya", *Journal of Conflict Resolution,* 53(3):331-362.

Lozano-Gracia, N., Piras, G., Ibáñez, A.M. & Hewings, G.J.D. 2010, "The journey to safety: Conflict-driven migration flows in Colombia", *International Regional Science Review,* 33(2): 157-180.

Lubkemann, S.C. 2008, *Culture in Chaos: An Anthropology of the Social Condition in War*. Chicago, University of Chicago Press.

McPeak, J. 2006, "Confronting the risk of asset loss: What role do livestock transfers in northern Kenya play?" *Journal of Development Economics*, *81*(2): 415-437.

McPeak, J. 2004, "Contrasting income shocks with asset shocks: livestock sales in northern Kenya". *Oxford Economic Papers*, *56*(2), 263-284.

Melander, E., & Öberg, M. 2007, "The threat of violence and forced migration: Geographical scope trumps intensity of fighting". *Civil Wars*, *9*(2), 156-173.

Minoiu, C., & Shemyakina, O. N. 2014," Armed conflict, household victimization, and child health in Côte d'Ivoire". *Journal of Development Economics*, *108*, 237-255.

Mironova, V., Mrie, L., & Whitt, S. 2014, "Fight or Flight in Civil War? Evidence from Rebel-Controlled Syria". *Evidence from Rebel-Controlled Syria (August 11, 2014).*

Moore, W.H. & Shellman, S.M. 2007, "Whither will they go? A global study of refugees' destinations, 1965-1995", *International Studies Quarterly,* 51(4): 811-834.

Moore, W.H. & Shellman, S.M. 2006, "Refugee or internally displaced person?: To where should one flee?", *Comparative Political Studies* 39(5): 599-622.

Moore, W.H. & Shellman, S.M. 2004, "Fear of persecution: Forced migration, 1952-1995", *Journal of Conflict Resolution:* 48(5):723-745.

Morrison, A. R. (1993). Violence or economics: what drives internal migration in Guatemala? Economic Development and Cultural Change, 817-831.

Medecins Sans Frontieres (MSF) 2012, [Email correspondence on MSF work in PK18] (Personal Communication, 31 Oct 2012).

Rader, N. E., May, D. C., & Goodrum, S. 2007,"An empirical assessment of the "threat of victimization:" Considering fear of crime, perceived risk, avoidance, and defensive behaviors". *Sociological Spectrum*, *27*(5), 475-505.

Richmond, A. H. 1995, *Global apartheid: Refugees, racism, and the new world order,* Canada, Oxford University Press

Rockmore, M. 2011, "The Cost of Fear: The Welfare Effects of the Risk of Violence in Northern Uganda", Households in Conflict Working Paper No. 109.

Rubin, J.H. & Moore, W.H. 2007, "Risk factors for forced migrant flight", *Conflict Management and Peace Science,* 24(2):85-104.

Ruiz, I. & Vargas-Silva, C. 2013, "The Economics of Forced Migration", *Journal of Development Studies,* 49(6): 772-784.

Sandmo, A. 1970, "The effect of uncertainty on saving decisions", *The Review of Economic Studies*, 37(3): 353-360.

Schaeffer, P. 2010, "Refugees: On the economics of political migration", *International Migration,* 48(1):1-22.

Sen, A. 1981, "Ingredients of famine analysis: availability and entitlements", *Quarterly Journal of Economics,* 96(3): 433-464.

Serneels, P., & Verpoorten, M. 2013, "The impact of armed conflict on economic performance Evidence from Rwanda", *Journal of Conflict Resolution*, Published online before print December 30, 2013, doi: 10.1177/0022002713515409.

Sørensen, BR & Vincent, M (eds) 2001, *Caught between Borders: Response Strategies of the Internally Displaced*. Pluto Press, London.

Stark, O., & Bloom, D. E. 1985, "The new economics of labor migration", *The American Economic Review*, 75:173-178.

Steele, A. 2011, "Electing displacement: Political cleansing in Apartadó, Colombia", *Journal of Conflict Resolution,* 55(3): 423-445.

Steele, A. 2009, "Seeking safety: avoiding displacement and choosing destinations in civil wars", *Journal of Peace Research*, *46*(3): 419-429.

Stewart, F., & Fitzgerald, V. (Eds.) 2000, *War and Underdevelopment, Volume 1: The Economic and Social Consequences of Conflict*. Todaro, Oxford University Press.

Turton, D. 2003, "Conceptualising forced migration". Refugee Studies Centre, Working Paper, 12. University of Oxford.

United Nations High Commissioner for Refugees (UNHCR), 2014, *UNHCR Global Trends 2013* 2014. Web 27 August 2014. Link: http://www.unhcr.org/5399a14f9.html.

Utas, M. 2005, "Victimcy, girlfriending, soldiering: Tactic agency in a young woman's social navigation of the liberian war zone", *Anthropological Quarterly,* 78(2):403-430.

Valentino, B.A. 2014, "Why we kill: The political science of political violence against civilians", *Annual Review of Political Science*, (Spring 2014).

Van Hear, N. 1998, New Diasporas: Mass Exodus, Dispersal and Regrouping of Migrant Communities, Routledge Publisher an imprint of Taylor & Francis Books Lt, 1998.

Varenne, L. 2012, *Abobo la guerre: Côte d'Ivoire: Terrain de jeu de la France et de l'ONU*. Fayard/Mille et une nuits

Verpoorten, M. 2009, "Household coping in war- and peacetime: Cattle sales in Rwanda, 1991-2001", *Journal of Development Economics,* 88(1):67-86.

Weinstein, J. M. 2006, *Inside rebellion: The politics of insurgent violence,* Cambridge Studies in Comparative Politics. Cambridge University Press.

Wood, R. M. 2010, "Rebel capability and strategic violence against civilians", *Journal of Peace Research*, *47*(5), 601-614.

Wood, E. J. 2008, "The Social Processes of Civil War: The Wartime Transformation of Social Networks" *Annual Review of Political Science.* 11:539–61.

Zetter, R., Purdekova, A., & Ibáñez Londoño, A.M. 2013, "Violence, Conflict, and Mobility—a Micro-Level Analysis." In Justino, P., Brück, T. & Verwimp, P. (Eds.) 2013, *A Micro-Level Perspective on the Dynamics of Conflict, Violence, and Development.* Oxford: Oxford University Press.

Zhukov, Y. M. 2013, "An epidemic model of violence and public support in civil war", *Conflict Management and Peace Science*, *30*(1), 24-52.

Zolberg, A. R., Suhrke, A., & Aguayo, S. 1989, *Escape from violence: conflict and the refugee crisis in the developing world*, Oxford University Press

Appendices

Appendix I

Survey instrument for first 500 households

Appendix II

Survey instrument for second round of 210 households

Appendix III

Full templates for civilian interviews

Appendix IV

Accounts of the reasons for displacement decisions from households impacted by violence

Appendix V

Missing data in the subjective threat rankings

Appendix VI

Threat importance construction robustness checks