

MICRO CON

**A MICRO LEVEL ANALYSIS
OF VIOLENT CONFLICT**

Poverty and Violent Conflict: A Micro Level Perspective on the Causes and Duration of Warfare

**MICROCON Research Working Paper 6
Patricia Justino
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Poverty and Violent Conflict:

A Micro-Level Perspective on the Causes and Duration of Warfare¹

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Abstract: This paper argues that endogenous mechanisms linking processes of violent conflict and household poverty provide valuable micro foundations to the ongoing debate on the causes and duration of armed conflicts. Household poverty affects the onset, sustainability and duration of violent conflict due to the direct and indirect effects of violence on the economic behaviour and decisions of households in conflict areas. These effects lead to the emergence of symbiotic relationships between armed groups and households living in areas they control that may sustain the conflict for a long time. The strength of this relationship is a function of two interdependent variables, namely household vulnerability to poverty and household vulnerability to violence.

JEL codes: D74, I32, O01.

Keywords: Household poverty, household welfare, causes of armed conflict, duration of conflict, micro-foundations of conflict.

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1. Introduction and scope of the paper

A large proportion of the poor across the world is affected by widespread violence and conflict, while empirical analyses of civil war point to low-per capita income as the most robust explanatory factor in determining the risk of violent internal conflict breaking out.³ There is, however, remarkably little systematic understanding of the role of household poverty, and household welfare in general, on the onset and duration of armed conflict, or the impact of violent conflicts on the lives of those in fighting areas and on people's own agency to escape poverty during and after conflict. The role of economic factors on the outbreak and duration of civil wars have attracted the attention of many scholars in recent years,⁴ some of which have drawn attention to the relationship between conflict and poverty.⁵ These studies highlight the significant role played by resource predation, power-grabbing, grievances, social discontent and the protection of the economic status of elites in the outbreak and duration of civil wars. Most existing research on the economic motivations of civil war is, however, based on national-level analysis, which implicitly assumes the course of armed conflict to be determined by the preferences and behaviour of elites (either state elites or rebel group leaders). This approach offers limited application to the analysis of the economic behaviour and agency of households and individuals living in conflict areas. The objective of this paper is to address this gap in the literature by proposing a framework to think about fundamental endogenous mechanisms

³ Collier et al. (2003), Collier and Hoeffler (2004), Deininger (2003), Elbadawi and Sambanis (2000), Fearon and Laitin (2003), Hegre and Sambanis (2006).

⁴ See, amongst others, Collier and Hoeffler (1998, 2004), Collier et al. (2003, 2004), Doyle and Sambanis (2006), Elbadawi and Sambanis (2002), Fearon (2004), Fearon and Laitin (2003), Keen (1997, 1998), Ross (2006).

⁵ For instance, Do and Iyer (2007), Elbadawi (2001), Elbadawi and Sambanis (2000), Goodhand (2001), Nafziger, Stewart and Väyrynen (2000), Stewart and Fitzgerald (2001), World Bank (2005).

linking the economic status of households in conflict areas and processes of violent conflict. I argue that endogenous interactions between household economic decisions and armed violence provide valuable though overlooked micro foundations to recent debates on the causes and duration of civil wars.

At a fundamental level, violent armed conflicts originate from the behaviour and motivations, not only of rebel groups, elites and the state army, but also ordinary members of society. All forms of violence mould the economic behaviour of individuals and their kin in ways that will have significant implications for policies aimed at the prevention of new conflicts and the resolution of ongoing armed violence. Households in conflict areas must adapt to strenuous circumstances to survive. They take on available opportunities (which may or may not include fighting, looting and denunciation of former friends and neighbours), adopt forms of livelihoods that may lead to severe poverty traps but avoid famine (or not), join in informal exchange and employment markets (which may or may not include illegal activities), form social and political alliances in new areas of residence that may allow economic survival or may lead to a life of crime and violence (or both), and take on different social and political identities in response to their exposure to violence, the efficacy of mobilisation by different factions and changes in territorial and population control by state armies and rebel groups. These endogenous processes of socio-economic transformation at the household level, which originate from armed conflict and the threat of violence, but also affect the organisation of violence and fighting strategies, have considerable implications for how the conflict emerges, evolves and lasts.

This paper explores analytically internal characteristics of conflict processes rooted in the endogenous relationship between violence and household economic behaviour that explain the outbreak, sustainability and duration of armed conflicts. This analysis does not intend to take into account every possible cause, process and outcome of violent conflict. Its main aim is rather to provide a framework to think about key, though largely ignored, endogenous interactions between micro level processes of violent conflict and the behaviour households adopt to protect their economic status and livelihoods in areas of armed conflict.

Violent conflict is wide-ranging term, which designates a variety of political phenomena including, amongst others, revolutions, rebellions, coups, genocide and wars. In order to focus the discussion, this paper concentrates on processes of violence that result from “armed combat within the boundaries of a recognised sovereign entity between parties subject to a common authority at the outset of the hostilities” (Kalyvas, 2007: 17), with a particular emphasis on insurgent civil wars. Other types of conflict are certainly likely to affect and be affected by the actions and behaviour of poor households, albeit through different transmission mechanisms to those being analysed in this paper.⁶

The term ‘household’ in this paper designates a group of non-state actors that share common living arrangements. As regularly experienced in conflict settings, households

⁶ For the economic analysis other types of conflict see Becker (1967) on crime, Justino (2006) on communal riots and industrial disputes, Krueger and Malečková (2003) on suicide bombers, Bueno de Mesquita (2005) on individual participation in terrorist organisation and Tolman and Raphael (2000) on domestic violence.

may include both civilian and non-civilian actors, where fighters may be recruited (voluntary or by force) by either the state military or rebel groups. The paper focuses both on decisions taken by the household as an economic unit and by individual household members in their different roles during the course of armed conflict. The typical household I have in mind is a rural household living in areas disputed by armed groups with members employed mostly in agricultural activities, or households living in small towns in rural areas of dispute. When discussing the role of household poverty in the outbreak and duration of conflict I consider both households that are poor at the start of the conflict (i.e. unable to command sufficient resources that allow its members to live above a minimum standard of living) and households that were not necessarily poor before the start of the hostilities but become vulnerable to poverty during (and because of) the conflict.

The paper is organised as follows. In section 2, I explore the channels through which conflict-related violence affects the economic status of households in conflict areas. In section 3, I consider the range of economic choices available to households exposed to violence and discuss how the impact of violence on their economic status creates a symbiotic relationship between households in conflict areas and the armed groups that control those areas. This relationship determines to a large extent the sustainability and duration of armed conflicts due to its importance for the strategic success of armed groups. In section 4, I offer a theoretical framework to understand the relationship between households in conflict areas and armed groups. I argue that the strength of this relationship is a function of two household-level variables responsible for the capacity of

households to adapt to the effects of violence, namely their *vulnerability to poverty* and *vulnerability to violence*. I put forward several theoretical hypotheses on how the levels of household vulnerability to poverty and violence affect household participation and support of armed groups, and hence the sustainability and duration of warfare. In the concluding section, I discuss some theoretical, empirical and policy implications of this analysis.

2. The impact of violent conflict on household poverty

Violent conflict affects households living in areas of combat, or in areas where direct combat does not take place but are indirectly affected by the fighting, through the intensity and types of violence it sets in motion (Kalyvas, 2007). Processes of violence impact on the economic status of households through the direct and indirect material, human, social, political and cultural transformations they entail. These channels are illustrated in figure 1. Direct effects (represented by dotted lines) include changes in household composition due to killings, injuries and recruitment of fighters, changes in the household economic status due to the destruction of assets and livelihoods and effects caused by forced displacement and migration. Indirect effects (represented by full lines) can take place at the local (community) level or at the national level. Local indirect effects include changes in households' access to and relationship with local exchange, employment, credit and insurance markets, social relations and networks and political institutions. National-level indirect channels consist of changes in economic growth and in distributional processes that impact on household welfare.

2.1. Direct impact of violent conflict: household composition, wealth and residence

Civil wars in the last three decades have killed tens of millions of people, most of which civilians, and caused extensive injuries, disability and psychological damage to millions more.⁷ During violent conflicts, assets such as houses, land, labour, utensils, cattle and livestock get lost or destroyed through heavy fighting and looting.⁸ Farmers often suffer the worst losses.⁹ These effects are made worse (and often caused by) the large population movements that accompany most violent conflicts: in 2004, 25 million people were displaced (UNCHR, 2005), many within their own country (IDMC, 2006).

To many households in conflict areas, these direct effects of violence will result in considerable reductions in their total income and consumption due to the loss of livelihoods and decrease in household productivity when key household workers die or are incapacitated, when assets get destroyed or stolen and when surviving members have to draw on existing savings to pay for medical bills or forgo employment to care for injured and disabled household members. These effects are aggravated by the breakdown of families and formal and informal social protection mechanisms caused by displacement and fighting.

⁷ Ghobarah, Huth, Russett (2003), Lacina and Petter Gleditsch (2005).

⁸ Bundervoet and Verwimp (2005), Ibáñez and Moya (2006), Shemyakina (2006), Verpoorten (2003).

⁹ Bundervoet and Verwimp (2005), Justino and Verwimp (2006), Matijasevic et al. (2007), Rahayu and Febriany (2007).

These outcomes of violence are often enough to push previously vulnerable households into extreme forms of poverty, which may affect individual and household welfare for generations to come (Alderman, Hoddinott and Kinsey, 2006). Households tend to replace adult workers with children,¹⁰ if these have not become fighters as well, who as a result experience large reductions in educational and health attainments. In addition, employment in new areas of location may not be sufficient to recover lost welfare. Displaced populations often struggle to find work,¹¹ are less likely to work in the post-conflict period (Kondylis, 2007) and exhibit lower productivity levels than those that stayed behind (Kondylis, 2005).

These negative effects may be counteracted by opportunities raised by conflict. Some will benefit from violence through looting (Keen, 1998), the redistribution of assets during conflict (Brockett, 1990; Wood, 2003), and the privileged access to market and political institutions for those that ‘win’ the conflict or support winning factions during the conflict. Population movements may also entail some positive effects. Although patterns of forced displacement feature prominently in accounts of violent conflict, some emerging evidence suggests that more traditional forms of migration from conflict areas to safer countries can play a key role in mitigating some of the negative effects of armed conflict on livelihoods and the economic status of households through remittances (Justino and Shemyakina, 2007; Lindley, 2007). These effects are as important in understanding processes of violent conflict as the more negative effects of violence since

¹⁰ The use of children as a form of economic security mechanism is widely reported in the development economics literature. See for instance Basu and Van (1998).

¹¹ Centre for Poverty Analysis (2006), Engel and Ibáñez (2007), Ibáñez and Moya (2006), Matijasevic et al. (2007).

both will have significant bearing on the sustainability of peace during the post-conflict period.

2.2. Indirect impact of violent conflict on local markets

The impact of exchange and employment markets on the economic status of households operates through changes in the market price of goods sold and purchased by the household (both staple goods and cash crops), which determines the profit from household productive activities and wages (Singh, Squire and Strauss, 1986). The impact of insurance and credit markets takes place through changes in savings, and hence potential investment (Rosenzweig and Wolpin, 1993). Empirical evidence on the operation of these mechanisms during armed conflict is scarce. Some studies have shown that the prices of staple food tend to increase during conflicts due to the scarcity of goods, farmers trying to protect crops against raiding, the destruction of land, seeds and crops and the risks associated with market exchanges during violence outbreaks (Azam, Collier and Cravinho, 1994; Bundervoet, 2006). At the same time, the prices of other commodities produced and assets held by households (particularly cattle and other livestock) tend to fall dramatically during conflict (Bundervoet, 2006; Verpoorten, 2005).

The effect of these changes on household productive decisions is unclear as other factors must be taken in consideration, notably increases in transaction costs caused by difficulties in accessing exchange markets when roads, train lines and other infrastructure is destroyed, adjustments to credit and insurance mechanisms and changes in access to

off-farm employment. These areas of research are still in their infancy. However, it seems clear that if households are not able to switch activities or cannot access credit, insurance or alternative employment, market shocks during armed conflict may result in significant reductions in household utility and welfare. In extreme cases, households will resort to subsistence activities, which may hinder the household's capacity to accumulate assets but may protect them against severe destitution.¹² If the household is able to switch activities in order to take advantage of new opportunities then losses may be small or the effect may even be positive.

2.3. Indirect impact of violent conflict on community relations

The development literature provides a good understanding of the importance of (both positive and negative) effects of social networks on the lives of the poor in peaceful settings (e.g. Fafchamps and Lund, 2002; Durlauf, 2006). In addition, the post-conflict literature has shown abundant evidence for the importance of community relations and networks in maintaining peace (Colletta and Cullen, 2000; Varshney, 2002). Evidence on community relations during conflict is less readily available. Some studies have shown how community relations and norms strengthen during the conflict (Wickham-Crowley, 1991; Petersen, 2001). These effects may create important community ties to cope (and perhaps avoid) violence, but may also (re)enforce some forms of social capital that either feed into the conflict itself or may constitute the 'tipping point' for the outbreak of

¹² See De Janvry, Fafchamps and Sadoulet (1991) for a theoretical analysis of household subsistence decisions and Brück (2004) and McKay and Loveridge (2005) for analyses of the impact of subsistence agriculture on household welfare in post-conflict settings.

violence.¹³ Similar effects take place amongst displaced populations. Community networks are fundamental in facilitating the transition of people to new locations. But displacement into areas where productive activities cannot be accessed may also trap households in criminal and violent networks, or in semi-legal and illegal forms of activity (Moser and McIlwaine, 2004; Salehyan and Gleditsch, 2006; Steele, 2007). The economic outcome of these changes is unclear as few studies reflect on the impact caused by the transformation of social relations, and the formation of new alliances and networks, on the economic status of households in conflict areas.

2.4. Indirect impact of violent conflict on political institutions

Armed conflicts change the structure of political institutions, both local and national, and their relationship with populations. These changes are likely to impact on the economic well-being of households in conflict areas through changes in the ability of political institutions to provide public goods, physical security and the protection of property rights. Households that are more vulnerable to economic decline and whose members are more likely to be targets of violence will be badly affected by these changes. But violent conflict also offers important opportunities for new local leaders to challenge old political powers and for local alternative governance structures to emerge in places where the state is absent (either before the conflict or due to the loss of territorial control during the conflict).¹⁴ The impact of these forms of political transformation and power competition

¹³ This argument is illustrated in Petersen (2001) and Pinchotti and Verwimp (2007). Kalyvas (2007) refers to these important community-level effects as the ‘dark side of social capital’ (pp. 14).

¹⁴ Arjona and Kalyvas (2006), Kalyvas (1999), Reno (2002), Valentino (2004).

on the economic status of households living in communities governed and controlled by armed groups is unclear.

The economics literature has shown that institutional effects are responsible for poverty traps when political forces result in dysfunctional institutions that perpetuate inequalities in power and wealth (Bowles, Durlauf and Hoff, 2006). Some conflict processes may result in the abolition of dysfunctional institutions and biases in the distribution of those variables. Other conflicts may establish and entrench new forms of dysfunctional political behaviour. Institutional organisation, either by state or non-state actors, determines the access of households to education opportunities, to buy land and other assets, to borrow funds and invest them in productive activities and to have a voice in socio-political decisions in their communities. Organisations that favour corrupt, rent-seeking and destructive behaviour will perpetuate dysfunctionality (Sánchez and Palau, 2006). On the other hand, organisations that promote the rule of law, enforce appropriate norms of conduct and impose sanctions for undesirable behaviour may improve the living conditions of households under their control and administration.¹⁵

2.5. Indirect impact of violent conflict on economic growth and distribution

The direct and indirect effects of violent conflicts can be made more or less acute through changes in overall economic growth and the distribution of national incomes. Violent conflicts have been one of the most significant causes of growth decline in modern economies (Collier, 1999, 2007), through the damage they cause to infrastructure,

markets and social cohesion (see above), and their effects on the capacity of economies responding to other shocks (Rodrik, 1998). These effects may be sufficient to drive many poor households into forms of poverty traps, and to push households that were relatively well-off at the start of the conflict into poverty. This may in turn reinforce the mechanisms that triggered conflict and violence in the first place,¹⁶ or create new incentives for violence (Cárdenas, 2002).

The economic status of households is determined not only by changes in economic growth, but also by changes in the distribution of incomes (Ravallion, 2004). Large shocks have been shown to produce profound restructuring of existing social norms and distributional arrangements (Dercon, 2004). Armed conflict, in particular, and its aftermath, may well result in the exclusion of certain groups from social, economic and political opportunities. A large literature has examined the impact of inequalities on the onset of civil conflict.¹⁷ Much less exists on the impact of conflict on distributional arrangements in societies affected by violence,¹⁸ though emerging literature shows evidence for a readjustment in not only in the distribution of national incomes but also in sub-national patterns of distribution that may have considerable implications for macroeconomic policies in the post-conflict period.

3. Household adaptation strategies and the duration of violent conflicts

¹⁵ Arjona and Kalyvas (2006), Bellows and Miguel (2006), Olson (2000), Weinstein (2007).

¹⁶ Miguel, Satyanath and Sergenti (2003) find that a negative growth shock of five percentage points increases the likelihood of conflict by one-half in the following year in sub-Saharan Africa.

¹⁷ For instance, Esteban and Ray (1994), Muller and Seligson (1987), Østby (2006).

¹⁸ Exceptions are Brück et al. (2008) at the cross-sectional level and Cárdenas (2002), McKay and Loveridge (2005) and Justino and Verwimp (2006) at the micro-level.

The analysis in the section above illustrated how the exposure of households and individuals to violence during the conflict affects their economic status. In some cases, these effects can be severely damaging. In others, the benefits from violent conflict may be substantial. In general, this net impact will depend on the capacity of households to adapt to changing economic, social and political circumstances. Households living in risky environments tend to develop a complexity of (ex ante) risk-management and (ex post) risk-coping strategies. Common strategies include the diversification of land holdings and crop cultivation, the storage of grain from one year to the next, resorting to sales of assets such as cattle and land that could have been accumulated as a precaution against the occurrence of a shock, borrowing from village lenders or other moneylenders, and the use of gifts and transfers from informal mutual support networks (e.g. family, friends, neighbours, funeral societies, and so forth).¹⁹ Although there is currently little understanding of differences between war-time and post-war coping strategies of households, accumulating evidence seems to suggest that almost all these strategies will be considerably restricted in contexts of violent conflict.²⁰ As a result, initial outbreaks of conflict are likely to create a cycle of conflict and poverty traps from which households are not able to escape easily (Collier, 2007; Justino, 2008).

There are nonetheless plenty of accounts of people's economic and social ingenuity and resilience in contexts of enduring violence. Many households leave areas of more intense

¹⁹ See Townsend (1994) for a full analysis of a general insurance model and an extensive review of these strategies.

²⁰ Azam, Collier and Cravinho (1994), Bundervoet (2006), de Walque (2004), Ibáñez and Moya (2006), Verpoorten (2003, 2005).

fighting to refugee and displacement camps, migrate to safer urban areas or move abroad. But numerous households live in conflict areas and survive (see Wood, 2003; Steele, 2007). They do so by integrating themselves (voluntarily or reluctantly) within social and political alliances that form locally and new forms of (legal and illegal) economic exchange. Often this involves participating and supporting armed groups through the provision of soldiers, shelter, food and information. This mechanism is represented by the double lines in figure 1.

This relationship between households and armed groups, which results from the conflict process itself, plays an important role in the sustainability of armed conflicts by making the organisation of the conflict a function of the symbiotic relationship established between armed groups and households living in areas they control. Armed groups make use of different levels of support from local populations to advance their strategic objectives, while ordinary citizens draw on armed groups to protect their economic status in times of violence. The higher the level of participation and support for armed groups, the more likely the strategic objectives of armed group are to succeed during and after the conflict. If the armed group faces a much weaker opposition, it may be able to win the conflict and form a government. In that case, population support is necessary for the group's strategic objectives as it will create the citizenship basis to support transition from armed fighting to legitimate state and nation-building. If the armed group faces an opposition of similar strength or stronger, the conflict may last for a long time (or end but re-occur over and over) because the 'losing' group may still have at their disposal population resources (in addition to other resources) to support the re-ignition of conflict.

This may then lead to a vicious cycle of poverty and conflict, which has been systematically reported in the literature. Participation and support of ordinary citizens provides an explanation for the (short or long) duration of armed conflicts because it determines to a large extent the strength of armed groups.

Why would those living under precarious economic conditions participate in violent conflicts or cooperate with armed groups? Evidently, individuals and households that benefit directly from the conflict will have an interest in supporting the actions of armed groups because they have a lot to gain from the conflict. This mechanism is well documented in the literature on collective action (Olson, 1965; Lichbach, 1995), which attributes participation in collective action to the presence of selective incentives such as improved socio-economic opportunities,²¹ looting and appropriation of valuable assets (Keen, 1997, 1998; Verwimp, 2005).²² However, material benefits accrued to rank and file soldiers are generally at best sufficient to satisfy basic needs as larger profits tend to remain within the leadership of the armed group (Humphreys and Weinstein, 2004; Verwimp, 2005). Therefore, many may support and cooperate (voluntarily or involuntarily) with armed groups, or may start to cooperate if they did not do so, not just for opportunistic reasons, but also for survival and fulfilment of basic economic needs (Humphreys and Weinstein, 2006; Richards, 1996). Armed groups provide employment to younger household members, facilitate access to land (that they may have appropriated in the first place), may allow small businesses to continue to operate, may be capable to

²¹ Collier and Hoeffler (1998), Grossman (2002), Hirshleifer (2001), Keen (1998, 2005).

²² Recent studies have shown that socio-emotional motivations – ‘pleasure of agency’, revenge, grief, anger and pride – may also matter significantly in explaining individual mobilisation in collective acts of violence. See, amongst others, Wood (2003) and Petersen (2001).

provide access to resources (depending on their endowments), offer physical protection from violence and are able to access better information about the activities of opposing armed groups (often through the networks formed by their civil support groups). Many individuals and their families are of course forced into forms of involuntary participation through coercion, abduction, peer-pressure and fear of violence and sanction.²³ But, in many circumstances, people simply cannot afford to stay out because non-participation is very costly. Although participation yields high costs (of death, injury and imprisonment), staying out can be as much of a risk, as non-participation increases the danger of violence and destitution (Kalyvas and Kocher, 2007).²⁴

Of course the sustainability and duration of armed conflict depends on several factors including external military and financial intervention, the level of technology and resources available to each armed group, the strength of their ideological beliefs, the relative strength of state presence in key areas in the country,²⁵ and the successful efforts by rebel leaders to secure social basis of support (which can be done through appealing to ideology, ethnic divides and so forth or through abductions and the spread of fear). But it depends also on internal characteristics of conflict processes such as the participation and support of local populations, which in turn is determined by the conflict itself. However, not all households and individuals support and participate in armed groups or provide recruits, even in areas controlled by the group, and despite the presence of the various

²³ Blattman and Annan (2007), Humphreys and Weinstein (2004), Kalyvas (2007), Verwimp (2005).

²⁴ Walter (2004) makes a complementary argument when arguing that 'misery' can act as incentives for the retention of fighters in armed groups during conflict, while Bueno de Mesquita (2005) discusses the potential role of individual low ability and low education as a motivation to join terrorist organisations.

²⁵ The role of natural resources such as oil, minerals and precious stones in the outbreak of civil wars is well documented. Humphreys (2005) and Ross (2004) provide critical reviews of this literature.

incentives discussed above (see Wood, 2003; Steele, 2007). What then makes some households and their members participate?²⁶

4. The participation of the poor in armed groups

The analysis in the two previous sections suggests that participation is a function of two interdependent variables. The first is initial household characteristics, which determine the extent of the household's *vulnerability to poverty*. The second is the extent of the exposure of the household to violence during conflict or, in other words, its *vulnerability to violence*. The interaction between these two variables determines the probability of a given household (or its members) participating in and supporting armed groups due to their effects on the costs of participation in relation to the costs of non-participation.

Initial household fixed effects, including its economic position, composition and location, are important determinants of how households adapt to violent conflict. Initial asset endowments held by the household will determine its capacity to draw on savings and accumulated assets when household members die or are injured, adapt to losses in productive assets or access new forms of livelihood in relocation areas. Households in possession of land holdings, livestock and savings may be able to use these to secure their access to food and credit and replace assets. Wealthier households will in principle be in a better position to protect themselves against the (negative) economic transformations

²⁶ Petersen (2001) distinguishes between several levels of participation by individuals in insurrections. This paper does not make these finer grain distinctions. Household participation in the context of the paper includes instances when household members become fighters in rebel groups or the state army, as well as

associated with conflict. Poorer households face higher economic costs of non-participation due to both the high costs of staying neutral (for instance, access to land and markets may be further restricted) and the high costs of outside options (often they are not available).²⁷ As a result:

Hypothesis 1: *The poorer the household is at the start of the conflict, the higher is the probability of the household participating and supporting an armed group.*

This hypothesis does not imply that poverty amongst households and individuals will per se result automatically in a higher rate of participation in armed groups. But high vulnerability to poverty increases the risk of non-participation which in turn provides important mechanisms whereby armed groups can extend their support basis, recruit fighters and agree on forms of reciprocity with civilians in areas they wish to control.

However, households that are poorer at the start of the conflict do not necessarily have to be the worst affected by the direct and indirect impacts of violence as better-off households may be characterised by particular features that may make them more prone to violence. This leads to the second condition for household participation in armed groups: their level of *vulnerability to violence*. This condition refers to the specific characteristics of households and their members that may make them more prone to being

the provision of material support, shelter and information to any of the fighting groups. Deliberate non-denunciation of activities of armed groups is also considered to be a form of participation.

²⁷ This hypothesis is consistent with evidence that poorer individuals constitute the bulk of soldiers in armed groups (e.g. Humphreys and Weinstein, 2004), that poor peasants participate in insurgencies (e.g. Wood, 2003), evidence on differentiated patterns of displacement across individuals (e.g. Czaika and Kis-Katos, 2007) and that price reductions in labour-intensive sectors encourage conflict through increases in incentives for mobilisation (Dube and Vargas, 2007).

a target of violence, being recruited into fighting units or being forced to leave their area of residence. These characteristics may have to do with identifiable forms of group membership (for instance, being from a certain race or ethnic or religious group), geographic location (such as living in areas of combat or ‘being in the wrong place at the wrong time’) or may be economic (for instance, holding property and other assets coveted by fighting units).²⁸

The advantages or disadvantages of initial economic characteristics may be emphasised by the conflict itself. Economic elites may reinforce their economic, social and political position if the faction they support wins the conflict, or if they are able to isolate themselves and their property abroad and away from destruction. Poorer households, on the other hand, may become even worse-off when access to markets and informal networks becomes restricted and local forms of governance reinforce previous injustices and economic disparities. However, the advantages and disadvantages of initial characteristics may be overhauled by the exposure of the household to violence. Wealthier households may lose their initial economic advantage when their property is looted or destroyed, whereas poorer households may gain from economic, social or political connections with armed groups. High risk of exposure to violence from one armed group will increase the probability of a household and its members supporting and participating in the opposing group (see Kalyvas, 2007; Kalyvas and Kocher, 2007):

²⁸ Justino and Verwimp (2006) show that households that were land-rich and non-poor in 1990 were the worse affected during the 1994 Rwandan genocide.

Hypothesis 2: *The higher the risk of violence, the higher is the probability of the household participating and supporting an armed group.*

Although the initial characteristics that make households vulnerable to poverty and violence may arguably be largely immutable, the levels of vulnerability of a specific household may evolve during the conflict in response to the economic, social and political transformations that take place locally, in particular, the forms of community alliances that are formed and the types of governance and organisation of violence exercised by the armed group in command of the area of residence of the household. These structures depend, as discussed in section 2, on the level of control exercised in the territory by each armed group (Kalyvas, 2007), and the resources available to armed groups (Weinstein, 2007). We would expect that the higher the level of control exercised by the armed group and the higher the resources available locally, the higher is the probability that a given household living in the area will participate in and collaborate with the armed group. This is due to three factors. First, the armed group will be in a better position to provide the resources needed to avoid poverty and destitution. Second, violence (in particular indiscriminate violence) is also likely to decrease with levels of territorial and resource control (Kalyvas, 2007). And thirdly, high levels of control and access to local resources (including a large population support basis) are more likely to result in forms of ‘stationary banditry’ where the provision of security, welfare and norms of behaviour may promote better living conditions amongst the population. The fact that households that are more vulnerable to poverty and violence will tend to support armed groups more strongly may of course be used strategically by the armed group, who may

take appropriate actions against selected households to make them dependent on their protection.²⁹ However, this strategy may backfire if valuable households and their members move to another location, move into other faction's protection or decide to challenge the authority and control of the armed group locally.

The hypotheses above suggest how in general the levels of household vulnerability to poverty and vulnerability to violence affect the probability of household participation in any armed group during conflict. Lets us now imagine a situation where an armed group takes over the control of one specific community. Some households (or their members) will stay and participate, some may stay and remain neutral and some may move. What determines each option? The interaction between the levels of household vulnerability to poverty and violence should result in four distinct scenarios. Each scenario results in several testable hypotheses about household participation in the local armed group, which are outlined in figure 2.

The first scenario (A) includes households that are highly vulnerable to both poverty and violence. These are for instance poor households that belong to particular ethnic groups or poor households with large numbers of young males. These households will always participate unless the violence is exercised by the local armed group. In that case, households and individuals that can escape persecution will flee to refugee or IDP camps.³⁰

²⁹ Azam (2006) uses a similar justification to explain raiding and looting of agricultural plots during civil wars.

³⁰ Populations may also flee if displacement is used as a deliberate strategy by armed groups trying to control territories and resources. In this case the armed group will value less their population support bases

Scenario B includes households that are vulnerable to poverty but experience low vulnerability to violence (for instance, poor households with few assets that can be looted, belonging to the ‘right’ ethnic group or living outside combat zones). These households will generally stay in areas of residence as the economic costs of non-participation may be too high. These are households with few possessions or accumulated wealth. If they hold some land and are allowed to keep it and cultivate it, they may stay neutral. For those with lower assets, the participation and support for local armed group may well increase substantially their chances of avoiding famine and destitution.

The third scenario (C) refers to households that experience low vulnerability to poverty and high vulnerability to violence. These households have higher outside options than those in scenario A. They face high exposure to violence (probably because they hold desirable property or assets or belong to certain ethnic groups) but may have enough accumulated wealth that allows to them to pursue alternative coping strategies. If the violence they face is from the local armed group, those that survive or are able to anticipate well in advance the breakout of violence will move to more secure areas.³¹ This may include migration to another country if movements abroad are still possible, which may explain the presence of wealthy political refugees abroad and other forms of

and the mechanisms outlined in this paper may not work. This often happens when armed groups benefit from extensive external military and financial support or plan to finance their activities through the forceful appropriation of natural or agricultural resources (Weinstein, 2007). But even in these cases the armed group may reverse their displacement strategy when eventually they will need labour to operate mines and oil fields, or to cultivate (illegal) crops or when external support becomes no longer available.

³¹ Note that participation may not end when household and individuals move as armed groups may institutionalise their links to displaced and migrant populations (in the country or abroad) by their representation in labour unions, political parties or the formation of militias that provide security (Steele, 2007).

economic migration from conflict areas. If the violence is from opposing groups, households in scenario C may participate. Because these households have some outside options, they will participate (instead of staying neutral or leaving) when the economic benefits of outside options outweigh the benefits offered from the armed group. Households that have accumulated wealth in the form of land may stay behind. Households in possession of more liquid assets may be able to move them to safer areas.

The final scenario (D) includes households that exhibit low vulnerability to both poverty and violence. Unless there are considerable constraints to population movements, these households have a reasonable large range of choices available to them. These are also valuable households to armed groups. They are likely to exhibit the ‘right’ ethnic, economic and political characteristics and possess accumulated wealth. Provided that they do not get abducted or forced in any other way to remain in the area of control of the armed group, these households will generally depart if they fear for their possessions and local levels of infrastructure and institutional destruction were high or may stay neutral when they have little to gain from participation. They will participate if they were supporters of the armed group to begin with, if their sources of wealth cannot be easily moved (for instance, they own land) or if the operation of their businesses is dependent on participation.

5. Conclusion and implications

This paper proposed an analytical framework to understand important endogenous links between household poverty and armed conflict. The paper argues that the economic behaviour and decisions of households to protect their livelihoods and economic status during conflict, and avoid poverty, matter substantially to the onset, sustainability and duration of armed conflicts because they determine the level of participation and support of households for armed groups. The strength of this relationship depends in turn on their initial levels of vulnerability to poverty and their exposure to violence during conflict. These mechanisms provide valuable micro foundations to understand the causes and duration of violent conflict, with considerable implications for future theoretical, empirical and policy work on micro-conflict processes.

Research on the links between poverty and violent conflict has focused, on the one hand, on incentives for predation and appropriation for large numbers of unemployed youth or those without outside non-violent economic options (e.g. Keen, 1997, 1998). Another area of research has viewed poverty as a source of grievances (e.g. Stewart and Fitzgerald, 2001). The analysis in the sections above suggests a different perspective: households provide human and material resources, shelter and information to armed groups because often this is often the only way they have of protecting them and their families from misery and destitution, as well as death, injury and imprisonment. These decisions offer in turn an important, even if partial, explanation for the outbreak, recurrence and duration of warfare. Interesting further theoretical extensions to this argument include more detailed distinctions between types and levels of violence,

different forms of rebel organisation, different levels and forms of participation and different household preferences (even amongst the poor).

The analysis has also empirical implications. The discussion of the processes linking violent conflict and household poverty highlighted a serious lack of hard evidence on the various channels. Despite a recent welcoming surge in empirical micro-level research,³² we still lack considerable evidence on fundamental processes linking armed civil conflict and household welfare. The general validation of the analytical framework and refinement of the hypothesis discussed in the paper requires serious advances in building empirical bases for linking factors that affect the viability of violent conflicts to household behaviour and the socio-economic preferences of households and their individual members. It also calls for considerable progress in our ability to relate empirically the economic profiles of a wide as possible cross-section of participants, supporters, non-participants and other conflict actors to processes of social and institutional transformation and strategies of governance throughout the conflict, as well as methods for the empirical determination of the costs and advantage of participation in armed groups. This is a challenging but not impossible task given the recent improvements in data availability and in analytical qualitative and quantitative methods. We expect the framework proposed in this paper to act as a benchmark for further empirical work on the analysis of the relationship between armed conflict and household welfare.

³² Significant empirical studies have started to emerge. See MICROCON (www.microconflict.eu), Households in Conflict Network (www.hicn.org), Program on Order, Conflict and Violence at Yale University (<http://www.yale.edu/macmillan/ocvprogram/index.html>), Centre for Research on Inequality,

Finally, the analysis in this paper has wide policy implications. In particular, the endogenous processes discussed will sustain and prolong armed conflicts unless the conditions for household and individual support of armed groups are eliminated, or at least significantly weakened, by external intervention. A large literature already exists on the design of international and national-level policies to end violent conflict and eliminate the risk of renewed fighting. These policies are divided into those designed to eliminate the financial viability of armed groups,³³ and those designed to deal with the restoration of democratic processes, the rule of law and development.³⁴ Much less attention has been paid to the role played by ordinary citizens in violent conflicts (beyond relief programmes for victims of violence). Actions aimed at ending armed conflict call for efforts not only to reinforce state capacity and eliminate resources available to armed groups, but also to address the effects of their human support basis either as a source of conflict re-ignition or, in cases where the conflict served to establish more legitimate forms of state- and nation-building, to promote the legitimacy of new political, economic and social institutions. In either case, policies must focus on strengthening the economic lives of those living in conflict areas,³⁵ keeping in mind the strong association between household and individual economic status and the social, economic and political transformations entailed by the conflict itself.

Human Security and Ethnicity (<http://www.crise.ox.ac.uk>) and Survey of War Affected Youth (www.sway-uganda.org).

³³ For instance, naming and shaming of rebel groups' atrocities, implementation of social, economic and political sanctions and use international criminal trials and tribunals (see Weinstein, 2007: 241-350).

³⁴ For instance, establishment of democratic elections, reform of the police and the security sector, demobilisation and disarmament of ex-combatants, incentives for the return of displaced populations and emergency relief policies.

³⁵ Justino (2008) analyses four types of policies: reinforcement of property rights, creation of forms of credit and financial support, household-level social assistance policies and policies aimed at restoring community relations and structures.

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Figure 1 - Endogenous relationship between violent conflict and household poverty

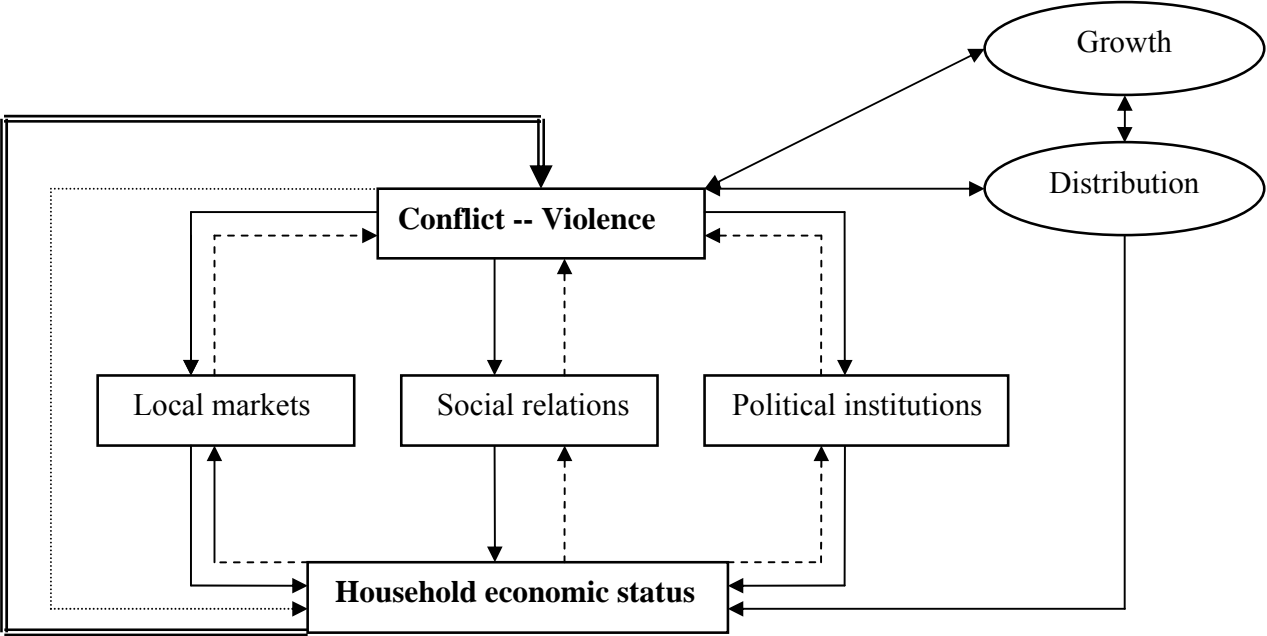


Figure 2 - Participation in armed groups

	High vulnerability to violence	Low vulnerability to violence
High vulnerability to poverty	<p><u>Scenario A:</u></p> <p>A.1. Probability of participation increases with levels of violence from opposing armed group and for lower levels of asset availability and fewer livelihood options</p> <p>A.2. Probability of remaining in area and staying neutral is negligent</p> <p>A.3. Probability of moving increases with levels of violence from local armed group</p>	<p><u>Scenario B:</u></p> <p>B.1. Probability of participation increases for lower levels of asset availability and fewer livelihood options</p> <p>B.2. Probability of staying neutral is negligent but may increase for higher levels of asset availability and larger livelihood options</p> <p>B.3. Probability of moving is negligent</p>
Low vulnerability to poverty	<p><u>Scenario C:</u></p> <p>C.1. Probability of participation increases with levels of violence from opposing armed group and if economic benefits from local group are high</p> <p>C.2. Probability of staying neutral increases if benefits from participation are low</p> <p>C.3. Probability of moving (or migrating) increases with levels of violence from local armed group and if benefits from participation are low</p>	<p><u>Scenario D:</u></p> <p>D.1. Probability of participation is negligent unless strong level of initial support for armed group or sources of wealth cannot be moved</p> <p>D.2. Probability of staying neutral increases if benefits from participation are low</p> <p>D.3. Probability of moving increases if costs of staying are high (e.g. level of destruction of infrastructure and institutions) and if benefits from participation are low</p>