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## **The Impact of Conflict and Fragility on Households**

A Conceptual Framework with Reference  
to Widows

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### **Abstract**

This paper analyses the transmission channels through which mass violent conflict and post-conflict fragility affect households. It does so by pointing out how a fragile environment impairs a household's core functions, boundaries, and its choice of income generating activities. Furthermore, it proposes a tool to analyse the impact of conflict and fragility on groups of households. The paper advances our understanding of mass violent conflict and fragility and contributes to the literature on the economics of conflict and development in three ways: first, it identifies the important gaps in the current micro level literature on conflict. Second, it provides a consistent and systematic framework to address these gaps. Third, it applies the framework to war widows, one example of a conflict affected and often forgotten group that typically amounts to a large population share in post-conflict societies.

Keywords: violent conflict, poverty, widows, households

JEL classification: O12, D13, D74

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## **1 Introduction**

Since the beginning of the 1990s, the number and intensity of mass violent conflicts has decreased worldwide (Human Security Centre 2005). However, this trend does not hold true for sub-Saharan Africa, where most of the world's armed conflicts currently take place. At the turn of the twenty-first century, more people were killed in wars in this region than in the rest of the world combined (*ibid.*: 24f. and 32f.). Yet little is known about how mass violent conflict and a fragile environment following conflict affect poor households and how poor households cope with such an environment.

The paper has three objectives: First, it identifies the gaps in the current micro level literature on conflict. Second, it provides a conceptual framework for the analysis of these gaps. Third, it applies the framework to widows, one example of a conflict affected group which typically amounts to a large population share in post-conflict societies. Extreme cases include the wars in Afghanistan, Vietnam, and Rwanda, for which it has been estimated that 700,000, one million, and 500,000 women were brought into widowhood, respectively (Stewart 1993: 371; United Nations 2001: 9).

The paper finds that, first, household boundaries, activities, and intra-household relations and gender roles are likely to be affected strongly by mass violent conflict and fragility. The households of widows of conflict may be particularly impaired by conflict. For instance, they may also face a different set of incentives to reorganize household membership as a result of their vulnerable social position. The second finding holds that households are likely to be constrained in their choice of coping strategies because conflict potentially destructs various production inputs and assets and interrupts markets. As a result, a household's income generating activities may entail higher risk and a reduced profit margin. Lastly, the paper proposes a new approach of defining and analysing groups.

These findings have several implications for further research. The conceptual issues raised in this paper may be verified empirically in order to quantify the impact of conflict on households and on groups of households. However, the paper cautions that there are several challenges inherent in such an empirical approach, such as changed household composition and core functions, which may render it difficult to identify households from survey data. Hence, a combination of different research methodologies, both quantitative and qualitative, is proposed to address these issues.

The structure of the paper is as follows: The next section summarizes recent research on the household, economic studies on conflict, and widows of conflict. The subsequent section identifies research gaps and derives three research questions. Section 4 provides a conceptual framework tracing the impact of mass violent conflict on household structure and production decisions; it also discusses the studying of a group of households as a unit for analysing the impact of conflict. Section 5 concludes.

## **2 State of the art of research**

### **2.2 Literature on the household**

A household is often considered in the economic literature as the smallest analytical unit of production and consumption. It is also a relevant unit for policymakers, as households are perceived to be identical to housing. Furthermore, it is often assumed that family is a

precondition for a household; therefore ‘household’ is often assumed to be the basic decision making unit regarding fertility, divorce, and migration (Kuijsten and Vossen 1988: 4f.). Definitions of household may also be influenced by statistical offices. These organizations are typically concerned with collecting household survey and census data and, hence, require clearly defined units of observation that can easily be identified in the field (Keilman and Keyfitz 1988: 255f.).

However, several authors have pointed out difficulties in applying the household concept to non-Western societies. They caution that household members are not necessarily tied by blood or marriage (Hammel and Laslett 1974). For example, Chant (1997: 7) finds evidence with respect to female headed households, stating that these women are not necessarily the mothers of the children they reside with. Carter is particularly critical of using the household concept in West African societies as ‘the rights and duties of male and female household members are quite unlike those found in Eurasian households’ (Carter 1984: 52). This point has been elaborated by Koopman, who argues that ‘the assumptions of shared preferences and of pooled incomes and resources fundamentally misrepresent the structure and processes of production and consumption in most African agricultural households’ (Koopman 1991: 152). According to Koopman, the head of household, and his wife or wives (a gender constellation common to most households), conduct separate income generating activities, have different schedules for work and leisure, and are subject to very different gender specific social expectations and sanctions. The keeping of separate budgets among spouses was also empirically confirmed by other studies on sub-Saharan Africa (Clark 1994; Schindler 2006). Furthermore, Clark (1994: 331–334) argues that in matrilineal African societies, the duo local residential rules after marriage—in which bride and groom remain in their original location—contradict the assumption of co-residency of the conventional European household concept. Similarly, Chant (1997: 6) cautions that some core household tasks, such as reproduction, take place outside the household boundaries and are performed within wider networks of relatives, friends, and neighbours in non-Western societies. As a conclusion, she critically asks if a general definition of household is desirable, given the fact that “‘households’ mean different things to different people in different places’—for example a kinship unit, economic unit, or housing unit (*ibid.*: 5).

For the sub-Saharan African context, this paper proposes a modified version of Netting’s (1989: 231) definition:

The household is a socially recognized domestic group. Its members are likely to share a common residence and to organize and carry on a range of consumption, inheritance, and reproductive activities. The specific content, intensity, and frequency of these activities vary by society, stage in the life cycle, and economic status of household members. Household inhabitants may be kin, but they may include friends, lodgers, and servants, and there are certainly family members who are not temporarily or permanently co-resident and cooperating.

While mostly qualitative studies have contributed to the discussion of the household concept, the literature on (farm) household models has provided insights to the production decisions of households, while taking the definition of a household as given (for example, Bardhan and Udry 1999; Chayanov 1966 [1925]; de Janvry and Kanbur 2006; Singh et al. 1986). More recently, these models have been adapted to better fit the characteristics of rural developing economies, such as imperfect, incomplete or failing commodity markets (de Janvry et al. 1991), credit markets (Carter 1989), and labour markets (Benjamin 1992; Strauss 1986). Part of this literature is used in the analysis of household behaviour during violent conflict, as described in the next section.

## 2.2 Economic research on violent conflict

Conflict is grounded in the perception of at least partially incompatible interests between individuals or groups (Elwert 2004: 26), often concerning the allocation of property rights. As such, conflict is inherent to all societies; it is systematic and dynamic, and constitutes social action that is based on rational behaviour, as defined in a local context (Keen 1997). Conflict involves various methods of mediation, which determine its intensity. While conflict may entail significant costs, it may also entail positive effects on social cohesion, the capability of mediating future conflicts, and the stability of institutions (for example, through democratic debates in parliament). Traditionally, conflict has been perceived in the economic literature as a temporary exogenous shock, whereas it has been acknowledged recently that conflict is intrinsically endogenous to the development process (Keen 1997; Stewart 1993). More specifically, *violent conflict* is characterized by three dimensions (Berdal and Malone 2000; Keen 1997):

1. Action which is non-cooperative, destructive, widespread, and persistent;
2. Violation or capture of property rights over assets, persons, or institutions;
3. Instigated through some degree of group (versus individual) activity.

These three dimensions combine to shape different types of violent conflicts. At one extreme there are international wars and civil wars, which involve potentially destructive and often long lasting actions carried out by large groups or even entire nations (cf. Stewart and FitzGerald 2001: 3f.). With declining degrees of violence, destruction, persistence, and a diminishing scale of group involvement, violent conflict also encompasses genocide, revolutions, uprisings, mutinies, civil unrest, terrorism, organized crime, and gang violence.<sup>1</sup> Given the variety of modes of violent conflicts, this paper limits its focus to *mass violent conflict* which we assume, first, affects a large number of households in a given region or country, thus minimizing the opportunity to mitigate the economic effects of conflict, second, destabilizes the institutional and economic framework, and third, creates an uncertain and insecure environment.

In many settings, the actual difference between active conflict and (at least the early) post-conflict phase is not clear cut. Levels of violence and insecurity often remain high even after the official end of a conflict as it takes time to rebuild institutions, trust, and the enforcement of property rights. These features are perceived in this paper to combine to one specific type of fragility.<sup>2</sup>

Economic research has commonly analysed conflict at the macro level, explaining both the causes and consequences of conflict, and using game theory approaches. An emerging field of economic research, which is the focus of this paper, examines conflict at the micro level.<sup>3</sup> The unit of analysis in micro level analyses of conflict is either the household or, in fewer cases, the individual. The methods employed by these studies on conflict typically consist of

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<sup>1</sup> Some authors have defined a minimum death toll in order to determine the scale of conflict, e.g., more than 1.000 violent deaths per year (e.g., Stewart and FitzGerald 2001: 3).

<sup>2</sup> See Binzel and Brück (2008) for a discussion of both the term ‘fragility’ and recent contributions in the literature.

<sup>3</sup> See Binzel and Brück (2007) and Justino (2006) for a detailed review of the household level literature on conflict.

quantitative econometric analyses of household or individual level survey data. However, the analysis of quantitative survey data entails some challenges: (i) there is no convention on how to account for conflict in survey datasets; (ii) data are likely to be biased because of sample attrition—individuals who died during a conflict are not represented in datasets; (iii) there are often difficulties in the sampling procedure. For example, the first nationally representative household living standard survey after the 1994 genocide in Rwanda, collected between 2000 and 2001, was based on a pre-genocide census. As a result, this survey does not take into account the estimated 800.000 deaths of the genocide which affected different Rwandan regions in different scales, nor does it depict the massive in and out migration of households; (iv) some regions of a post-conflict country may continue to suffer high levels of violence, hence preventing data collection. As a consequence of these obstacles, survey data collected in conflict affected countries is generally of worse quality than data collected in times of peace. For some conflict settings, there is no data available at all.

As Stewart and FitzGerald (2001) and Keen (2001) have pointed out, the impacts of violent conflict can be divided into *direct* and *indirect* effects: the first consists of killing and wounding, while the second comprises ‘the indirect effects on human welfare of war induced changes in economic, social, and political life’ (Keen 2001: 46). Commonly, micro studies on conflict that use household survey data assess the *indirect* impacts of violent conflict, with poverty as a prevailing topic (Justino 2006). While some studies focus on direct poverty measures, such as income and consumption levels of households (Brück 2001b; Justino and Verwimp 2006; Luckham et al. 2001), other studies are concerned with non-monetary indicators of poverty in a conflict setting (see Justino 2006 for a survey). For example, Alderman et al. (2004) point out that civil war in Zimbabwe had a negative long term effect on the height of children. In Burundi, the civil war and subsequent economic embargo mostly affected children of rural households (Bundervoet and Verwimp 2005). Other household level research has been conducted on the impact of conflict on particular assets, such as land (Ansoms 2006; Brück and Schindler 2006) and cattle (Verpoorten 2005). Finally, some studies disentangle the indirect intra-household effects of conflict. Differentiating for gender, Akresh and Verwimp (2006) find that girls born in a conflict affected region in Rwanda after the civil war have a significantly lower health status, while boys do not seem to be affected. Conflict was also found to have a gendered effect on education in Tajikistan, where school enrolment was much more impeded for girls than for boys (Shemyakina 2006). Drawing a general conclusion, Stewart and FitzGerald (2001: 18) find that during violent conflict ‘average levels of entitlements of all kinds are likely to decline’.

Micro level studies employing individual level survey data or census data typically focus on the *direct* effects of violent conflict, such as demographics, mortality, and fertility. For example, several studies are concerned with estimating mortality rates in Cambodia (de Walque 2006), Darfur (Guha-Sapir and Degomme 2005), and Bosnia and Herzegovina (Tabeau and Bijak 2006). One limitation of these studies is that individual level data generally do not account of households, thus impeding the analysis of poverty or production and consumption, which mostly involve the household as a whole.

Besides the economic micro level literature on conflict, there is another body of empirical studies that focuses on livelihoods in conflict affected countries. Cross-cutting several social science disciplines, livelihood studies mainly rely on qualitative research techniques. In a review of livelihood studies in conflict affected settings, Holland et al. (2002) find three topics prevailing: malnutrition and the mortality of children, famine as a deliberate strategy of war, and migration. Research focusing on the topic of migration includes Young’s (2006) study on Darfur, where the conflict impeded migration and, hence, remittances, depriving the

local population of an important income source. Similarly, Ogden (2000) shows in her study on Kosovo that households without family members abroad were the most vulnerable to food insecurity in the 1990s, because they did not receive remittances. On the other hand, Clark (2006) argues that conflict also brought new opportunities for Congolese youngsters in refugee settlements, who increased their influence on decision making at the household and community level. In contrast to quantitative studies, this literature allows for more insights into the change in decision making processes and adaptive strategies to cope as a result of conflict. However, given their reliance on qualitative research methods, findings from livelihood studies often are only representative for their particular research area. As a result, it is difficult to derive general conclusions from this field of research.

### **2.3 Literature on widows of conflict**

A wide range of factors can lead to widowhood: age difference between spouses, longer life expectancies of women in most parts of the world, a husband's untimely death due to an accident or a health shock, and a husband's violent death during conflict. Widows of conflict may differ among the way their husbands died during conflict—if he was killed in combat, or died as a civil casualty. Furthermore, there are 'false widows' (Roussou 1987: 38f.), whose husbands disappeared during conflict, with an unknown fate. There are also 'de facto widows' (Chant 1997: 12f.), whose husbands live permanently apart from them, for example, as a result of long term migration or a prison sentence. Generally, widowhood is a time dependent state, as widows may arrange to remarry quickly in order to protect their livelihood. In the following, households that are headed by, or simply include widows are considered (see Section 4.3 below). We posit that those living as a head of a household face more challenges in reconstructing their livelihood.

Analysing widows of mass violent conflict empirically has several challenges. (a) Not all widows in a given post-conflict setting have lost their husband because of a violent death; (b) it is difficult to capture the time dynamics of widowhood through cross-sectional data; (c) widows may be constantly moving among different households of relatives and are therefore difficult to identify from survey data (United Nations 2001: 4).

There are two branches of literature that concern widows of mass violent conflict: First, an academic literature, and second, empirical case studies and reports from policy oriented organizations operating in conflict settings. Academic studies on widows mostly have their origin in the social sciences. To our knowledge, no economic studies have addressed widows of conflict so far in neither developing nor developed countries. This is surprising, given the number of war widows in the aftermath of the Second World War. Economic studies on widows in Western societies have implicitly assumed a peacetime environment, where widowhood is typically conceived as a feature of aging societies. Common topics of this literature are widow's pension, state welfare, and life insurance (Brien et al. 2004; Fitzgerald 1989; McGarry and Schoeni 2005; Skevik 2004). A general finding of this literature is that widows in Western societies are often vulnerable to poverty (Hurd and Wise 1989, 1991; McDonald et al. 2000; Weir and Willis 2000).

There are surprisingly few academic studies that specifically address the situations of widows in conflict settings in developing countries. While much research has been conducted on the gendered effects of violent conflict, widows are only mentioned marginally, if at all (for example, Afshar and Eade 2004; Koen 2006; Pampell Conaway 2006; Ridd and Callaway 1987). For example, in her book on women headed households in developing countries, Chant (1997) only dedicates one paragraph to widowhood as a possible cause for female headship. An exception is Turshen's (2001) study on sexual violence against women in violent

conflicts. She finds Rwandan widows in the post-genocide environment to be very vulnerable to extortion and expropriation of their husbands' land. However, a widow has more bargaining power to claim her land if she is the mother of a son and can show her ability to farm. In this case a widow may claim custodianship of her son's inheritance until he reaches adult age (*ibid.*: 66).

In contrast, there is a large body of policy oriented empirical case studies that address the role and fate of women during wartime and the reconstruction period (see Brück and Vothknecht 2007 for a survey). Many of these studies acknowledge that widows are not only a large scale phenomenon in post-conflict settings, but that they are also particularly vulnerable to poverty (for example, United Nations 2001: 4f.). Although few of these studies focus exclusively on widows, most of them allow considerable room to describe the specific challenges facing widows. Studies in this field can be grouped into two subcategories: On one hand, there are qualitative case studies that provide in-depth analyses of specific areas. Typically, these studies are based on extensive and original testimonies of victims. For instance, Newbury and Baldwin (2000) describe the challenges faced by widows of the Rwandan genocide in accessing land. Nowrojee (1996) points out that Rwandan widows in the post-genocide period are subject to discrimination in various regards, which significantly reduces their living standard as compared to other households. On the other hand, there is a variety of reports that draw general conclusions from a range of case studies on the impact of war on women and widows and formulate implications for policy interventions (El-Bushra 2003b; Lindsey undated; Rehn and Sirleaf 2002; United Nations 2001, 2002; WCRWC 1997).

To conclude, it seems that the policy literature on widows of conflict is far ahead of academic research in this respect.

### **3 Gaps in the literature and research questions**

The economic literature on conflict reviewed above entails three gaps. First, even though the micro level literature on conflict focuses on the household as a unit of analysis, not much is known about how large scale violent conflict and post-conflict fragility affect household structure. It has been criticized that the household is often considered as a black box in the literature in peacetime (Wilk 1990: 323f.); this applies even more to conflict settings. For example, while there is ample evidence from qualitative empirical case studies that gender roles within the household may change as a result of conflict this topic has not been analysed systematically. This leads us to the following research questions: How does violent conflict affect the composition, function, and structure of households? This also includes investigating the change of gender roles within the household as a result of violent conflict. Furthermore, there is no systematic research so far on how this issue affects widows of conflict.

Second, it is not known in detail how households actually cope with violent conflict and fragility—particularly those households which are mostly affected by conflict. More specifically, very little quantitative research has been conducted on how households move between various income generating activities as a response to different economic environments, and to protect their livelihoods. Of the few existing studies, Brück (2004) provides insight into the activity choices of farm households in post-war Mozambique, which operate in an uncertain environment. Verpoorten (2005) shows how coping strategies of rural households in Rwanda changed during the genocide: while she finds that cattle sales were limited during times of peace, the sale of cattle increased enormously during violent conflict as a result of fear of raiding, need for food, and the migration of cattle owning households. Hence the second research question asks: What are the coping strategies of conflict affected

households? Furthermore, as has been proposed by Justino (2006: 13f.), this question should link in with more detailed questions regarding the vulnerability of these households in terms of poverty, the role of assets in their coping strategies, and their capabilities to use choice based, versus forced strategies. Again, this question will also be applied to widows of conflict, as there is no evidence on the coping strategies of these particular households so far.

A third gap in the household level literature on conflict is an analysis concerning the impact of conflict on groups of households. Groups have been a common topic in explaining the causes and motives of conflict, as mentioned in Section 2.2. Most prominently, the concept of horizontal inequality has been employed to measure the relative share in entitlements between groups, classified by social class, ethnicity, religion, and other cultural characteristics (Stewart 1998). However, violent conflict affects households in different ways, as conflict may not only lead to economic, social, and political disruption but may also foster new economic activities, such as military industry and foreign aid (Cramer 1997; Keen 2001). Clearly, violent conflict makes some households worse-off and others better-off, thereby affecting households' ability to reconstruct their livelihoods in the post-conflict period. So far, only a few studies have analysed the impact of conflict on groups systematically. Some exceptions include the study on the differentiation of victims and perpetrators in the Rwandan genocide (Verwimp 2003) and child soldiers (Blattman 2006). The research questions addressing this gap are: How do groups of households cope with conflict? Furthermore, it will be analysed in how far common features of group members determine households' coping strategies. In a second step, the question will be applied to households that include or are headed by widows of conflict, one particular type of groups of households.

#### **4 A conceptual framework for the analysis**

The gaps are addressed in the following three subsections. Each section first provides conceptual notes and then illustrates the proposed matters to widows of conflict as one example of conflict affected households.

##### **4.1 Household structure and intra-household issues**

This section analyses three channels through which mass violent conflict affects households, namely household boundaries, household activities and intra-household relations, and gender roles.

While the household is a flexible construct, as has been argued above, its definition and function are even more fluid during conflict and a period of fragility following conflict. Household *boundaries* may become permeable during conflict as members may die, due to acts of both violence and indirect casualties, also called 'excess death'. While usually more men die of violence, it is commonly assumed that more children and women die as a result of indirect effects of violent conflict, including deteriorating supplies of food and health care and the loss of livelihoods. Furthermore, male adults may be mobilized for war, while in some conflicts minors are abducted for service in militia groups. In general, the ratio of male to female household members is likely to decrease. Also, households may face the temporary or permanent separation of members due to displacement. New members may be integrated into the household, for instance orphaned or widowed individuals who may or may not be relatives. As a result, the overlapping of household membership and kinship—a common assumption in the literature—may not necessarily be the case. The integration of new members may lead to new constellations of households that go beyond the socially recognized norm of a given society in times of peace. For example, separated and orphaned children or

individuals stranded in a refugee camp may form a household (Clark 2006). Hence, the formation and dissolution of households during violent conflict is no longer primarily determined by life cycle events, such as birth, leaving the parental home, marriage, birth of children, departure of the children from home, death of a partner, and, simply, death (Willekens 1988: 95).

Violent conflict also has an impact on households' *activities*, most importantly constraining households in earning a livelihood. Direct and indirect casualties affect a household's membership and potentially decrease the ratio of net producers to net consumers in the household (Chayanov 1966 [1925]). The surviving household members may be constrained in their ability to work because of injuries, psychological trauma after the experience of violence, the loss of family members, and malnutrition. Tasks that require individuals to move away from the household compound, such as water fetching from a distant well or cultivating fields outside the village, may be kept to a minimum because an insecure and fragile environment poses a threat to individuals. Also, the educational system may be interrupted during and after the conflict, thus obstructing children from acquiring human capital (Shemyakina 2006). Other household activities which may no longer be performed as a consequence of the formation of new households in a conflict setting are reproduction and inheritance. This may be the case if newly formed households consist of members who are not related through kinship or marriage, or are of the same sex. However, violent conflict may also stimulate new activities. For example, household members who conducted separate income earning activities in times of peace may pool their resources and jointly generate an income in a conflict setting. Their motivation may change as a result of an insecure environment, which may have few insurance options and, therefore, expose individual income generating activities to high risk.

Finally, *intra-household relations* and *gender roles* are affected by conflict. The allocation of tasks within the household may change across genders. For example, women may perform productive activities that are confined to men during times of peace. Women's involvement in productive activities is in turn likely to increase women's decision making power inside the household. Then again, depending on the type of conflict, women's liberty of action may be restricted during conflict, especially when women are targeted, as a deliberate war strategy intended to dishonour the enemy conflict party (Ridd 1987: 3). In general, changes in gender roles have the largest impact when women become the head of a household. In some post-war settings, female headed households were found to reach up 30 per cent and more of all households (El-Bushra 2003b: 18; Gervais 2004: 304). Besides gender, the roles and tasks of children and the elderly may also be affected by conflict, for example if labour input is needed to sustain the household's livelihood. Consequently, the allocation of income and resources within the household may be different in a conflict setting. Assuming that the household lives closer to the survival threshold, income and resources could be either more or less equally distributed among household members. Some studies caution that gender roles are only modified temporarily for the duration of conflict, but often return to the pre-conflict norm when conflict ends (Ridd and Callaway 1987: 3f.).

War widows may face particular constraints in consumption and production. While all households in a conflict setting may reorganize membership as a strategy to generate income (especially in labour intensive agriculture), widows may adopt this strategy to cope with societal pressure against single women. Widows may reconfigure their household, form new ones, become widow headed, take in orphans or other widows, or join the households of relatives. As a result, household membership in a conflict setting may not overlap with kinship, thus posing difficulties for widows to claim their rights to their husband's assets in

societies which hand inheritance along the patriliney. Because of their sex, widows are more vulnerable to attacks and sexual violence in both the conflict and post-conflict period than men (Csete and Kippenberg 2002; El-Bushra 2003a). Widows are more likely to co-reside with their household members for security reasons, which may not be common during times of peace. The impact of conflict induced changes in gender roles, in addition to the allocation of resources, income, and decision making power on widows, depends on the household constellation they live in. For example, widows who become heads of households or who live in female headed households may become the principle caretaker of other household members, and therefore assume responsibilities in decision making and productive tasks (El-Bushra and Piza-Lopez 1994: 181). In contrast, it is conceivable that widows lose decision making power if there are working age male household members present in the household.

## 4.2 Coping strategies of households in conflict

This section considers each of the inputs required for household production separately.

The channels and intensity of impact may range across the duration of conflict, its regional diffusion, the degree of participation and mobilization, and the duration of fragility after conflict ended. Most importantly, the impact of conflict on a particular household depends on the household's involvement in conflict (for example, if the household is a passive unit that aims at avoiding conflict, or if its members actively engage in conflict and take advantage of the opportunity to loot, extort, and appropriate). This in turn depends on the causes and motives of conflict, for example if some households are specifically targeted because of their religion, ethnic affiliation, or social class (see Verwimp 2004 for Rwanda). Similarly, violent conflict has a larger adverse impact on poorer households, as they may be more vulnerable to shocks and have fewer coping strategies available than relatively wealthier households (Binzel and Brück 2007).

The previous section has shown how conflict may reduce a household's *labour endowments* because of direct and indirect war casualties.

Landmines confine a household from the use of its *land endowments*. Furthermore, the allocation of customary use rights over land may be interrupted if local institutions cease to exist (Brück and Schindler 2006; Moser and McIlwaine 1999: 208). This in turn renders marginalized households vulnerable to losing their access to land. While displaced households may not have land available for cultivation in their new environment, and therefore may not pursue agricultural production, the return of long term refugees may create additional pressure on land (Ansoms 2006), thus potentially increase fragility. Households that lack access to land are likely to face constraints in the credit market as they lack collateral securities. Finally, farm households may also refrain from cultivating their fields since this may attract looters and endanger the security of household members.

Looting of property, pillage, and the destruction of existing *capital* are typical features of mass violent conflict, as individual property rights over assets may no longer be enforced. For example, the number of cattle decreased significantly during the civil war in Mozambique (Brück 2001a: 66), and also during the Rwandan civil war and genocide (McKay and Loveridge 2005: 5). In addition, a fragile environment and the unpredictability of the course of conflict may reduce the household's incentive to invest. Lastly, markets for agricultural inputs, such as tools, seeds, and fertilizers, may be interrupted, thus rendering farm production less efficient. However, while on average the capital endowments per household are likely to decrease sharply during conflict, some households are certainly in a position to take advantage of the institutional breakdown during conflict and appropriate new assets.

As a result of physical insecurity to humans and the interruption of local markets, a household may decide to employ different income generating strategies to cope with the conflict shock. For example, a household may retreat from the market and shift towards subsistence production (McKay and Loveridge 2005) or may sell some of its productive assets for fear of looting (Verpoorten 2005). A change in income generating strategies may require a different *production technology*, i.e., a distinct set of skills and abilities. Also, societies experiencing violent conflict face a breakdown of social cohesion, trust, and traditional social protection mechanisms (Moser and McIlwaine 1999: 207f.), which may impede risk sharing, the formation of work sharing groups, or communication networks. The combined impact of mass violent conflict on each of the farm production factors reduces a household's options to cope. In other words, income generating strategies may no longer be determined by choice, but forced upon households by circumstances. This may result in falling output and food shortages, which again poses a threat to the continuity of the household.

As mentioned in Section 4.1 above, widows are affected by shortages in *labour endowments*. This is particularly true if working age males are absent; as a result, widows lack their working and income earning power (El-Bushra and Piza-Lopez 1994: 181). Also, widows may face cultural taboos and discriminatory customary laws to own *land* (WCRWC 1997: 6), the most important physical endowment for a rural household. For instance, widows are at risk of losing the rights of their deceased husband's endowments to the husband's kin-group. A widow's position against claims from relatives is even weaker if she is childless, lost children during conflict, or was a victim of rape and so does not continue her husband's line. Similar to other land constrained households, widows are also likely to be constrained in their access to credit (Nowrojee 1996; WCRWC 2000: 9). Additionally, widows may face difficulties to access their husband's *capital endowments*. This particularly poses a problem if inheritance is passed through the male line, thereby making marriage the most important channel for women to access assets. As Turshen states, 'any control women have over land and income depends on their personal relationships with individual men' (Turshen 2001: 66). There is evidence that widows are disadvantaged in inheriting land and other productive assets even in peacetime in developing countries (Deininger and Castagnini 2004; Parpart 2000). Widows may also face constraints in earning a livelihood. Some (typical for female) income generating activities, such as petty trade, may be impossible during conflict because of threats to their security or interrupted markets. Also, cultural taboos may inhibit women to perform particular productive tasks; for instance, Gervais (2004: 307) reports a taboo for women to engage in the construction of housing in Rwanda. While the absence of men obliges widows to assume new responsibilities, they may be ill-prepared and lack the *production technology* to shift to new income generating strategies (Csete and Kippenberg 2002; Tercier Holst-Roness 2006; WCRWC 2000). Furthermore, widow headed households may face difficulties to access *output markets* in societies where markets are traditionally a male dominated domain (El-Bushra 2003b). Widows may also be marginalized socially as they are a symbol of disorder, and may be feared of destructing existing marriages (Chant 1997: 63; Nowrojee 1996). As a consequence, widows may be excluded from risk-sharing networks, which increases their vulnerability to poverty and food shortages.

### **4.3 Group behaviour in conflict**

Groups can be classified along various dimensions. First, the changeability of common features that identify an individual as a member of a group may range between the extremes of fixed features, such as place of birth, and highly adaptable features, such as membership in

a union.<sup>4</sup> Second, common features may visibly and univocally distinguish individuals of various groups, while on the other extreme, features may only be known to the members themselves. Examples for the former are skin colour or sex, while the latter may be represented by political attitude. Third, the degree of individuals' perception to share common features with other individuals may range considerably. On one hand, individuals sharing common features may have no sense of belonging. On the other hand, individuals may have a strong sense of sharing common features and interests with each other and strongly identify with the group. This dimension correlates with varying degrees of group organization, ranging from no organization at all, such as all males in a given society, to highly active lobby groups.

These three dimensions combine to create various types of groups. According to this definition, members of one household would also form a group, sharing the common feature of co-residence. However, the household, and not the individual, is considered as the unit of analysis, given that individual level data on consumption, assets, and behaviour are often not available. As a result, only *groups of households* are considered; it is assumed that one or more household members carry a feature that marks the household as a whole as member of a particular group.

Such a definition of the group leads to considering how mass violent conflict and fragility affect a number of households that are alike in some regards, but which are not necessarily organized. As Keen (2001) pointed out, households perform differently in the post-conflict period—hence there are winners and losers when conflict is over. Factors that contribute to these differential influences include households' involvement in conflict as active or passive agents,<sup>5</sup> their status as perpetrators or victims, and households' exposure to attacks, such as their ethnic, religious, regional or political affiliation, and the location of residence. An interesting topic of research following out of this could be a comparison of within group effects of conflict with between group effects intended to determine the impacts of certain group features. Further research could analyse if and to what degree common features of a group determine similar coping strategies of households.

Households that include one or more widows of conflict are considered to be one example of a conflict affected group. Considering the above mentioned definition, widowhood is a fixed feature at least in the short term. Although not directly visible, the marital status of individuals is very likely to be known to community members. It is assumed that widows have a perception of the fate of other widows, while their involvement in a common interest group depends on the particular setting. There is evidence from very active widows organizations (Rehn and Sirleaf 2002: 77). However, widows of conflict are also a diverse group: they may differ widely in age, the number of children, and in their social position, within both the household and the community. Similarly, their experience of conflict may be very different, depending on their social class (El-Bushra 2003b: 24). Also, the way their husband died may affect widows' social standing in the post-conflict period. The common feature is their marital status as widows, which is an important determinant for their material circumstances and their moral standing within the society (Chant 1997: 11). As mentioned earlier widows face even more challenges if they become heads of household. For example, female headed households

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<sup>4</sup> A similar definition is employed to define ethnicity (e.g., Bates 1999; Van Hoyweghen and Vlassenroot 2000).

<sup>5</sup> While participation in conflict is carried out at the individual level, it is assumed that the decision regarding which household members participate in conflict in which ways is made at the household level, taking consumption, production, and risk for all household members into consideration.

have been identified to be potentially vulnerable to chronic poverty in peacetime in many developing countries (Chronic Poverty Research Centre 2004: chapter 2), which is even more common in a conflict or fragile environment.

In order to determine the impact of widowhood empirically, several different constellations of households could be compared: First, male headed households that include widows of conflict as members versus male headed households without widows; second, female headed households that include widows (but not as heads of households) versus widow headed households; third, widow headed households that also include working age male members versus widow headed households without adult males; and fourth, male headed households without widows versus widow headed households without adult male members. We hypothesize that the fourth case comparison will display the largest differences in terms of asset endowments, choice of coping strategies, and welfare, because it includes the combined effects of widowhood, female headedness, and lack of adult male members. Also, the third case comparison may expose a large effect for similar reasons.

## **5 Conclusions**

The paper aimed at analysing the transmission channels through which mass violent conflict and post-conflict fragility affect the household. Three key findings were presented. First, mass violent conflict is likely to have a strong impact on household boundaries, activities, and intra-household relations, including gender roles, which may significantly transform the core functions of households. Second, conflict may destruct production inputs and hence limit the choices of income generating activities of households. Third, the paper proposed a modified concept of group that allows identifying groups of households that share common features but are not necessarily organized or aware of their common features.

These findings advance the literature on the economics of conflict and development by underlining the need to analyse the impact of conflict and fragility at the household level. Also, the paper has pointed out the need to analyse the impact of conflict on several production inputs jointly in order to determine if income generating strategies of households are choice based or forced by circumstances. Furthermore, the concept of group proposed in this paper may be used to determine if common features determine the choice of coping strategies of groups of households; this may indicate the existence of a poverty trap for entire groups of households.

The approach proposed in this paper is suitable to analyse policy relevant case studies of conflict affected groups, such as war widows, children, or displaced households. On the one hand, the needs of these households may be determined, which may then be used to inform policy. On the other hand, a needs assessment of particular groups can be compared with existing policies in order to evaluate their performance and targeting.

Future research in this field may address the topics discussed in this paper empirically. Such an empirical approach poses several challenges—for instance, grasping the local concept of the household, identifying households in a conflict setting from survey data, or identifying relevant groups of households that are affected by conflict in a common way. This may call for a combination of qualitative and quantitative research methods.

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