

# War and Poverty

MICROCON Research Working Paper 32 Patricia Justino

August 2010

Correct citation: Justino, P., 2010. *War and Poverty*. MICROCON Research Working Paper 32, Brighton: MICROCON

First published in 2010 © Patricia Justino 2010 ISBN 978 1 85864 944 7

For further information, please contact: MICROCON: A Micro Level Analysis of Violent Conflict, Institute of Development Studies at the University of Sussex, Brighton BN1 9RE Tel: +44 (0)1273 872891 Email: info@microconflict.eu Web: www.microconflict.eu



War and Poverty<sup>1</sup>

Patricia Justino<sup>2</sup>

## **MICROCON Research Working Paper 32**

July 2010

Abstract: The main objective of this paper is to systematically identify potential channels of transmission linking civil war and poverty that may lead to the persistence of cycles of poverty and war. A particular focus of the paper is the notion of individual (and group) agency during civil wars, as well as agency constraints faced by populations affected by violence. Although the outbreak and impact of war is known to depend on several financial and political factors, the onset, duration and magnitude of the impact of civil wars are also closely related to what happens to people during violent conflicts and to what people do in areas of violence to secure livelihoods, economic survival, physical security and their social networks. The nature and extent of these choices depends in turn on how individuals and households relate to changes in social norms and forms of institutional organisation during civil wars. The paper explores the economic status and responses of individuals and their immediate relations in areas of violent conflict to cope with and adapt to changes to livelihoods and economic status during civil wars. This analysis focuses in particular on the important but under-researched role of social and political institutional transformation during civil war on individual and household poverty.

<sup>&</sup>lt;sup>1</sup> Forthcoming in Handbook of the Economics of Peace and Conflict, Oxford University Press. Edited by Michelle Garfinkel and Stergios Skaperdas.

<sup>&</sup>lt;sup>2</sup> Institute of Development Studies, Brighton, UK, Households in Conflict Network (www.hicn.org). Email: p.justino@ids.ac.uk.

#### **1. Introduction**

Civil wars have become since the Cold War the most common form of violent conflict in the world. Civil wars impact substantially on economic development and the living conditions of local populations at the time of the conflict and for many years thereafter. Most take place in poor countries in Africa, Asia and Latin America (Collier 1999 2007, Collier, Hoeffler and Söderbom 2004, Fearon 2004, Gurr and Marshall 2005, Stewart and Fitzgerald 2001). There is however remarkably little systematic understanding of the role of poverty on the onset and duration of civil wars, or the impact of civil wars on the lives of those in fighting areas and on people's own agency to escape poverty.

The role of economic factors on the outbreak and duration of civil wars and the economic costs of wars have attracted significant research attention since the early 1990s.<sup>3</sup> Research on the economic causes of civil wars has focused on the interplay of conflicting interests between governments and opposing group(s),<sup>4</sup> while studies on its consequences have concentrated on the costs that wars impose on countries.<sup>5</sup> Programmes of conflict resolution have also been typically driven by concerns with state security and state capacity (UN 2004 2005).

Recently, this perspective has come under criticism due to insufficient consideration paid to the role of local dynamic processes on the outbreak and duration of civil wars (see Kalyvas, Shapiro and Masoud 2007), or the impact of armed conflicts on the livelihood choices and human capital of individuals and households affected by violence (see Justino 2009). Recent research on the causes of violent conflict at the micro-level has started to shed light on some of the complex causes of violence, while the last few years have witnessed an increased focus on the consequences of armed conflict on individuals, households and communities (see Verwimp, Justino and Brück 2009).

<sup>&</sup>lt;sup>3</sup> See reviews in Blattman and Miguel (2009), Goodhand (2001) and Justino (2009).

<sup>&</sup>lt;sup>4</sup> See Hirshleifer (2001), Garfinkel (1990) and Skaperdas (1992) at the theoretical level, and Collier and Hoeffler (2004) and Fearon and Laitin (2003) at the empirical level.

<sup>&</sup>lt;sup>5</sup> For instance, Knight, Loayza and Villanueva (1996), Collier (1999) and Stewart and Fitzgerald (2001).

The main objective of this chapter is to review the state of the art of this emerging literature in order to systematically identify potential channels of transmission between war and poverty that may lead to the *persistence of cycles of poverty and war*. A particular focus of the paper is the notion of individual (and group) agency during civil wars, as well as agency constraints – due to norms and institutions that may emerge during civil wars – faced by populations affected by violence. Although the outbreak and impact of war is known to depend on several financial and political factors, the onset, duration and magnitude of the impact of civil wars are also closely related to what happens to people during violent conflicts and to what people do in areas of violence – including fighting – to secure livelihoods, economic survival, physical security and their social networks. The nature and extent of these choices depends in turn on how individuals and households relate to changes in social norms and forms of institutional organisation during civil wars.

Section 2 explores the economic channels through which war may affect the economic status and responses of individuals and their immediate relations in areas of violent conflict. This section makes use of emerging evidence on wartime behaviour and local economic changes to discuss when and how civil wars may result in the persistence of poverty amongst individuals and households affected by violence. We argue that the nature and magnitude of the relationship between war and poverty is determined to a large extent by the way in which different individuals and households respond to war-induced economic, social and institutional changes. Section 3 discusses strategies adopted by individuals and households to cope with and adapt to changes to livelihoods and economic status during civil wars, while section 4 reflects on the important but under-researched role of social and political institutional transformation during civil wars and review existing evidence on the role of poverty as a trigger for civil war. Section 6 concludes the paper and reflects on potential areas for further research on the war-poverty cycle.

## 2. From war to poverty: a micro-level perspective

Civil war has been identified as one of the main causes for the persistence of poverty in many regions of the world (Collier 2007): war damages infrastructure, institutions and production, destroys assets, breaks up communities and networks and kills and injuries people. Although

there is a large body of evidence on the destructive effects of war, we are still far from understanding how these effects may or may not persist across time.

Recent studies have shown that institutional effects of war at the macro-level may not persist into the long-term (Bellows and Miguel 2006, Ben-David and Papell 1995, Brackman et al. 2004, Davis and Weinstein 2002, Miguel and Roland 2005). In line with neoclassical growth theory, temporary destruction of capital can be overcome in the long-term by higher investments in affected areas, effectively bringing the overall economy to its steady growth path. Justino and Verwimp (2006) find evidence for this form of convergence across provinces in Rwanda following the 1994 genocide.

Seemingly contradictory evidence has shown that education, labour and health impacts of war at the individual and household levels can be observed decades after the conflict (Alderman, Hoddinott and Kinsey 2006, Bundervoet, Verwimp and Akresh 2009, Shemyakina, 2006). Although these effects may average out at the macroeconomic level, they may contribute to the emergence of poverty traps amongst specific population groups affected by violence. This literature is very recent, and the debate is ongoing.

Development economics literature has concentrated on explaining the emergence of poverty traps through threshold mechanisms: households will be trapped in poverty if they cannot engage in productive activities that lead to the accumulation of physical and human capital beyond critical thresholds. Individuals and households trapped under certain physical and human capital ceilings (for instance, due to low health expectancy, low education of household members or the types of assets held) will not be able to prosper unless a large windfall (e.g. aid) can push them into recovery path (Banerjee and Duflo 2005, Carter and Barrett 2006, Dasgupta and Ray 1986).

Warfare has been shown to affect physical and human capital thresholds of individuals and households through killings, injury, looting, robbery, abductions and overall destruction associated with fighting that leads to the breakdown of households, the loss of assets and livelihoods and the displacement of individuals and families (and often entire communities). This section discusses available evidence on the impact of war on the persistence of poverty through

its impact on thresholds of physical and human capital of individuals and households in areas of violence.

## 2.1. The effects of civil war on household physical capital

During violent conflicts assets get lost or destroyed through fighting and looting. These include houses, land, labour, utensils, cattle, livestock and other productive assets (Brück 2001, Bundervoet and Verwimp 2005, Gonzalez and Lopez 2007, Shemyakina 2006, Verpoorten 2009). The destruction of productive assets affects the access of individuals and households to important sources of livelihood, which may in turn severely affect their productive capacity and damage their economic position. Those that face sudden losses of land, houses, cattle and other assets will be left without means of earning a living or providing food and shelter for their members. Such losses will impact significantly on the ability of affected households to recover their economic and social position in post-conflict settings (Justino and Verwimp 2006, Verpoorten 2009).

Negative productive effects can be counteracted by opportunities raised by armed conflict. Some individuals, households and groups will benefit from violence through looting, the redistribution of assets during conflict,<sup>6</sup> and the privileged access to market and political institutions for those that 'win' the conflict or support winning factions during the conflict. Evidence has also started to accumulate on how some areas of the economic private sector – not necessarily related to the war effort – adapt and flourish during war (McDougal 2008). These research results suggest that countries emerging out of civil wars are far from being in an economic blank state, and that pockets of resilience and development persist despite (or because of) violence.

The net impact of civil wars on household stocks of physical capital will depend largely on how the onset of violence influences local exchange, employment, insurance and credit markets. In particular, changes in the price of staple goods and other crops farmed are of key importance for rural household decisions (Singh, Squire and Strauss 1986). Empirical evidence on price effects

<sup>&</sup>lt;sup>6</sup> Wood (2003) discusses the extent of land redistribution to rebel groups during the El Salvador conflict in the early 1990s. Brockett (1990) provides further evidence in other Latin American countries. Keen (1998) discusses the role of looting and resource appropriation in sustaining civil wars.

of armed conflict is however very scarce. Recent studies have shown evidence for an increase in prices of staple food during conflicts due to the scarcity of goods, the destruction of land, seeds and crops and the risks associated with market exchanges during violent outbreaks (Verpoorten 2009, Bundervoet 2006).<sup>7</sup> This price increase will benefit households that are net producers of the staple good, but may harm those (the majority) that are net consumers. Negative effects are likely to prevail due to observed decreases in the price of other commodities and assets (particularly cattle and other livestock) (see evidence in Bundervoet 2006), as well as increases in transaction costs caused by difficulties in accessing exchange markets when roads, train lines and other infrastructure is destroyed.

The ability of households to respond to price shocks depends on the direction of the shock. If the household is able to switch activities in order to take advantage of them (for instance, looting but also access to new markets, including informal or illegal markets through alliances of support of different fighting factions) then losses may be small or the effect may even be positive. A negative overall shock will result in a reduction in household assets if the household is not able to switch activities, cannot access credit and insurance markets or no alternative activities exist. In extreme cases, this will result in the household resorting to subsistence activities. There is however little evidence on the impact of armed conflict on the operation and access to local markets. Loss of trust between economic agents, the upheaval caused by armed conflict to local communities and institutions and the destruction of infrastructure are likely to severely constrain the functioning of local formal and informal credit and insurance markets. This effect will be stronger when entire communities are affected by violence making the risk of income losses covariant. For instance, Ibáñez and Moya (2006) find that in Colombia only 9.2 percent of displaced households had the opportunity to ask for loans to relatives, neighbours, and friends, in contrast to 18 percent before displacement. When violence is targeted at particular households or household members, the extent of the shock will be more localised and community-level insurance mechanisms may continue to operate.

<sup>&</sup>lt;sup>7</sup> Prices can also be kept artificially high during conflicts if farmers choose to hide crops so they do not get raided. Azam, Collier and Cravinho (1994) provide evidence of such behaviour in the initial stages of the Angolan war.

Employment markets are also likely to be affected by war. Ibáñez and Moya (2006) find that households displaced by the Colombian conflict, who previously relied on agriculture income, were only slowly absorbed into urban labour markets. Unemployment rates soared from 1.7 percent to more than 50 percent during the first three months of displacement. Unemployment rates declined to 16.1 percent after one year of displacement, but even then displaced households fared worse than their urban poor counterparts. Some of these effects are due to difficulties in integration caused by lack of appropriate skills needed to pursue employment in the urban sector, the destruction of social networks, and the discrimination and fear of displaced and refugee population, sometimes perceived as being linked to armed groups. In the context of displaced Bosnians during the 1992-95 war, Kondylis (2007) shows that displaced populations are less likely to work in the post-conflict period. Productivity levels of returnees tend also to be lower than those that stayed (Kondylis 2008). Matijasevic et al. (2007) describe how farmers had to abandon agricultural employment to build roads or receive training by local armed groups in Colombia. They also mention that several farmers experienced limited access to employment due to forms of control by the armed group who would not allow workers to cross a bridge or a road. On the other hand, the report of the Centre for Poverty Analysis (2006) to the World Bank's Moving Out of Poverty project describe the emergence of jobs as 'home guards' in Sri Lanka, a body of auxiliary police recruited from rural communities. Employment as home guards provided many with economic security in areas affected by violence.

The type of evidence discussed above is, however, still very limited and unsystematic. Advances in the understanding of the impact of war on poverty requires further analyses on the role of markets, both as an opportunity for predatory behaviour during conflict, and as a source of livelihood and economic security for those involved in and affected by violence during and after the conflict. We need also to take into consideration that the processes whereby individuals and households accommodate to the impact of armed violence on specific local markets will transmit the shock to other markets and therefore may set off a series of second-round effects. This has yet to be considered in the economics literature on civil wars.

#### 2.2. Household human capital during civil wars

Recent empirical literature has dedicated considerable efforts to analysing the human capital effects of civil wars. Wars result in deaths, injuries, disability and psychological trauma of men, women and children. These outcomes of violence may often be enough to push previously vulnerable households below critical wealth thresholds (particularly amongst household with widows, orphans and disabled individuals), which may well become insurmountable if the household is unable to replace labour or capital (Beegle 2005, Berlage, Verpoorten and Verwimp 2003, Donovan et al. 2003, Justino and Verwimp 2006, Brück and Schindler 2007, Verwimp and Bundervoet 2008), and may last across generations if education and health outcomes of children is significant.

Overall empirical evidence has shown that civil wars result in largely negative and long-lasting nutritional effects amongst children in war zones. Bundervoet and Verwimp (2005) show that children affected by the recent civil war in Burundi had a height-for-age of one-standard deviation lower than children not affected by the war. Alderman, Hoddinott and Kinsey (2006) use panel household survey data collected in 1983-84, 1987 and yearly from 1992 to 2001 to show the impact of the Zimbabwe civil war in the 1970s, which was followed by severe droughts in 1982-83 and 1983-84. The authors find that in 2001, on average, children in the sample affected by the shocks would have been 3.4 cm taller had the war and adverse weather conditions not taken place. Similar evidence is found in Akresh and Verwimp (2006), Akresh, Verwimp and Bundervoet (2007) and Akresh and de Walque (2008) for Rwanda, Bundervoet, Verwimp and Akresh (2009) for Burundi and Guerrero-Serdán (2009) for Iraq. Reduced nutrition during childhood is a well-known mechanism leading to poverty traps (see Banerjee et al. 2009, Smith 2009, van den Berg et al. 2006).

The empirical literature on the micro-level effects of civil wars has also found that in general wars have a negative impact on educational attainments, although some studies dispute the overall longer-term implications of these outcomes. Alderman, Hoddinott and Kinsey (2006) find that Zimbabwean children affected by the civil war in the 1970s and ensuing droughts completed fewer grades of schooling and/or started school later than those not affected by the shocks. Similar findings are reported in Akresh and de Walque (2008) for Rwanda, Angrist and Kugler (2008) and Rodriguez and Sanchez (2009) for Colombia, Chamarbagwala and Morán (2009) for

Guatemala and de Walque (2006) for Cambodia. Shemyakina (2006) finds a reduction in girls' education following the Tajikistan civil war in the early 1990s, but no impact on boys' education. One explanation is that households invested more strongly on the education of male children after the war as a means to returning to their longer-term income levels. Swee (2009) finds strong effects of war on secondary school enrolments, but not on primary school, most likely reflecting the recruitment of older children into armed groups or the army.

In general, individuals with less education will exhibit lower labour market outcomes later in life in terms of earning capacity (Case and Paxson 2006, Maccini and Young 2009). This longer term evidence has been harder to investigate, but some empirical evidence has started to emerge. Akbulut-Yuksel (2009) analyses the impact of bombing in Germany during the Second World War on educational attainment, health status and labour market outcomes of German children. She finds that children living in areas affected by bombing had between 0.4 and 1.2 fewer years of schooling and were one centimetre shorter. These effects translated in a reduction of 6% in earnings as adults as compared to those not affected by the bombings. Similar results are found in Ichino and Winter-Ebmer (2004), who compare the relationship between school attainment levels and later life earnings amongst cohorts affected by bombings in Austria and Germany during the Second World War, with those less affected by the war in Switzerland and Sweden. Merrouche (2006) uses data on landmine contamination intensity in Cambodia to evaluate the long run impact of Cambodia war (1970-1998) on education levels and earnings. She finds that individuals affected at a young age by the war received on average 0.5 less years of education. The paper does not find however any significant impact of war-exposure on earnings in adult life. Merrouche argues that reduction in returns to education was driven by the destruction of physical capital (schools), which may not have had a large long-term labour market impact. This explanation is akin to the argument put forward in Bellows and Miguel (2006) that as long as war effects are limited to the destruction of capital, rapid economic growth in the post-war period should lead to convergence of the economy to its steady state growth. Destruction of schools and health facilities and absence of teachers also account for Akbulut-Yuksel's findings, although in this case the long-term labour market effects of war were found to be largely negative. While it is clear that civil wars affect household education attainment and schooling decisions, it is much less apparent through which channels and for how long these effects will impact on the long-term

ability of individuals and households to survive economically, access sustainable forms of livelihood, and make long-term production, consumption or labour decisions.

One important channel is through changes in child labour. Often households choose to replace dead, injured or physically and mentally disabled adult workers with children if these have not become fighters as well. The use of children as a form of economic security mechanism is widely reported in the development economics literature (see Dasgupta 1993, Nugent and Gillaspy 1983), as is the resort to child labour as a form of compensating for low-incomes (Basu and Van 1998, Duryea, Lam and Levinson 2007). This form of household coping strategy may have severe negative consequences on the long-term welfare of households. Children that are needed to replace labour may be removed from school. This may in turn deplete the household of their stock of human capital for future generations. Akresh and de Walque (2009), Merrouche (2006), Shemyakina (2006) and Swee (2009) put forward this mechanism as an explanation for the reduction in education attainment and enrolment observed in contexts of civil war. In a recent paper, Rodriguez and Sanchez (2009) test directly the effect of war of child labour and find that violent attacks in Colombian municipalities by armed groups have increased significantly the probability of school drop-out and increased the inclusion of children in the labour market. They show that increased mortality risks, negative economic shocks and reduction in school quality due to violence are the main channels through which armed conflict reduces human capital investments at the household level and increases child labour.

The recruitment of young males and children into fighting units also leads to interruption in schooling, which in turn affects the capacity of young people to accumulate skills and capital, and may trap them into low-productivity activities (Blattman and Annan 2009, Angrist 1990, 1998). This effect can have intergenerational consequences as their children are likely to also remain trapped in a cycle of low human capital and low productivity.<sup>8</sup> However, recruitment also may result in increased individual political participation and leadership amongst ex-fighters and those victimised by war (Blattman 2009, Bellows and Miguel 2006, Wood 2003), which may well

<sup>&</sup>lt;sup>8</sup> In fact, Camacho (2008) shows that exposure to violence may also affect future generations through effects on foetus during the first three months of pregnancy that result in lower birth weights and premature deliveries. Her results are based on the empirical analysis of the birth effects of landmines explosions in the municipality of residence of women in early stages of pregnancy in Colombia.

boost its labour market outcomes. More positive labour outcomes may also be observed through intra-household effects. Shemyakina (2009) finds that women affected by civil war in Tajikistan in the early 1990s were about 30 percent less likely to enter marriage than women of the same age from the less affected regions. This may have considerable implications on the labour market participation of women, with women in conflict affected areas supplying more labour than women in lesser affected areas (Justino and Shemyakina 2007). It may also be an important mechanism whereby war affects women traditional roles (see Annan et al. 2009). The long-term welfare impact of labour allocation effects remains however largely under-researched.

## 3. Coping strategies and individual and household agency in war contexts

The nature and magnitude of the threshold effects discussed above are determined to a large extent by the way in which different individuals and households respond to war-induced shocks. This information is only slowly starting to accumulate through empirical analyses of armed conflict largely due to the large data requirements involved in the assessment of these effects in terms not only of the individual and household-level channels identified above, but also in terms of the social and institutional changes that take place locally during and after armed conflicts.

Typically, outbreaks of fighting are likely to create a cycle of war and poverty traps from which it is very difficult to escape. In particular, violent conflicts such as civil wars are distinguished from other shocks by their deliberately destructive nature, including the intentional destruction of common coping strategies adopted by households in economically insecure environments, such as social networks and family ties, accumulation of agricultural assets and land and so forth (see de Waal, 1997). Political shocks such as civil war have a covariate character, but individuals and households with characteristics that are relevant to the conflict may be particularly badly hit by the initial shock. For instance, high levels of education became a severe liability during the Cultural Revolution in China or the Khmer Rouge regime in Cambodia (de Walque 2006), while holding cattle during the civil wars in Rwanda and Burundi resulted in households being targeted by armed groups (Bundervoet 2006, Verpoorten 2009). At the same time, displacement and other community-level social changes will pose hard constraints on informal networks of support (see Ibáñez and Moya 2006). There are nonetheless strong accounts of how individuals and households live in conflict areas and survive the impacts of violence (for instance, Wood 2003, Steele 2007). Households living in risky environments generally develop a complexity of (ex ante) risk-management and (ex post) risk-coping strategies.<sup>9</sup> Common strategies include: diversification of land holdings and crop cultivation, 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 gifts and transfers from informal mutual support networks (e.g. family, friends, neighbours, funeral societies, and so forth). Individuals and households living in areas of violent conflict adopt also a plethora of strategies to survive that include some variation on risk-coping strategies listed above, but may also include fighting, looting, support for armed groups and participation in illegal activities (see Justino 2009).

There is currently little understanding of differences between war-time and post-war coping strategies of individuals and households, though evidence is slowly accumulating. As in other situations of crisis, households in conflict areas or in refugee and IDP camps tend to rely on the cultivation of low return (and also low risk) crops – if they can access land – that can feed their families, and make use of available labour supply including that of children. Such choice may hinder the household's capacity to accumulate assets and use them in times of crisis, but may protect households against severe destitution (see DeJanvry, Fafchamps and Sadoulet 1991), avoid famine and improve the nutritional status of household members during conflict (Brück 2004a 2004b, McKay and Loveridge 2005).

Some households may also protect their welfare through migration. Although most of the literature has understandably focused on issues of forced migration during armed conflict, some evidence has shown that some households in conflict areas resort to migration as a form of economic coping strategy (Centre for Poverty Analysis 2006 for Sri Lanka, Engel and Ibáñez 2007 for Colombia, Czaika and Kis-Katos 2007 for Aceh, Indonesia, Justino and Shemyakina 2007 for Tajikistan, Lindley 2007 for Somalia).

<sup>&</sup>lt;sup>9</sup> See Townsend (1994) for a full analysis of a general insurance model.

Apart from these sporadic analyses, in general, we know very little about what people do in areas of violent conflict, and how their choices and behaviour affects their wellbeing and livelihoods in the post conflict period. This gap in knowledge has important policy implications as both the initial position and subsequent changes in household choices and alliances affect the nature and dynamics of the conflict itself, and consequently its sustainability, duration and the magnitude, nature and distribution of its impact. The ways in which people adapt to violent conflict and to post-conflict processes depends largely on levels of trust and cooperation amongst community members – that may or may not be the same as before the conflict – and the types of social organisational structures that emerge locally (Alexander and Christia 2009, Habyarimana et al. 2008, Fearon and Laitin 2003). Thus far we know very little about the nature and impact of these changes on people's choices and constraints, or on mechanisms that may maintain peace locally or sustain violence. The next section discusses the under-researched impact of institutional change on poverty outcomes.

## 4. Institutional effects of war

Institutional change may have considerable impact on the level and dynamics of poverty amongst individuals and households in war areas through their effects on the nature, organisation and use of violence in civil wars. However, limited attention has been paid to how social and political institutional organisations change and adapt during (and after) violent conflict, including ways in which communities manage conflict and sustain social cohesion, the forms of local governance that emerge amidst violence and means developed for the provision of public goods and security in areas of violent conflict. These changes are likely to have profound impacts on the socioeconomic status and security of individuals, households and communities and hence on the persistence of cycles of war and poverty amongst certain individuals, households and communities.

Two areas of institutional change remain critically under-researched. One concerns *changes in social cohesion and norms of cooperation*. Violent conflict impacts considerably on the social fabric of affected communities, on social relations between family members, neighbours and

friends, on how communities relate internally and with other communities, and on the functioning of local citizen organisations and their relation with state-level institutions (see for instance Colletta and Cullen 2000, Cramer 2006, Hartzell et al. 2003, Kalyvas 2006, Lubkemann 2008, Moser and McIlwaine 2004, Richards 1996, Petersen 2001). The impact of these on the lives of local populations can be significant as it will affect the ability of people to rely on community relations in times of difficulty, to access employment or credit arrangements and to integrate into new norms and institutional processes. The second is the *emergence of local governance structures* controlled by non-state (often armed) actors during violent conflict in areas where the state is absent, deposed or heavily contested. The actions of these actors may have significant impacts on the socio-economic status and security of individuals, households and communities in the areas they control. We discuss below how emerging evidence on these institutional effects may inform the relationship between war and poverty, and discuss promising avenues for future research on these important channels linking violent conflict and poverty outcomes.

## 4.1. Effects of war on local social norms and cohesion

Civil wars have profound effects on the social fabric of affected communities. The impact of these on individual and household poverty levels and dynamics can be significant in so far as these changes affect the ability of individuals and households to rely on community relations in times of difficulty, access particular employment or credit arrangements and integrate into new norms and institutional processes. These effects are determined to a large extent by changes in household composition and the displacement and migration of households to safer areas. They are also caused by the dynamics of the conflict itself, such as people telling on each other, different groups turning against each other and changes in levels of trust amongst communities (see Kalyvas 2006, Wood 2003).

Political forces and social norms may also strengthen some forms of social interactions that either feed into the conflict or constitute the 'tipping point' for the outbreak of violence. Kalyvas (2006) refers to these community-level effects as the 'dark side of social capital' (pp. 14). Miguel, Saiegh and Satyanath (2008) show how cultural norms that sustain violence may promote further

violent behaviour by looking at the positive link between the history of civil war in the home country of international football players and their propensity towards violent behaviour in the field. Pinchotti and Verwimp (2007) illustrate a related phenomenon in the case of the 1994 Rwandan genocide, where violence was reinforced by the politicisation of inter-group cooperation and association. In the words of the authors, "the genocide was, in a frightening way, an exercise in communal cooperation and organization among the participating Hutu. Without the conversion of social capital to bond the Hutu together, it is doubtful that the genocide could have been unleashed at such a rapid pace with such tragic consequences" (pp. 30).

Civil wars may however also result in positive social outcomes. Bellows and Miguel (2009) find that individuals who were exposed more intensely to war-related violence in Sierra Leone are more likely to attend community meetings, to join local political and community groups, and to vote in the post-conflict period. Similarly, Blattman (2009) finds a strong positive correlation between exposure to violence and increased individual political participation and leadership amongst ex- combatants and victims of violence in Northern Uganda. Voors et al. (2010) find that direct individual experiences of violence during the Burundi civil war have resulted in more altruistic behaviour, less risk aversion and higher discount rates.

The impact of changes in local social relations on individual and household poverty will depend on the initial characteristics and alliances of individuals and households at the start of the conflict (for instance, the level of integration within own community), the extent of the breakdown of social cohesion during the conflict (for example, those living in communities targeted by the conflict due to ethnic characteristics or displaced populations may fare worse) and the strength and types of new networks and social interactions formed during and after the conflict (for example, those fighting for winning coalitions may benefit from new forms of governance in the post-conflict period).

The development literature provides extensive evidence for the importance of social networks and social interactions on the lives of the poor, as well as the influence of individual and household group membership (for instance, race, religion and ethnic groups, local associations, neighbourhoods, and so forth) on the human and social capital of the poor (Platteau 1991, Foster and Rosensweig 2001, Fafchamps and Lund 2002). However, very few studies have examined the role of changes in social relations or the formation of new social alliances and networks amongst different population groups in contexts of violent conflict.

A number of development economic studies have shown how group membership may result in poverty traps through distorted 'neighbourhood' effects (Durlauf 1996, Wilson 1995) and social segregation (Bowles, Loury and Sethi 2009). Bowles, Durlauf and Hoff (2006) refer to the example of high levels of local forms of corruption, which may limit the capacity of other community members to undergo productive activities. Durlauf (2006) discusses the role of peer-pressure in maintaining low levels of social and economic equilibrium (for instance, through peer pressure resulting in below-level performance in school, participation in criminal activities and so forth). Similar mechanisms are likely to arise from changes in intra- and inter-household and community relations during civil wars.

Displacement and recruitment are two driving mechanisms of such changes. The displacement of large numbers of people from their areas of residence is accompanied by the inevitable breakdown of families and socio-economic networks, both important elements of the social, economic and political capital of the poor in developing countries. Displacement into areas where productive activities cannot be accessed may result in trapping people in criminal and violent networks, or in semi-legal or illegal forms of activity. When their own social networks breakdown, individuals may seek economic and physical protection from militias in some areas of relocation (often urban areas), which may draw the conflict into new areas and support violence through new forms of economic, social and political organisation (Moser and McIlwaine 2004, Steele 2009). The lack of outside labour opportunities may force them to remain within their networks, which in turn will decrease even further their chances of obtaining productive employment. Similarly, the recruitment of young people and children into armies and the removal of children from school to work may result in lower educational and market aspirations for those involved, which may transmit itself across generations.

Empirical evidence on these effects is scarce. Further research in these areas requires comprehensive evidence on community-level institutional change during and after civil wars in

order to match changes in social networks, social norms and organisational structures at the community level to initial individual and household level economic characteristics and changes in individual and household behaviour and outcomes during conflict.

This is a difficult exercise but possible through studies that combine in-depth social analysis with larger quantitative studies (see Ibáñez and Justino, forthcoming). This is a very important area of analysis in conflict studies as the effects of membership groups on individual and household economic outcomes will entail considerable consequences in terms of designing appropriate policies to break poverty traps in the post-conflict period, promote equality of opportunities and avoid renewed conflicts.

## 4.2. Effects of war on political institutions and local governance

The economics literature has shown that institutional effects are responsible for poverty traps when political forces and social interactions result in dysfunctional institutions that make property rights insecure and perpetuate inequalities in power and wealth (Bowles, Durlauf and Hoff 2006, Mehlum, Moene and Torvik 2006). These effects are likely to matter substantially in contexts of civil war due to two features that distinguish the impact of armed conflict from other shocks. One is the fact that during civil wars property rights are insecure and often cannot be enforced because the state has lost the monopoly of violence and the rule of law does not operate. The second is the profound institutional transformation caused by violent conflict.

Institutional organisation, governed 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 (including voting). Organisations that favour corrupt, rent-seeking and destructive behaviour will perpetuate dysfunctionality. This is illustrated for the case of Colombia by Sánchez and Palau (2006). On the other hand, organisations that promote the rule of law, establish appropriate norms of conduct and social behaviour and impose sanctions for undesirable behaviour may improve the living conditions of households under their control and administration (see Arjona and Kalyvas

2006, Bellows and Miguel 2006, Weinstein 2007, Mehlun, Moene and Torvik 2006).<sup>10</sup> Further advances in understanding the role of political institutions on the economic well-being of individuals and households during and after armed conflicts requires however more detailed analysis of the endogenous dynamic relationship between violence and governance than what is currently offered in the literature.

One area that remains seriously under-researched is the emergence of local 'governance' structures during civil wars in areas where the 'government' is absent, deposed or heavily contested (see Vlassenroot and Raeymaekers 2004). In the available literature, such circumstances are usually referred to as state 'collapse' (Milliken 2003, Zartman 1995), and portrayed as resulting from or leading to forms of state 'failure' (Ghani and Lockhart 2008, Milliken 2003, USAID 2005). However, the collapse of 'government' does not necessarily have to be accompanied by the collapse of 'governance', rather it is accompanied by institutional changes as different non-state actors - rebel groups, militias, paramilitary groups, warlords, gangs, mafia, drug trafficking factions, private security providers and vigilante groups - gain the monopoly over the use of violence in contested areas (Arjona 2009, Gambetta 1996, Skaperdas 2001, Volkov 2002, Weinstein 2007). The actions of these actors have profound impacts on the socio-economic status and security of individuals, households and communities in the areas they control. These effects are, however, largely unknown. Their nature and magnitude is likely to be related to the strength of new local forms of governance relative to the strength of local state presence, and how this relationship evolves with the conflict (Kalyvas 2005, Weinstein 2007). This is in turn associated with the effectiveness of non-state armed groups vis-à-vis the state apparatus to control local resources and populations. This may be done through fear and terror, through the provision of public goods and security and the establishment of effective social norms and sanctions to guarantee social cohesion and the protection of property rights and punish undesirable behaviour, or through a mix of both strategies (see Kalyvas 1999 2003 2005, Valentino 2004, Arjona and Kalyvas 2006).

Understanding the relationship between poverty and armed conflict through changes in political institutions requires a meticulous grasp of how state and non-state actors interact and compete

<sup>&</sup>lt;sup>10</sup> This argument is akin to Olson (2000)'s distinction between 'stationary bandits' and 'roving bandits'.

throughout the conflict, how their different (or similar) strategies of violence determine population support and the control of territories and resources, and how different state and nonstate actors' activities are embedded in different areas and communities. This has enormous implications for poverty outcomes, the reconstruction of communities and the economic recovery of households in post-conflict settings. While development economics and political science literatures provide substantiated accounts of institutional changes at the national level following the outbreak of civil wars, we have only limited systematic evidence on changes of power relations at a grassroots level and their impact on local institutional processes and governance structures. We have also limited evidence on the impact of these forms of socio-political transformation and power competition on the economic status of members of communities governed and controlled by armed groups throughout the conflict, and how those changes relate to the strategic choices made by individual supporters and armed group leaders alike, during and after the conflict. This constitutes a very promising area for future research.

### 5. From poverty to war

Over the last decade a significant body of work has emerged on the potential impact of poverty on the outbreak of civil wars. Cross-national empirical evidence shows a strong association between low-per capita income and the risk of armed internal conflict breaking out and persisting (Collier et al. 2004, Collier and Hoeffler 1998, 2004, Do and Iyer 2007, Doyle and Sambanis 2006, Fearon and Laitin 2003, Murshed and Gates 2005, Stewart and Fitzgerald 2001, World Bank 2005).

Civil wars are more likely to take place in poor countries, and (bar few exceptions) in the poorer, less developed, regions within those countries (Collier 2007, Deininger 2003, Do and Iyer 2007, Miguel, Satyanath and Sergenti 2004, Murshed and Gates 2005, Sanchez and Chacon 2006). War-affected regions in turn generally have higher levels of poverty, weaker state institutions and lower growth rates (Collier 1999, Collier et al. 2004, Collier 2007, Stewart and Fitzgerald 2001).

This body of literature provides valuable evidence on the role of poverty in the outbreak of civil wars. However, although the cross-national and case studies listed above hinge on implicit

assumptions on what makes low national or sub-national incomes a condition for violent conflict, they offer only limited systematic accounts of the mechanisms through which low incomes amongst a large fraction of society affect the outbreak of civil war.

The assumptions on which the above literature is based are informed by two largely untested conditions. The first is that low-incomes are associated with a greater incidence of armed conflict when large numbers of poor (unemployed or underemployed) individuals provide a substantial pool of recruits for armies and rebel groups alike. The second is the role of poverty in violent collective mobilisation, either because it increases collective grievances, or it enhances opportunities for resource appropriation by rebel groups by weakening state institutions. We examine these mechanisms below.

#### 5.1. Involvement of the poor in civil war

The role of individuals and households in explaining the onset and duration of civil wars has been analysed in several recent political science studies based on substantial ethnographic and microlevel empirical research (Kalyvas 2006, Kalyvas and Kocher 2007, Petersen 2001, Weinstein 2007, Wood 2003). One common link across this body of research is the endogenous relationship between conflict processes and the political and social behaviour of conflict actors before and during outbreaks of fighting. Less attention has been paid to the role of micro-level economic factors on the emergence, sustainability and duration of civil wars.

The development economics literature suggests that participation of individuals in collective violence by and large requires a level of organisation and capacity of mobilisation that is not typically associated with the poor (for instance, Muller and Seligson 1987; see review in Goodhand 2001). There are, however, well-documented accounts of peasant rebellions, insurgencies and revolutions (Paige 1975, Scott 1976 1985, Wood 2003). More recent studies have suggested that persistent levels of unemployment may make soldiering a means of earning a living when other (non-violent) means of livelihoods offer limited opportunities (Grossman 2002, Hirshleifer 2001, Keen 1997, 1998, 2005, Nillesen and Verwimp 2009, Walter 2004). There is,

however, limited empirical evidence on socio-economic profiles of conflict perpetrators,<sup>11</sup> and even less systematic empirical evidence on the involvement of the poor in the onset or the duration of civil wars.

Why would those living under precarious economic conditions participate in and support civil wars? Traditional political science literature attributes individual participation in armed rebellions and collective acts of violence to the presence of material incentives (Olson 1965). A number of actors have made use of war and violence as means to try to improve their position and to take advantage of potential opportunities offered by conflict (Dube and Vargas 2007, Lichbach 1995, Keen 1998, 2005, Hirshleifer 2001, Humphreys and Weinstein 2008). Notably, poverty may drive individuals into violent conflict when productive activities in peaceful times are scarce, unemployment is high and returns from agriculture work are low (Collier and Hoeffler 1998, Deininger 2003, Grossman 2002, Verwimp 2005, Walter 2004). Other studies have shown how violent conflict may create opportunities for looting (see Keen 1997, 1998).<sup>12</sup>

Many young people may become soldiers for reasons other than material profits. Walter (2004) analyses the impact of 'misery' and 'lack of voice' as incentives for the retention of fighters in armed groups, while Humphreys and Weinstein (2008), in a survey of 1000 ex-fighters in Sierra Leone, found that almost half of all fighters were from less privileged backgrounds. Their main motivations to joining militias or military groups were to get access to basic needs and ensure the protection of their families and their livelihoods.<sup>13</sup> Looting and predatory activities played a lesser role amongst rank and file soldiers as larger profits tend to remain within the leadership of the armed group (Humphreys and Weinstein 2008).

Recent studies have shown that socio-emotional motivations may matter at least as much as selective incentives in explaining the participation in collective acts of violence of those from poor, landless backgrounds and removed from the mechanisms of power decisions. In a study of

<sup>&</sup>lt;sup>11</sup> One exception is Verwimp (2005).

<sup>&</sup>lt;sup>12</sup> For game-theoretic model on the determination of looting and fighting activity during a civil war see Azam (2002) and Azam and Hoeffler (2002). The various essays in Garfinkel and Skaperdas (1996) provide theoretical analyses of conditions under which state and non-state actors engage in appropriative activities to compete for property, income, rights and privileges in contexts of ill-defined and poorly enforced property rights. See also Skaperdas (1992).

the civil war in El Salvador, Elisabeth Wood (2003) refers to what she calls the 'pleasure of agency' and a "new sense of hope and dignity" born from defiance against ruling parties and state brutality, and revenge against the impact of violence on dear ones. The role of defiance has been prominent in other studies of insurgent participation, notably Goodwin (2001). Moore (1978) attributes violence to the violation of norms of fairness in society, while Petersen (2001) discusses the role of grief, anger against previous patterns of violence and pride in participation in violent collective action, as well as feelings of revenge for acts of violence against family and friends.

Other recent studies have focused on forms of involuntary participation through coercion, abduction and fear. Many individuals before and during violent conflicts are forced into becoming soldiers or providing resources and information to rebel groups or the state army through peer-pressure and fear of sanction by their group (see Verwimp, 2005 for Rwanda),<sup>14</sup> or through force (see Humphreys and Weinstein, 2008 for evidence in Sierra Leone and Beber and Blattman 2009 and Blattman and Annan 2009 for Uganda). Fear and peer-pressure are easier to impose amongst those with the least voice (Walter, 2004).

A final explanation for why the poor would participate in and support the activities of armed groups is suggested by the recent work of Kalyvas and Kocher (2007). In many circumstances, people cannot afford to stay out because non-participation is very costly: "individuals may participate in rebellion not in spite of risk but in order to better manage it" (pp. 183). Although participation yields high costs (of death, injury etc) staying out can be as much of a risk, as non-participation increases the danger of being identified with the other side. In this case, armed groups may offer protection from indiscriminate violence from opposing factions, as well as offer privileged access to resources, information and skills invaluable in fighting zones (Kalyvas and Kocher 2007, Kalyvas, 2006; see also Guichaoua 2009). This argument has been extended to issues of welfare protection in Justino (2009). This paper argues that when non-participation

<sup>&</sup>lt;sup>13</sup> Also in the context of the civil war in Sierra Leone, Richards (1996) discusses how young soldiers and civilians alike used rebellion as a way of continue their education when state infrastructure collapsed.

<sup>&</sup>lt;sup>14</sup> Verwimp (2005) shows evidence that in Rwanda "households decided to supply the labour of one person per household to the genocidal effort" (pp.15), having interpreted their participation in the 1994 genocide as a state-directed obligation. Alison Des Forges, cited in Verwimp (2005), adds that "during this period when the guy with the

equates destitution and misery, being poor, or being vulnerable to poverty, is a sufficient condition to raise substantially the costs of non-participation. However, information on choice sets faced by individuals and households in conflict contexts is still very limited.

## 5.2. The role of poverty in collective mobilisation

A large literature has postulated that the level or intensity of poverty may trigger civil strife when poverty amongst population groups intensifies social ties amongst groups to promote participation in collective violence or the support for armed groups (for example, Moore 1966). Poverty may constitute a powerful motivation for war if it heightens a sense of injustice and unfairness amongst certain population groups (Gurr 1970). However, there is widespread disagreement regarding the effect of social discontent (grievances) on the outbreak of war.

The empirical literature on the causes of civil war has concentrated on two explanations for the origin of armed conflict. They are, respectively, greed and grievance.<sup>15</sup> The greed explanation emphasises the role of lootable rents in producing inter-group rivalry for their control, while the grievance concept refers to historical injustices and inter-group inequalities (Collier and Hoeffler 1998, 2001). Cross-national empirical analyses on the causes of civil wars have found no statistical evidence for a relationship between 'grievances' and civil wars (Collier and Hoeffler 1998 2001, Fearon and Laitin 2003). Most of the evidence compiled in these studies seems to suggest that rebel groups are primarily motivated by opportunities for predating on available resources and assets (Collier and Hoeffler 2001) or conditions that facilitate insurgency, such as rough terrain (Fearon and Laitin 2003). These findings are challenged by a body of research that emphasizes the importance of grievances as sources of armed conflict measured as vertical inequality (of incomes and assets such as land) (Maystadt 2008, Muller 1985, Muller and Seligson 1987, Wickham-Crowley 1992, Schock 1996), class divides (Paige 1975, Scott 1976), inequalities in access to power decisions (Richards 1996), horizontal inequality across ethnic, religious and other cultural characteristics (Langer 2004, Stewart 2000, 2002, Stewart, Brown

gun was the one who gave the orders, the poor and the weak – who had no way to get a gun – had precarious little means of defence expect to join the strong' (pp. 319-320).

<sup>&</sup>lt;sup>15</sup> There are several reviews of the 'greed versus grievance' argument. For a recent analysis see Murshed and Tadjoeddin (2007).

and Mancini 2005, Mancini 2005, Murshed and Gates 2005, Østby 2006), relative deprivation (Gurr 1970), levels of polarization (Esteban and Ray 1991, 1994, Reynal-Querol 2001, Montalvo and Reynal-Querol 2008, Esteban and Schneider 2008), categorical inequalities (Tilly 1998) and ethnic fragmentation (Easterly and Levine 1997, Elbadawi 1992).

The debate is inconclusive with respect to the role of poverty differentials across population groups as a trigger for armed conflict. However, low national incomes are almost always associated with the occurrence of civil wars. How can we account for these seemingly contradictory findings? While poverty, inequality, social exclusion, discrimination and other sources of grievances exist in most societies, only a handful of countries have experienced civil wars because not all countries have in place appropriate structures and institutions that allow the translation of grievances into acts of violence and rebellion (Fearon, 2004). Collective mobilisation is also not sufficient to sustain armed conflict without human, material and financial support. Poverty per se is therefore unlikely to be a sufficient condition to trigger civil war, but it may be instrumental to the organisation of collective violence when combined with the readily availability of resources (people, funds, food, and so forth) to sustain the rebellion, or when access to resources can be made available or easily appropriated due to weak state presence in key areas in the country.<sup>16</sup>

The existence of common grievances (which are often founded in forms of relative poverty or perceived poverty in relation to elite groups) amongst religious, ethnic or other cultural characterisation of group identity may facilitate mobilisation and social cohesion amongst rebel groups that take on the causes of the aggrieved and their support bases. Even when the rebel leaders are seduced into predation during the conflict, the social groups they have mobilised are likely to have a sharp sense of identity-based grievances as a result of the conflict, which it would be risky to ignore when trying to implement systems of sustainable peace in the post-conflict period (Justino and Leonard 2008).

<sup>&</sup>lt;sup>16</sup> The role of natural resources such as oil, minerals and precious stones in the outbreak of civil wars has been widely researched. This literature is reviewed in Ross (2004).

These mechanisms are not well-understood in the literature and little research exist on how processes of collective mobilisation take place under different contexts, on how rebel groups and other armed groups organise, or on the instrumental use of violence. The potential for empirical micro research to advance knowledge on these important processes of human interaction is very large.

## 6. Final reflections and future research

This chapter discussed the relationship between civil war and poverty from the perspective of an emerging body of literature that has provided new insights into the micro-level channels linking violent conflict and poverty outcomes. Recent research on micro-level conflict dynamics has started to shed light on some of the complex causes of conflict, including important theoretical insights on the emergence of violent collective action (Blattman 2009, Beber and Blattman 2008, Goodwin 2001, Kalyvas and Kocher 2007, Petersen 2001, Wood 2003), the organisation and functions of violence (Cramer 2006, Kalyvas 2006, Keen 1998) and internal organisation of armed groups and motivations of individuals within (Humphreys and Weinstein 2008, Richards 1996, Weinstein 2007). This literature has also significantly advanced understanding of the consequences of violent conflict on local populations through several channels including assets, health and nutrition, education, labour market allocation decisions and individual and household productive capacity.

Despite considerable progress, two critical areas have remained unexplored in the literature. The first is the type and effectiveness of *adaptation strategies* employed by individuals, households and communities at different stages of the conflict and at different levels of exposure to violence in order to protect their lives and livelihoods. The second area is the emergence of new *social and political institutional organisations* and changes to existing institutional arrangements in areas of violent conflict.

The first gap in the literature concerns the issue of civilian agency during civil wars. The general tendency of academic and policy research on civil wars has been to focus on civilians as mostly victims of warfare, with limited attention to the role played by the choices and preferences of

citizens before, during and after the conflict. Although the outbreak of civil wars will depend on several macro factors – external military and financial intervention, level of technology and resources available to armed groups, intensity of ideological beliefs, mobilisation capacity, relative strength of state and so forth - the onset and duration of wars is also closely related to what happens to people during violent conflicts and to what people do in areas of violence to secure livelihoods and economic survival. Post-conflict policies and humanitarian interventions rightly focus on increasing economic resilience by attempting to reduce levels of vulnerability to poverty. These interventions are directed to groups of the 'poor' defined by some measure of geographic location (refugee of IDP camps) or ethnic identity without much empirical evidence on who the 'poor' really are, and why they have become poor in the first place. This way of identifying populations at risk faces two problems. First it may overestimate the numbers of the 'poor' amongst identified populations. Second, it will miss a large number of vulnerable populations that live in areas of violence but are difficult to find or identify, in particular when violence becomes not only a short-term shock but a constant factor in people's lives. Better estimation of the effects of civil wars on individual and household poverty levels and dynamics, and more systematic theorisation of channels whereby warfare affects poverty will contribute towards more realistic post-conflict social policies to reduce poverty and increase economic resilience amongst those living with violence. This will also have important implications for the sustainability of peace as protection strategies adopted by individuals and households in conflict areas may entail considerable impact on the organisation and duration of warfare (Justino 2009, Kalyvas and Kocher 2007).

Secondly, we require greater theoretical efforts in linking poverty outcomes to how social and political institutions change and evolve. The ways in which local populations behave, make choices and interact are not purely localised events. They depend to a large extent on how institutional organisation and the fight for power at different levels unfold in the political arena. Individuals and households cope with violence and make choices to protect their lives and livelihoods as a response to localised forms of control, information and institutional change (Balcells 2008, Kalyvas 2006). These in turn may have important consequences on how institutional transformation evolves as the effectiveness of livelihoods pursued will affect the strength and level of authority exercised by non-state groups, the level of support they can expect

from local populations, and the ability of the state to operate and intervene in areas they control (Justino 2009). The links between individual and household economic strategies and institutional processes during warfare are therefore crucial to understanding the relationship between war and poverty, and the design of policies to break the war-poverty cycle.

Advances in these areas of research will not be possible without further efforts to construct databases and develop new and more appropriate methodologies for the empirical analysis of processes of civil war and violence at the micro level. The ability to clearly identify how individuals, communities, state actors and new actors that emerge during armed conflict behave, react and relate to others, and a sound understanding of the consequences of resulting violence on their welfare and adjustment behaviour are critical to the design of effective post-conflict recovery policies. They are also essential to promote more proactive strategies amongst the development community in formulating adequate strategies to end armed conflicts, as well as prevent the eruption of new cycles of violence. More efficient empirical strategies to measure conflict processes at the micro-level can play an important role in reducing the risk of renewed conflict, as they can be designed to address social, economic and political risk factors – such as reduction in household welfare, changes in household behaviour, changes in social norms and local political alliances - that resulted in the outbreak of civil war in the first place and do not necessarily disappear after the conflict. Additional advances in the micro level empirics of armed conflict could contribute to better approaches by allowing more precise identification of factors leading to the success or failure of conflict recovery (and even prevention) measures and their impact on poverty.

#### References

- Akbulut-Yuksel, M. 2009. "Children of War: The Long-Run Effects of Large-Scale Physical Destruction and Warfare on Children", HiCN Working Paper no. 62, Households in Conflict Network (www.hicn.org).
- Akresh, R. and de Walque, D. 2008. "Armed Conflict and Schooling: Evidence from the 1994 Rwandan Genocide", HiCN Working Paper no. 47, Households in Conflict Network (www.hicn.org).
- Akresh, R. and Verwimp, P. 2008. "Civil War, Crop Failure and the Health Status of Young Children", HiCN Working Paper no. 19, Households in Conflict Network (<u>www.hicn.org</u>).
- Akresh, R., Verwimp, P. and Bundervoet, T. 2007. "Civil War, Crop Failure and Child Stunting in Rwanda", Policy Research Working Paper Series 4208, The World Bank.
- Alderman, H., Hoddinott, J. and Kinsey, B. 2006. "Long Term Consequences of Early Childhood Malnutrition", Oxford Economic Papers, 58 (3): 450-474.
- Alexander, M. and Christia, F. 2009. "Institutionalizing Cooperation: Public Goods Experiments in the Aftermath of Civil War", Working Paper 2009-0005, WCFIA, Harvard University.
- Angrist, J. and Kugler, A. 2008. "Rural Windfall or Resource Curse? Coca, Income and Civil Conflict in Colombia," *Review of Economics and Statistics* 90: 191-215.
- Annan, J., Blattman, C., Mazurana, D. and Carlson, K. 2009. "Women and Girls at War: 'Wives', Mothers and Fighters in the Lord's Resistance Army" HiCN Working Paper no. 63, Households in Conflict Network (<u>www.hicn.org</u>).
- Angrist, J. D. 1990. Lifetime Earnings and the Vietnam Era Draft Lottery: Evidence from Social Security Administrative Records. *American Economic Review*, 80 (3), 313-336.

- Angrist, J. D. 1998. Estimating the Labor Market Impact of Voluntary Military Service Using Social Security Data on Military Applicants. *Econometrica* 66 (2), 249-288.
- Arjona, A. M. 2009. "Variants of Social Order in Civil War.". Unpublished PhD Dissertation,Yale University, Department of Political Science.
- Arjona, A. M. and Kalyvas, S. N. 2006. "Preliminary Results of a Survey of Demobilized Combatants in Colombia". Unpublished manuscript, Yale University.
- Azam, J-P. 2002. "Looting and Conflict Between Ethno-regional Groups: Lessons for State Formation in Africa", *Journal of Conflict Resolution* 46 (1): 131-153.
- Azam, J-P., Collier, P. and Cravinho, A. 1994. "Crop Sales, Shortages and Peasant Portfolio Behaviour: An Analysis of Angola", *Journal of Development Studies* 30 (2): 361-379.
- Azam, J-P. and Hoeffler, A. 2002. "Violence Against Civilians in Civil Wars: Looting or Terror?", *Journal of Peace Research* 39 (4): 461-485.
- Balcells, L. 2008. "Rivalry and Revenge: Making Sense of Violence Against Civilians in Conventional Civil Wars" HiCN Working Paper no. 51, Households in Conflict Network (www.hicn.org).
- Banerjee, A. J. and Duflo. 2005. "Growth Theory through the Lens of Economic Development."In P. Aghion and S. Durlauf (eds.) *Handbook of Economic Growth*, North-Holland, Amsterdam.
- Banerjee, A., Duflo, E., Postel-Vinay, G and Watts, T. 2009. "Long Run Health Impacts of Income Shocks: Wine and Phylloxera in 19th Century France," *Review of Economics and Statistics*, forthcoming.
- Beber, B. and Blattman, C. 2009. "The Industrial Organization of Rebellion: The Logic of Forced Labor and Child Soldiering," unpublished working paper, Yale University.

- Beegle, K., 2005. "Labor Effects of Adult Mortality in Tanzanian Households", *Economic Development and Cultural Change*, 53 (3): 655-83.
- Bellows, J. and Miguel, E. 2006. "War and Institutions: New Evidence from Sierra Leone", *American Economic Review* 96 (2): 394-399.
- Bellows, J. and Miguel, E. 2009. "War and Local Collective Action in Sierra Leone", *Journal of Public Economics* 93: 1144-1157.
- Ben-David, D. and Papell, D. 1995. "The Great Wars, the Great Crash, and the Unit Root Hypothesis," *Journal of Monetary Economics*, 36: 453-475.
- Berlage, L., Verpoorten, M. and Verwimp, P. 2003. "Rural Households Under Extreme Stress: Survival Strategies of Poor Households in Post-Genocide Rwanda," A report for the Flemish Interuniversity Council and the Belgium Department of International Cooperation under the Policy Research Program.
- Blattman, C. 2009. "From Violence to Voting: War and Political Participation in Uganda", *American Political Science Review* 103 (2): 231.
- Blattman, C. and Annan, J. 2009. "The Consequences of Child Soldiering", *Review of Economics* and Statistics, forthcoming
- Blattman, C. and Miguel, E., 2010 "Civil War" Journal of Economic Literature 48 (1): 3-57.
- Bowles, S., Durlauf, S. N. and Hoff, K. 2006. Poverty Traps. Princeton University Press.
- Bowles, S., Loury, G and Sethi, R. 2009. "Group Inequality". Unpublished manuscript, Columbia University.
- Brakman, S., Garretsen, H. and Schramm, M. 2004. "The Strategic Bombing of Cities in Germany in World War II and its Impact on City Growth," *Journal of Economic Geography* 4: 1-18.

- Brockett, C. D. 1990. Land, Power, and Poverty: Agrarian Transformation and Political Conflict in Central America. Boston, MA: Unwin Hyman.
- Brück, T. 2001. "Mozambique: The Economic Effects of the War." In Francis Stewart and Valpy Fitzgerald (eds.) *War and Underdevelopment*, vol. 2. Oxford University Press, Oxford.
- Brück, T. 2004a. "Coping Strategies Post-War Rural Mozambique", HiCN Working Paper no. 02, Households in Conflict Network (<u>www.hicn.org</u>).
- Brück, T. 2004b. "The Welfare Effects of Farm Household Activity Choices in Post-War Mozambique", HiCN Working Paper no. 04, Households in Conflict Network (www.hicn.org)
- Brück, T. and Schindler, K. 2007. "The Impact of Conflict: A Conceptual Framework with Reference to Widow and Refugee Households", paper presented at the second annual workshop of the Household in Conflict Network, Antwerp, 19-20 January.
- Bundervoet, T. 2006. "Livestock, Activity Choices and Conflict: Evidence from Burundi", HiCN Working Paper no. 24, Households in Conflict Network (<u>www.hicn.org</u>).
- Bundervoet, T. and Verwimp, P. 2005. "Civil War and Economic Sanctions: An Analysis of Anthropometric Outcomes in Burundi", HiCN Working Paper no. 11, Households in Conflict Network (www.hicn.org).
- Bundervoet, T., Verwimp, P. and Akresh, R. 2009. "Health and Civil War in Rural Burundi", *Journal of Human Resources*, 44 (2).
- Camacho, A. 2008. "Stress and Birth Outcomes: Evidence from Terrorist Attacks in Colombia", *American Economic Review* 98 (2): 511-15.
- Carter, M. and Barrett, C. 2006. "The Economics of Poverty Traps and Persistent Poverty: An Asset-based Approach," *Journal of Development Studies* 42(2):178-199.
- Case, A. and Paxson, C. 2006. "Stature and Status: Height, Ability, and Labor Market Outcomes," *Journal of Political Economy* 16: 499-532.

- Centre for Poverty Analysis. 2006. "Moving Out of Poverty in Conflict-Affected Areas in Sri Lanka", Country Synthesis Report for the Moving Out of Poverty Study, Colombo, Sri Lanka.
- Chamarbagwala, R. and. Morán, H. E., 2008. "The Human Capital Consequences of Civil War: Evidence from Guatemala", HiCN Working Paper no. 59, Households in Conflict Network (www.hicn.org).
- Colletta, N. J. and Cullen, M. L. 2000. *Violent Conflict and the Transformation of Social Capital: Lessons from Cambodia, Rwanda, Guatemala, and Somalia*, Conflict Prevention and Post-Conflict Reconstruction, World Bank, Washington D. C.
- Collier, P. 1999. "On the Economic Consequences of Civil War", Oxford Economic Papers 50(4): 168-83.
- Collier, P. 2007. *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It.* Oxford: Oxford University Press.
- Collier, P. and Hoeffler, A. 1998. "On Economic Causes of Civil War", *Oxford Economic Papers* 50(4): 563–573.
- Collier, P. and Hoeffler, A. 2004. "Greed and Grievance in Civil War", *Oxford Economic Papers* 56 (4): 563-595.
- Collier, P., Elliot, L., Hegre, H., Hoeffler, A., Reynal-Querol, M. and Sambanis, N. 2003. Breaking the Conflict Trap: Civil War and Development Policy, World Bank, Oxford University Press.
- Collier, P., Hoeffler, A. and Söderbom, M. 2004. "On the Duration of Civil War", *Journal of Peace Research* 41(3): 253–273.
- Cramer, C. 2006. *Civil War Is Not a Stupid Thing: Accounting for Violence in Developing Countries*. London: Hurst & Company.

Czaika, M. and Kis-Katos, K. 2009. "Civil Conflict and Displacement: Village-Level Determinants of Forced Migration in Aceh", *Journal of Peace Research*, 46 (3), May.

Dasgupta, P. 1993. An Inquiry into Well-Being and Destitution, Clarendon Press, Oxford.

- Dasgupta, P. and Ray, D. 1986. "Inequality as a Determinant of Malnutrition and Unemployment, 1: Theory", *Economic Journal* 96(4): 1011-1034.
- Davis, D. and Weinstein, D. 2002. "Bones, Bombs, and Break Points: The Geography of Economic Activity," *American Economic Review*, 92: 1269-1289.
- Deininger, K. 2003. "Causes and Consequences of Civil Strife: Micro-Level Evidence from Uganda", *Oxford Economic Papers* 55: 579-606.
- De Janvry, A., Fafchamps, M. Ad Sadoulet, E. 1991. "Peasant Behaviour with Missing Markets: Some Paradoxes Explained", *Economic Journal* 101: 1400-1417.
- de Waal, A. 1997. *Famine Crimes. Politics and the Disaster Relief Industry in Africa*, African Rights and the International African Institute in association with James Currey, Oxford.
- de Walque, D., 2006. "The Long-Term Legacy of the Khmer Rouge Period in Cambodia", paper presented at the First Annual Workshop, Households in Conflict Network, Berlin January 15-16.
- de Walque, D. and Verwimp, P., 2009. "The Demographic and Socio-Economic Distribution of Excess Mortality During the 1994 Genocide in Rwanda", Policy Research Working Paper Series 4850, The World Bank.
- Do, Q. and Iyer, L. 2007. "Poverty, Social Divisions, and Conflict in Nepal", The World Bank.
- Donovan, C., Bailey, L., Mpyisi, E. and Weber, M. 2003. "Prime-Age Adult Morbidity And Mortality In Rural Rwanda: Which Households Are Affected And What Are Their Strategies For Adjustment?," 2003 Annual Meeting, August 16-22, 2003, Durban, South Africa 25847, International Association of Agricultural Economists.

- Doyle, M. and Sambanis, N. 2006. *Making War and Building Peace: United Nations Peace Operations*. Princeton University Press.
- Dube, O. and Vargas, J. 2007. "Are All Resources Cursed? Coffee, Oil and Armed Conflict in Colombia", Working Paper no. 2007-1, Weatherhead Center for International Affairs, Harvard University.
- Durlauf, S. 1996. "A Theory of Persistent Income Inequality", *Journal of Economic Growth* 1: 75-93.
- Durlauf, S. 2006. "Groups, Social Influences and Inequality", in S. Bowles, S. N. Durlauf and K.Hoff (eds.), *Poverty Traps*, chapter 6. Princeton University Press.
- Duryea, S., Lam, D. and Levinson, D. 2007. "Effects of Economic Shocks on Children's Employment and Schooling in Brazil," *Journal of Development Economics* 84: 118-214.
- Easterly, W. and Levine, R. 1997. "Africa's Growth Tragedy: Policies and Ethnic Divisions", *Quarterly Journal of Economics*, CXII: 1202-1250.
- Elbadawi, I. A. 1992. Civil Wars and Poverty: The Role of External Interventions, Political Rights and Economic Growth. The World Bank, Washington D. C
- Engel, S. and Ibáñez, A. M. (2007), "Displacement Due to Violence in Colombia: A Household-Level Analysis", *Economic Development and Cultural Change* 55: 335-365.
- Esteban, J. and Ray, D. 1991. "On the Measurement of Polarization", Boston University, Institute for Economic Development, Working Paper no. 18.

Esteban, J. and Ray, D. 1994. "On the Measurement of Polarization", Econometrica 62, 819-852.

- Esteban, J. and Schneider, G. 2008. "Polarization and Conflict: Theoretical and Empirical Issues", *Journal of Peace Research* 45 (2): 131-141.
- Fafchamps, M. and Lund, S. 2002. "Risk-Sharing Networks in Rural Philippines", Journal of Development Economics 71: 261-287.

- Fearon, J. D. 2004. "Why Do Some Civil Wars Last So Much Longer Than Others?", Journal of Peace Research 41(3): 275–301.
- Fearon, J. and Laitin, D. 2003. "Ethnicity, Insurgency and Civil War", American Political Science Review 97 (1): 75-90.
- Foster, A. D. and Rosenzweig, M. R. 2001. "Imperfect Commitment, Altruism and the Family: Evidence from Transfer Behavior in Low-Income Rural Areas", *Review of Economics and Statistics* 83 (3): 389-407.
- Gambetta, D. (1996). *The Sicilian Mafia: The Business of Private Protection*. Cambridge: Harvard University Press.
- Garfinkel, M. 1990. "Arming as a Strategic Investment in a Cooperative Equilibrium", *American Economic Review*, 80(1): 50-68.
- Garfinkel, Michelle and Stergios Skaperdas. 1996 (eds.). *The Political Economy of Conflict and Appropriation*, Cambridge University Press, New York.
- Ghani, A and Lockhart, C., 2008 *Fixing Failed States: A Framework for Rebuilding A Fractured World.* Oxford University Press, Oxford.
- González, M. and Lopez, R. 2007. "Political Violence and Farm Household Efficiency in Colombia". *Economic Development and Cultural Change* 55 (2): 367-92.
- Goodhand, G. 2001. "Violent Conflict, Poverty and Chronic Poverty", Working Paper No. 6, Chronic Poverty Research Centre, University of Manchester.
- Goodwin, J. 2001. *No Way Out: States and Revolutionary Movements 1945-1991*. Cambridge Studies in Comparative Politics, Cambridge University Press.
- Grossman, H. I. 2002. "Make Us a King: Anarchy, Predation, and the State", *European Journal* of Political Economy 18 (1): 31-46.

- Guerrero Serdan, G. 2009. "The Effects of the War in Iraq on Nutrition and Health: An Analysis Using Anthropometric Outcomes of Children," HiCN Working Paper no. 55, Households in Conflict Network (<u>www.hicn.org</u>).
- Guichaoua, Y. 2009. "How Do Ethnic Militias Perpetuate in Nigeria? A Micro-level Perspective on the Oodua People's Congress", MICROCON Working Paper no. 19. MICROCON, EU Integrated Project on Micro-Level Analysis of Violent Conflicts, Institute of Development Studies, Brighton (www.microconflict.eu).
- Gurr, T. R. 1970. Why Men Rebel, Princeton University Press.
- Habyarimana, J., Humphreys, M., Posner, D., Weinstein, J., Rosecrance, R., Stein, A. and Muller, J. Z. 2008. "Is Ethnic Conflict Inevitable?" *Foreign Affairs*, 87(4): 138-151.
- Hartzell, C., Hoddie, M. and Rothchild, D. 2001. "Stabilizing the Peace After Civil War: An Investigation of Some Key Variables", *International Organization* 55: 183-208
- Hirshleifer, J. 2001. *The Dark Side of the Force: Economic Foundations of Conflict Theory*, Cambridge University Press.
- Humphreys, Macartan & Jeremy Weinstein, 2008. 'Who Fights? The Determinants of Participation in Civil War', *American Journal of Political Science* 52(2): 436-455.
- Ibáñez, A. M. and Justino, P. forthcoming. "Collective Action Amidst Violent Conflict", Unpublished manuscript, Households in Conflict Network.
- Ibáñez, A. M. and Moya, A. 2006. "The Impact of Intra-State Conflict on Economic Welfare and Consumption Smoothing: Empirical Evidence for the Displaced Population in Colombia", HiCN Working Paper no. 23, Households in Conflict Network (<u>www.hicn.org</u>).
- Ichino, A. and Winter-Ebmer, R. 2004. "The Long-Run Educational Cost of World War II" Journal of Labor Economics, 22: 57-86.

- Justino, P. 2009. "Poverty and Violent Conflict: A Micro-Level Perspective on the Causes and Duration of Warfare", *Journal of Peace Research*, 46 (3), May.
- Justino, P. and Verwimp, P. 2006. "Poverty Dynamics, Conflict and Convergence in Rwanda", Working Paper no. 16, Households in Conflict Network (<u>www.hicn.org</u>).
- Justino, P. and Leonard, D. 2008. "Sources of Rebellion in Bottom Billion Countries", *IDS In Focus* Issue no. 3 – Concern for the Bottom Billion, March.
- Justino, P. and Shemyakina, O. 2008 "Migrant Remittances and Household Labor Supply in the Post-Conflict Tajikistan", Unpublished manuscript, Harvard University.
- Justino, P and Shemyakina, O. 2007. "Private and Public Transfers as a Coping Strategy under Armed Conflict: The Case of Tajikistan", paper presented at the *Third Annual Workshop of the Households in Conflict Network*, IDS, 10-11 December.
- Kalyvas, S. N. 1999. "Wanton and Senseless? The Logic of Massacres in Algeria", *Rationality* and Society 11 (3): 243-285.
- Kalyvas, S. N. 2003. "The Ontology of 'Political Violence': Action and Identity in Civil Wars", *Perspectives on Politics*, 1 (3): 475-494.
- Kalyvas, S. N. 2005. "Warfare in Civil Wars". In Isabelle Duyvesteyn and Jan Angstrom (eds.), *Rethinking the Nature of War*. Frank Cass, Abingdton.
- Kalyvas, S. N. 2006. *The Logic of Violence in Civil Wars*. Cambridge: Cambridge University Press.
- Kalyvas, S. N., Shapiro, I. and Masoud, T. 2008. "Introduction: Integrating the Study of Order, Conflict, and Violence". In Stathis N. Kalyvas, Ian Shapiro and Tarek Masoud (eds.), Order, Conflict and Violence, Cambridge University Press, Cambridge M.A.
- Kalyvas, S. and Kocher, M. 2007. "How 'Free' is Free-Riding in Civil Wars?", *World Politics* 59 (2): 177-216.

Keen, D. 1997. "A Rational Kind of Madness", Oxford Development Studies, 25 (1).

Keen, D. 1998. "The Economic Functions of Violence in Civil Wars", Adelphi Paper no. 320. International Institute of Strategic Studies, Oxford.

Keen, D. 2005. Conflict and Collusion in Sierra Leone. London: James Currecy Publishers.

- Knight, M., N. Loayza and D. Villanueva. 1996. "The Peace Dividend: Military Spending Cuts and Economic Growth." *IMF Staff Papers* 43(1): 1-37. Washington DC, United States.
- Kondylis, F. 2007. "Agricultural Outputs and Conflict Displacement: Evidence from a Policy Intervention in Rwanda", HiCN Working Paper n. 28, Households in Conflict Network (www.hicn.org).
- Kondylis, F. 2008. "Conflict Displacement and Labor Market Outcomes in Post-War Bosnia & Herzegovina", HiCN Working Paper n. 45, Households in Conflict Network (<u>www.hicn.org</u>).
- Langer, A. 2004. "Horizontal Inequalities and Violent Conflict: The Case of Cote D'Ivoire", CRISE Working Paper no. 13, Centre for Research on Inequality, Human Security and Ethnicity, Queen Elizabeth House, University of Oxford.
- Lichbach, M. 1995. The Rebel's Dilemma. University of Michigan Press, Ann Arbor.
- Lindley, A., 2007. "Remittances in Fragile Settings: A Somali Case Study", HiCN Working Paper no. 27, Households in Conflict Network (<u>www.hicn.org</u>).
- Lubkemann, S. 2008. *Culture in Chaos: An Anthropology of the Social Condition in War*. Chicago: University of Chicago Press.
- Maccini, S. and Young, D. 2009. "Under the Weather: Health, Schooling, and Economic Consequences of Early-Life Rainfall", *American Economic Review* 99 (3): 1006-1026.
- McDougal, T. 2008. "Mars the Redeemer: What Do Civil Wars and State-Led Industrialization Have in Common?", unpublished manuscript, MIT. Paper presented at the WIDER/HiCN Conference on Entrepreneurship and Conflict.

- Mancini, L. 2005. "Horizontal Inequality and Communal Violence: Evidence from Indonesian Districts", CRISE Working Paper no. 22, Centre for Research on Inequality, Human Security and Ethnicity, Queen Elizabeth House, University of Oxford.
- Matijasevic, T. M., Velásquez, L., Villada, C. and Ramírez, M. 2007. "Moving Out of Poverty: Understanding Freedom, Growth and Democracy from the Bottom-Up – National Synthesis Report, Colombia, Centro de Estudios Regionales Cafeteros y Empresariales, Manizales, Colombia.
- Maystadt, J-F. 2008. "Does Inequality Make Us Rebel? A Renewed Theoretical Model Applied to South Mexico", Working Paper no. 41, Households in Conflict Network, Institute of Development Studies at the University of Sussex.
- McKay, A. and Loveridge, S. 2005. "Exploring the Paradox of Rwandan Agricultural Household Income and Nutritional Outcomes in 1990 and 2000", Staff Paper 2005-06, Department of Agricultural Economics, Michigan State University, Michigan.
- Mehlun, H., Moene, K. and Torvik, R. 2006. "Parasites". In Simon Bowles, Steven Durlauf and Karla Hoff (eds.), *Poverty Traps*. Princeton University Press.
- Merrouche, O. 2006. "The Human Capital Cost of Landmine Contamination in Cambodia", HiCN working paper no. 25, Households in Conflict Network
- Miguel, E., Saiegh, S. and Satyanath, S. 2008. "National Cultures and Soccer Violence", keynote paper at the 4<sup>th</sup> annual workshop of the Households in Conflict Network, Yale University 4-5 December.
- Miguel, E., Satyanath, S. and Sergenti, E. 2004. "Economic Shocks and Civil Conflict: An Instrumental Variables Approach", *Journal of Political Economy* 112(4): 725-753
- Miguel, E. and Roland, G. 2005. "The Long Term Impact of Bombing Vietnam", mimeo Berkeley University.

Milliken, J. (ed.) 2003. State Failure, Collapse & Reconstruction. Malden, Blackwell.

Moore, B. 1966. Social Origins of Dictatorships and Democracy. Beacon Press, Boston.

- Moore, B. 1978. Injustice: The Social Bases of Obedience and Revolt. M. E. Sharpe, White Plains, N. Y.
- Montalvo, J. and Reynal-Querol, M. 2008. "Discrete Polarization with an Application to the Determinants of Genocides", *Economic Journal* 118: 1835-1865.
- Moser, C. and McIlwaine, C. 2004. *Encounters with Violence in Latin America: Urban Poor Perceptions from Colombia and Guatemala*. Routledge, London.
- Muller, E.N., 1985. "Income inequality, regime repressiveness, and political violence". *American Sociological Review* 50, 47-61.
- Muller, E. and Seligson, M. A. 1987. "Inequality and Insurgency", American Political Science Review 81(2): 425-451.
- Murshed, M. and Gates, S. 2005. "Spatial-Horizontal Inequality and the Maoist Insurgency in Nepal", *Review of Development Economics* 9: 121-134.
- Murshed, M. and Tadjoeddin, M. Z. 2007. "Reappraising the Greed vs Grievance Explanations for Violent Internal Conflict", MICROCON Working Paper no. 2. MICROCON, EU Integrated Project on Micro-Level Analysis of Violent Conflicts, Institute of Development Studies, Brighton (www.microconflict.eu).
- Nillesen, E. and Verwimp, P., 2008. *Rebel Recruitment in a Coffee Exporting Economy*. MICROCON Research Working Paper 11, Brighton: MICROCON.
- Nugent, J. B. and Gillaspy, T. 1983. "Old Age Pensions and Fertility in Rural Areas of Less Developed Countries: Some Evidence from Mexico", *Economic Development and Cultural Change* 31 (4): 809-829.

- Olson, M. 1965. *The Logic of Collective Action: Public Good and the Theory of Groups*. Cambridge, MA: Harvard University Press
- Olson. M. 2000. Power and Prosperity: Outgrowing Communist and Capitalist Dictatorships, Basic Books.
- Østby, G. 2006. 'Horizontal Inequalities, Political Environment and Civil Conflict: Evidence from 55 Developing Countries', *CRISE Working Paper* 28, University of Oxford ( <u>http://www.crise.ox.ac.uk/pubs/workingpaper28.pdf</u>).

Paige, J. 1975. Agrarian Revolutions. Free Press, New York.

- Petersen, R. 2001. *Resistance and Rebellion: Lessons from Eastern Europe*. Cambridge: Cambridge University Press.
- Pinchotti, S. and Verwimp, P. 2007. "Social Capital and the Rwandan Genocide: A Micro-Level Analysis", HiCN Working Paper no. 30, Households in Conflict Network (<u>www.hicn.org</u>).
- Platteau, J. 1991. "Traditional Systems of Social Security and Hunger Insurance: Past Achievements and Modern Challenges. In: Ahmad, E., Dreze, J., Hills, J., Sen, A. (Eds.), Social Security in Developing Countries. Clarendon Press, Oxford.
- Reynal-Querol, M. 2001. Ethnicity, Political Systems and Civil War, Institut d'Analisis Economic, Campus de la UAB: Bellatera-Barcelona
- Richards, P. 1996. *Fighting for the Rainforest: War, Youth and Resources in Sierra Leone*. London: James Currey Publishers, 1996.
- Rodriguez, C. and Sanchez, F. 2009. "Armed Conflict Exposure, Human Capital Investments and Child Labour: Evidence from Colombia" HiCN Working Paper no. 68, Households in Conflict Network (<u>www.hicn.org</u>).
- Ross, M. 2004. "What Do We Know About Natural Resources and Civil War?", *Journal of Peace Research* 41 (3): 337-356.

- Sánchez, F. and Chacon, M. 2006. "Conflict, State and Decentralisation: From Social Progress to an Armed Dispute for Local Control, 1974-2002", paper presented at the First Annual Workshop, Households in Conflict Network (www.hicn.org), Berlin January 15-16.
- Sánchez, F. and Palau, M. 2006, "Conflict, Decentralisation and Local Governance in Colombia, 1974-2004", HiCN Working Paper no. 14, Households in Conflict Network (<u>www.hicn.org</u>).
- Schock, K. 1996. "A Conjuctural Model of Political Conflict: The Impact of Political Opportunities on the Relationship Between Economic Inequality and Violent Political Conflict", *Journal of Conflict Resolution*, 40 (1): 98-133.
- Scott, J. 1976. *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia.* Yale University Press, New Haven.
- Scott, J. 1985. Weapons of the Weak: Everyday Forms of Peasant Resistance. Yale University Press, New Haven.
- Shemyakina, O. 2009. "The Marriage Market and Tajik Armed Conflict" HiCN Working Paper no. 66, Households in Conflict Network (www.hicn.org).
- Shemyakina, O. 2006. "The Effect of Armed Conflict on Accumulation of Schooling: Results from Tajikistan", HiCN Working Paper no. 12, Households in Conflict Network (www.hicn.org).
- Singh, I., Squire, L. and Strauss, J. 1986. *Agricultural Household Models: Extensions, Applications and Policy*. Baltimore, MD: Johns Hopkins University Press.
- Skaperdas, S. 2001. "The Political Economy of Organized Crime: Providing Protection When the State Does Not", *Economics of Governance* 2: 173-202.
- Skaperdas, S. 1992. "Cooperation, Conflict, and Power in the Absence of Property Rights", *American Economic Review* 82 (4): 720-739.

- Smith, J. P. 2009. "The Impact of Childhood Health on Adult Labor Market Outcomes", *Review* of Economics and Statistics 91 (3): 498-489.
- Steele, A. 2007. "Massive Civilian Displacement in Civil War: Assessing Variation in Colombia", HiCN Working Paper no. 29, Households in Conflict Network (www.hicn.org).
- Stewart, F. 2000. "Crisis Prevention: Tackling Horizontal Inequalities", *Oxford Development Studies* 28 (3).
- Stewart, F. 2002. "Horizontal Inequalities: A Neglected Dimension of Development", *Queen Elisabeth House, Working Paper Series* No. 81, University of Oxford, United Kingdom.
- Stewart, F., Brown, G. and Mancini, L. 2005. Why horizontal inequalities matter: some implications for measurement. CRISE Working Paper no. 19, Centre for Research on Inequality, Human Security and Ethnicity, University of Oxford.
- Stewart, F., Fitzgerald, V. and Associates 2001. War and Underdevelopment. Volume 1: The Economic and Social Consequences of Conflict, Oxford University Press, Oxford.
- Swee, E. L. 2009. "On War and Schooling Attainment: The Case of Bosnia and Herzegovina", HiCN Working Paper no. 57, Households in Conflict Network (www.hicn.org).
- Tilly, C. 1998. Durable Inequality, California: University of California Press.
- Townsend, R. M. 1994. "Risk and Insurance in Village India", Econometrica 62(3): 539-591.
- UN. 2004. A More Secure World, United Nations, New York.
- UN. 2005. In Fuller Freedom, United Nations, New York.
- USAID (2005). Conducting a conflict assessment: a framework for strategy and program development, USA Agency for International Development (USAID).
- Valentino, B. 2004. *Final Solutions: Mass Killing and Genocide in the 20th Century*. Ithaca, Cornell University Press.

- van den Berg, G., Lindeboom, M. and Portrait, F. 2006. "Economic Conditions Early in Life and Individual Mortality," *American Economic Review* 96: 290-302.
- Verpoorten, M. 2009. "Household Coping in War and Peacetime: Cattle Sales in Rwanda, 1991-2001", *Journal of Development Economics* 88: 67-86.
- Verwimp, P. 2005. "An Economic Profile of Peasant Perpetrators of Genocide: Micro-Level Evidence from Rwanda", *Journal of Development Economics* 77: 297-323.
- Verwimp, P. and Bundervoet, T. 2008. "Consumption Growth, Household Splits and Civil War", HiCN Working Paper no. 48, Households in Conflict Network (<u>www.hicn.org</u>).
- Verwimp, P., Justino, P. and Bruck, T. 2009. "The Analysis of Conflict: A Micro-Level Perspective" *Journal of Peace Research* 46 (3): 307-314.
- Voors, M., Nillesen, E., Verwimp, P., Lensink, R. and van Soest, D. 2010. "Does Conflict Affect Preferences? Results from Field Experiments in Burundi", MICROCON Working Paper no.
  21. MICROCON, EU Integrated Project on Micro-Level Analysis of Violent Conflicts, Institute of Development Studies, Brighton (www.microconflict.eu).
- Vlassenroot, K. and Raeymaekers, T. 2004. Conflict and Social Transformation in Eastern DR Congo, Ghent, Academia Press.
- Volkov, V. 2002. "Who is Strong When the State Is Weak". In M. Beissinger and C. Young (eds.), Beyond State Crisis?: Post-Colonial Africa and Post-Soviet Eurasia in Comparative Perspective, Woodrow Wilson Press.
- Walter, B. F. 2004. "Does Conflict Beget Conflict? Explaining Recurring Civil War", Journal of Peace Research, 41 (3): 371-88.
- Weinstein, J. 2007. *Inside Rebellion: The Politics of Insurgent Violence*, Cambridge: Cambridge University Press.

Wickham-Crowley, T. 1992. *Guerrillas and Revolution in Latin America: A Comparative Study* of Insurgents and Regimes Since 1956. Princeton University Press, Princeton.

Wilson, W. J. 1995. The Truly Disadvantaged. University of Chicago Press, Chicago.

- Wood, E. J., 2003. *Insurgent Collective Action and Civil War in El Salvador*. Cambridge Studies in Comparative Politics. New York: Cambridge University Press.
- World Bank 2005. Toward a Conflict-Sensitive Poverty Reduction Strategy: Lessons from a Retrospective Analysis, Report no. 32587, The World Bank, Washington D. C.
- Zartman, W. (ed) 1995. Collapsed States: The Disintegration and Restoration of Legitimate Authority, Boulder.