

**Quantifying the Impact of Women's Participation in  
Post-Conflict Economic Recovery**

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## **LIST OF ABBREVIATIONS**

ACLED	Armed Conflict Location and Events Database
ACORD	Association for Cooperative Operations Research and Development
BICC	Bonn International Center for Conversion
CAVR	Commission for Reception, Truth and Reconciliation in East Timor
CDC	Community Development Corporation
CDD	Community Driven Development
CEBR	Centre for Economics and Business Research
CEWARN	Conflict Early Warning and Response Mechanism
CERAC	Centro de Recursos para el Analisis de Conflictos (Conflict Analysis Resource Center) (Colombia)
CODHS	Colombia Demographic and Health Survey
CSO	Civil Society Organisation
DDR	Disarmament, Demobilisation and Reintegration
DFID	UK Department for International Development
DHS	Demographic and Health Surveys
DRC	Democratic Republic of Congo
FAO	Food and Agriculture Organisation
FMLN	Farabundo Martí National Liberation Front (El Salvador)
ICC	International Criminal Court
IDP	Internally Displaced Person
IISS	International Institute for Strategic Studies
ILO	International Labour Organisation
INGO	International Non-Governmental Organisation
KDP	Kecamatan Development Project (Indonesia)
KLSS	Kosovo Living Standards Measurement Survey

LTTE	Liberation Tigers of Tamil Eelam (Sri Lanka)
LRA	Lord's Resistance Army
LSMS	Living Standards Measurement Surveys
MFI	Microcredit Financial Institutions
NATO	North Atlantic Treaty Organization
NDHS	Nepal Demographic and Health Survey
NGO	Non-Governmental Organisation
NSP	National Solidarity Program (Afghanistan)
PRIO	Peace Research Institute Oslo
TLSS	Tajik Living Standards Measurement Survey
UCDP	Uppsala Conflict Data Program
UNDP	United Nations Development Programme
UNDP-HDR	United Nations Development Programme Human Development Report
UNHCR	United Nations High Commissioner for Refugees
UNIFEM	United Nations Development Fund for Women (now merged into UN Women)
UNMIL	United Nations Mission in Liberia
UNSCR	United Nations Security Council Resolution
UNSTATS	United Nations Statistics Division
USAID	United States Agency for International Development
WDI	World Development Indicators
WHO	World Health Organisation

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This report represents the views of the authors alone and not of UN Women or UN member states.

## EXECUTIVE SUMMARY

Recent research has started to shed light on some of the complex mechanisms associated with the outbreak of conflict, including the emergence of violent collective action, how competing groups form, interact and behave, and the organisation and functions of violence. The last few years have also witnessed a growing focus of the literature on conflict on the consequences of armed violence to the lives of people living in areas of conflict. One of the emerging findings of this literature is that the lives and livelihoods of women in contexts of violent conflict face significant adjustments as a reaction to the effects of violence on themselves, their families and their communities. The literature contains numerous accounts of women taking up new jobs, joining armies, acting as peacemakers and providing essential economic and social support to the reconstruction of communities affected by violent conflict. However, societal pressures and post-conflict processes tend to limit the capacity of women to participate fully and take advantage of new opportunities after the end of the war. Post-conflict contexts are currently characterised by a mismatch between policy priorities and women's needs and aspirations.

There have been some notable advances in the inclusion of women in peace, stability and economic recovery processes. The role of the United Nations has been instrumental in these advances, particularly the adoption of Security Council Resolution 1325 in 2000, which included among its main goals the need to address women and girls' specific needs, and to reinforce women's capacities to act as agents in relief and recovery processes in conflict and post-conflict situations.

Despite these important advances, there is still a considerable lack of systematic and rigorous understanding about the impact of violent conflict on women's roles, activities and aspirations, or about the nature and magnitude of the benefits of including women more fully in economic recovery and peacebuilding processes. Policy programming around gender issues in post-conflict contexts is currently being designed based on limited rigorous evidence, and incorporates inadequate procedures to evaluate its impact in terms of gender roles and gender equality. This situation has at times resulted in misplaced interventions and the continued emphasis on the reintegration of (male) combatants, and male employment generation programmes.

The main aim of this report is to analyse how changes in the roles and activities of women during episodes of violent conflict may shape their contribution to post-conflict economic recovery and sustainable peace. The report poses two important questions for which limited evidence is to date available in the academic literature on violent conflict or in policy programming in post-conflict contexts:

1. How does violent conflict change the roles that women take on within their households and communities?
2. How do changes in female roles during conflict affect women's own status after the conflict, and the capacity of households and communities to recover from the conflict?

In order to address these questions, the report reviews existing knowledge and provides new empirical evidence on the nature and extent of changes in women's roles and activities as a result of their exposure to violent conflict and the impact of these changes on post-conflict economic recovery at the household and community levels. The purpose of this empirical analysis is to provide a better understanding of (i) how changes in women's roles and activities may contribute towards processes of economic recovery; (ii) whether existing interventions are able to support these new roles (if positive) or to help women overcome negative outcomes; and (iii) what interventions the international community and local governments need to encourage in order to support the role of women in economic recovery and peacebuilding processes.

The research was based on a literature review and original comparative empirical analysis in six country case studies: Bosnia and Herzegovina, Colombia, Kosovo, Nepal, Tajikistan and Timor Leste. This analysis offers a first step towards the generation of rigorous evidence on the relationship between women's engagement in economic recovery and community stability in post-conflict countries. The results obtained must be interpreted with caution due to the simplistic nature of the analytical methods employed. Nonetheless, the empirical analysis points to a number of strong and suggestive trends and patterns, as follows:

- **Women participate more actively in labour markets during conflict.** This result is consistent across the six case studies. However, despite increases in labour market participation, women often face substantial limitations in terms of access to employment, the types of employment available to them, and the levels of wages received. In addition, women's contribution to household economic security is overlooked in the post-conflict period: women tend to lose their jobs once the war is over and face pressures to return to traditional roles.
- In general, **vulnerability among women increases during conflict.** This result is particularly significant for female-headed households. This is due to three main factors. The first is an increase in dependency rates during the conflict: households have more children to take care of (due to increases in fertility and in the number of orphans) and have more injured and incapacitated household members to support. The second is an increase in the labour market participation of women without any visible reduction in other obligations: women join formal and informal employment when male workers enlist in armed forces or are killed, injured, migrate or are abducted, in addition to their traditional household duties. The third is related to the type of jobs that women perform in contexts of violent conflict. These are typically low-paid, low-skilled jobs in the form of self-employment in informal activities or unpaid family labour. These new activities very seldom result in direct empowerment gains for women and may contribute further to their levels of vulnerability.
- However, and against all odds, **increases in the labour participation of women in conflict-affected areas are in some cases associated with increases in overall household and community welfare**, when compared with households and communities in areas less affected by violence, and measured in terms of higher per capita consumption. This result is dependent on the type of work in which women engage: benefits are more significant when women are employed in better paid jobs. Remarkably, positive household or community benefits were still observed in some case studies despite the low status jobs performed by women affected by conflict, and the fact that women earn on average less than men.

These results are not reflected in policy interventions currently being implemented in conflict-affected countries, including employment generation programmes, microfinance projects, community-driven development (CDD) initiatives, peacebuilding projects and disarmament, demobilisation and reintegration (DDR) programmes. Despite the potentially important peace dividends of more systematic integration of women in economic recovery and peacebuilding initiatives, of more meaningful employment for women and of measures that improve women's power relations within the household and in their communities, current policy programming in conflict-affected countries continues to prioritise the role of men in the achievement of peace, security and economic stability. Women remain outside mainstream peacebuilding and economic recovery programmes.

This situation may be partially due to the lack of rigorous enough evidence on the roles played by women in the economic security of their households through periods of violence, and in contributing positively to the economic recovery of communities affected by armed conflict. This project contributes, we expect, to the improvement of this evidence basis. The evidence discussed in this report suggests very strongly that post-conflict recovery interventions should support much more systematically women's engagement in economic reconstruction of post-conflict societies, given the large yet unexploited benefits of women's involvement in household and community-level recovery processes.



## 1. BACKGROUND

### 1.1. Aims and Rationale

Violent conflict is one of the most important challenges facing the world today, given its persistence and the devastating effects it entails to the lives, livelihoods and health of almost 1.5 billion people. The incidence of both intra- and inter-state wars has decreased in recent years (Themner and Wallensteen 2011).<sup>1</sup> Despite the decline in the number of violent conflicts, not all countries have reached a situation of stability and credible peace. The legacy of violence persists in many contexts: violence and conflict are associated with and generate severe physical and economic insecurity, loss of confidence and trust between and within communities, high levels of criminal activity, massive destruction of infrastructure, institutions and assets, scarcity in human capital and productivity, collapsed labour markets and lack of access to productive capital (Blattman and Miguel 2010, Justino 2012, World Bank 2011). Countries recovering from conflict face enormous challenges in re-establishing the social contract between states and citizens, the functioning of markets, and the re-building of infrastructure and social and political structures.

While violence causes significant hardship to economies, governments and people, conflict is often associated with profound institutional transformations that may change society in many different ways (Acemoglu and Robinson 2006, Cramer 2006, Justino 2012, Lubkemann 2008, Tilly 1978, 1990). One of these forms of transformation relates to changes in gender roles and aspirations. The lives of women in contexts of violent conflict adjust dramatically in response to changes in their households and their communities, as well as a direct response to fighting and violence. The end of conflict can open opportunities to challenge socio-cultural institutions and norms that act against gender equality. However, more often than not, pre-conflict conditions and post-conflict processes tend to limit the capacity of women to participate fully and take advantages of new opportunities during post-conflict reconstruction (Addison 2003, Bruck and Vothknecht 2011).

The increased recognition of the differentiated impact of violent conflict on men and women, and of the vital importance of economic recovery for sustainable peace, has driven renewed policy efforts to further involve women in peace and economic processes in post-conflict contexts. The role of the United Nations has been instrumental, particularly through Security Council Resolution 1325 issued in 2000. UNSCR 1325 includes among its main goals the need to address women and girls' specific needs, and to reinforce women's capacities to act as agents in relief and recovery processes, in conflict and post-conflict situations. Subsequent Resolutions, and the Secretary-General report on Women and Peacebuilding in 2010, highlighted the role of women as key actors in economic recovery, social cohesion and political legitimacy. These documents have also recognised some of the persistent challenges to women's participation in post-conflict recovery and proposed a 7-Point Action Plan to advance the successful implementation of UNSCR 1325. The plan commits the UN system to ensure "women's equal involvement as participants and beneficiaries in local-development, employment-creation, frontline service-delivery and DDR programmes in post-conflict situations". The subsequent strategic framework specifies clear targets including: (i) at least 15% (by 2014) and 20% (by 2020)

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<sup>1</sup> In 2010, there were 30 armed internal conflicts active in 25 locations. The maximum number of armed conflicts registered was 53 in 1993. Only 4 of the current active violent conflicts are considered major wars (involving 1,000 or more battle-related deaths), in contrast to 16 in 1990 (Themner and Wallensteen 2011). This declining trend does not take into account the events that unfolded in Middle East and North Africa from 2011 onwards, where at least 13 states experienced popular uprisings. Of these, Libya (and perhaps in Syria and Yemen) might be coded as new armed conflicts. The remaining uprisings will be classified as one-sided violence (Themner and Wallensteen 2011, UCDP 2011).

of demobilization, disarmament and reintegration (DDR) programme funds to be dedicated to addressing specific gender needs, (ii) at least 15% (by 2014) and 30% (by 2020) of funding for economic recovery programmes to be specifically dedicated to gender equality, and (iii) at least 30% (by 2014) and 40% (by 2020) of participants in economic recovery, temporary employment and post-conflict poverty reduction programmes to be women.

Despite these important advances, there is still a considerable lack of systematic and rigorous evidence on the impact of violent conflict on women and gender roles, and on the benefits of including women in economic recovery and peacebuilding processes. Policy programming around gender issues in post-conflict contexts is currently being designed based on limited rigorous evidence, which has at times resulted in misplaced interventions and the continued emphasis on the reintegration of (male) combatants, and male employment generation programmes. The aim of this report is to build on existing knowledge to provide new empirical evidence on the impact of violent conflict on women's roles and activities, and the subsequent effect of these changes on local processes of post-conflict economic recovery.

The project adopts a micro-level perspective, focussing on individual, household and community-level interactions that result from violent conflict, and necessarily have a gender dimension. The new evidence produced in this report is based on primary data collected for representative samples of individuals, households and communities, using survey research designs and statistical methods of analysis. This framework is particularly useful for policy purposes, as understanding how conflict develops at the micro-level will impact on how policies and incentives to prevent conflict, maintain peace and protect livelihoods may be designed, structured and fine-tuned to the needs of specific individuals and groups. The focus on the micro-level does not imply a disregard for aggregated evidence, which is useful to assess the generalization and regularity of findings across a broader range of countries. The study will therefore compare and contrast some of the micro-level evidence against findings from the cross-country datasets.

The report is organised in three main parts. In the first part (chapter 2), we review existing evidence on how conflict affects women's roles in households and communities, why and how gender roles change due to the conflict, and to what extent these new roles may affect local processes of economic recovery in post-conflict countries. The literature review makes use of recent empirical studies on the impact of violent conflict on individuals, household and communities (see Justino 2012), as well as of policy-oriented literature and in-depth case studies published in the last couple of decades on gender, conflict and peace. This review was used to identify a set of testable hypotheses about the potential contribution of women to economic recovery processes. These hypotheses form the framework for the empirical analysis in chapter 3.

The second part (chapter 3) constitutes the analytical bulk of the report. We have mapped and assessed the usefulness of existing databases to build rigorous empirical analysis on (i) the impact of conflict on women's roles and activities within households and local communities, and (ii) the impact of women's new roles on local processes of stability and economic recovery. Using a selected number of datasets, chapter 3 provides detailed analysis at the micro-level, using descriptive statistical analysis, on key relationships in six case studies (Bosnia and Herzegovina, Colombia, Kosovo, Nepal, Tajikistan and Timor Leste), compares these findings with aggregated data across a larger sample of conflict-affected countries and proposes possible strategies to undertake causal regression analysis in a subsequent Phase II of this study.

In the third part of the report (chapter 4), we compare and contrast the empirical findings discussed in chapter 3 against available evidence on the impact of gender-focused peacebuilding and economic recovery initiatives being implemented by UN agencies, the World Bank and major international NGOs in post-conflict countries.

## **1.2. Definitions and Concepts**

Some important concepts addressed in this report have received much attention in the literature. We define below how we make use of key concepts in order to ensure consistency throughout.

### ***Conflict***

Armed conflict has been defined by Uppsala University/PRIO (and subsequently the World Bank) as “contested incompatibility, which concerns government and/or territory, where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths”.<sup>2</sup> Events resulting in more than 1,000 battle-deaths are defined as major conflicts (see Wallensteen and Sollenberg 2001). The analysis in this report refers mostly to one form of major conflict – civil wars – defined as “armed combat within the boundaries of a recognised sovereign entity between parties subject to a common authority at the outset of the hostilities” (Kalyvas 2007: 17). Other types of violent conflict are certainly likely to affect the roles, actions and behaviour of women and their families, albeit through different mechanisms. We concentrate on civil wars given the scarcity of evidence at the micro-level on the impact of other forms of violent conflict.

### ***Peacebuilding and economic recovery***

In this report, we use the definition of peacebuilding provided by Boutros Boutros-Ghali during his time as UN Secretary General, as “action[s] to identify and support structures which tend to strengthen and solidify peace to avoid a relapse into conflict”.<sup>3</sup> These actions can be at local, regional, national and international levels. The concept does not apply only to post-conflict situations but may also be extended to measures and action that can prevent conflicts from taking place, as well as to supporting measures during the conflict that could facilitate the peace process.<sup>4</sup> In this report, we focus in particular on the role of economic recovery and improvement in livelihoods as central to achieving stability and reducing the risk of conflict relapse (Addison and Bruck 2009, Collier and Hoeffler 2004, Beasley 2006), particularly if such recovery is broad-based and inclusive of all members of society (Addison 2003, Stewart et al. 2007).

### ***Post-conflict***

This is the period directly after conflict. The start of the post-conflict period can be marked by the signing of an official peace-agreement, or by the end of fighting and violence for other reasons. It is also referred to as the ‘transition phase’ of a country. Defining when this period starts and ends is heavily dependent on each individual context. This is a controversial issue as a ‘post-conflict’ country will be entitled to receive different aid and financial interventions than one still considered to be experiencing conflict. It is therefore difficult to provide an exact definition, except the broad one given above.<sup>5</sup> Some parts of a country may embark on a post-

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<sup>2</sup> [http://www.pcr.uu.se/research/ucdp/definitions/definition\\_of\\_armed\\_conflict/](http://www.pcr.uu.se/research/ucdp/definitions/definition_of_armed_conflict/).

<sup>3</sup> United Nations, *An Agenda for Development: Report of the Secretary-General*, UN Doc A/48/935 (6 May 1994).

<sup>4</sup> <http://www.who.int/hac/techguidance/hbp/definitions/en/>.

<sup>5</sup> [http://www.huntalternatives.org/download/39\\_post\\_conflict.pdf](http://www.huntalternatives.org/download/39_post_conflict.pdf).

conflict period before others, whilst other parts can remain unaffected by direct violent conflict throughout a conflict period.

### ***Empowerment***

Empowerment is the process through which an individual (man or woman) increases their capacity to make their own life choices, and to transform these choices into actions and outcomes. Central to this process are actions, which both build individual and collective assets, and improve the efficiency and fairness of the organizational and institutional context which govern the use of these assets” (World Bank 2002). For reasons of data availability, we refer in this report to women’s empowerment in terms of their bargaining power and their level of engagement in decision-making processes within their household and community. This definition proxies to some extent the five components included in the UN’s definition of women’s empowerment: (i) women’s sense of self-worth, (ii) their right to have and to determine choices, (iii) their right to have access to opportunities and resources, (iv) their right to have the power to control their own lives, both within and outside the home, and (v) their ability to influence the direction of social change to create a more just social and economic order, nationally and internationally.<sup>6</sup>

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<sup>6</sup> <http://www.un.org/popin/unfpa/taskforce/guide/iatfwemp.gdl.html>

## 2. LITERATURE REVIEW

This study addresses two main questions. The first question relates to the role of women during conflict: How does violent conflict change the roles that women take on within their households and communities? In section 2.1, we review the literature on the impact of violent conflict on women's functions within their families, and their wider economic, societal and political roles. The second question is concerned with the impact of these new roles and activities: How do changes in female roles during conflict affect women's own status after the conflict, and the capacity of their households and communities to recover from the conflict? We review existing evidence on this issue in section 2.2.

Overall, we have found that rigorous evidence on the roles of women during conflict and in the post-conflict period is staggeringly scarce. Nonetheless, from each of the studies reviewed below, we were able to compile useful information on what we know and what we need to know about the impact of violent conflict on women's roles and activities. In particular, we have made use of the literature review in sections 2.1 and 2.2 to derive specific hypotheses that can be empirically tested using quantitative data and to identify key evidence gaps that need to be addressed in a systematic, comparative way. We will provide a first cut at the possibilities of empirical analysis in chapter 3, based on descriptive statistics for a sample of six countries affected by violent conflict.

### 2.1. Changes in gender roles during and after conflict

#### 2.1.1. *Impact of conflict on family roles*

Emerging research has provided what amounts now to a considerable body of evidence on the impact of violent conflict on households and communities due to the death, injury and displacement of individuals, the destruction of physical infrastructure and the destruction of social fabric and local social and political structures.<sup>7</sup> One of the key findings of this literature is that these effects often force women to adopt new roles, notably as household heads and breadwinners. For instance, Menon and Rodgers (2011) report an increased proportion of women whose husbands migrated between the start and the end of the conflict in Nepal (from 16% in 1996 to 26% in 2006), resulting in the growing incidence of female-headed households (from 7% to 15% in the same time period). In the case of Rwanda, Schindler (2010) has found that 23.3% of all rural households in 2005, a decade after the civil war and the 1994 genocide, were headed by a woman. Of these, 79% were widows, 12% were divorced, 7% were single and 2% were married. Women also tend to marry and have children at younger ages due to male shortages (see de Walque 2006 for evidence on Cambodia, Shemyakina 2009 for evidence on Tajikistan and Schindler 2010 for evidence on Rwanda).

There are additional accounts of increases in the incidence of female- and widow-headed households due to conflict in the policy-oriented literature. Zuckerman and Greenberg (2004) refer to a study by UNIFEM (2004) showing that, in post-conflict Timor Leste, 45% of all adult women are widowed. Kumar (2001) refers to a study by UNDP (2008) showing that female-headed households constituted 25-30% of all families in Cambodia. The study also reports that 30-50% of all households in the Ixcán region of Guatemala are headed by a woman. El-Bushra et al. (2002) describe a 30% increase in female-headed household in the conflicts in Colombia and Sudan. Bouta et al. (2005) found further that, in Angola, Bosnia and Herzegovina, Kosovo, Mozambique and Somalia, widows represent more than 50% of all adult women. UN (2001)

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<sup>7</sup> See Blattman and Miguel 2010 and Justino 2012 for reviews of the literature on micro-level conflict processes that emerged in the last decade. See also [www.hicn.org](http://www.hicn.org).

reports that around 60% of all adult women after the war in Mozambique were widowed. These are staggering figures.

This body of evidence has allowed us to derive the first hypothesis on the impacts of violent conflict on gender roles:

***Hypothesis 1:*** Violent conflict increases the responsibilities of women within households and changes the gender division of tasks through its impacts on household composition.

Two key testable implications derive from this hypothesis. First, we expect to observe higher shares of separated, divorced and/or widowed women, of female-headed households, and of dependency ratios in conflict-affected areas, in relation to areas less affected by violence. Second, we expect to find significant differences in the allocation of time of women and men across activities, with women in households affected by conflict spending more time in productive tasks and less in reproductive tasks, when compared to women in households less affected by violence.

Two factors may prevent us from finding support for this hypothesis in some contexts. First, formerly married women and widows may decide to join households of relatives or form new extended households with non-relatives. In those circumstances, we may not observe significant changes in women's activities within the household, particularly if they have working age males living with them. Second, some literature has highlighted that the impact on gender roles could be different for older and younger women, as the latter can respond to shortage of males by marrying and having children earlier (see Schindler 2010). Therefore, we may only observe changes in women's roles for older women. We return to this discussion in chapter 3. Below we discuss in more detail existing evidence on the wider impact of conflict on women's economic, social and political roles.

### ***2.1.2. Impact of conflict on women's economic roles***

The negative effects of violent conflict on markets and economic opportunities force individuals and households to adopt a variety of adaptation strategies in order to secure their lives and livelihoods. As a result of the impact of conflict on the demographic composition of households, one of the major livelihood adaptation strategies adopted by households in conflict-affected countries is a change in customary gender divisions of labour: women typically take on earning roles within the household during and shortly after the conflict to replace lost (male) workers (see review in Justino 2009). New forms of labour division, however, are not only restricted to (newly) female-headed households. The income generating opportunities and resources men relied on before the conflict (such as land, animals and other assets) are often lost or severely obstructed, forcing men to accept menial employment or to rely on female household members.

The literature on the impacts of conflict on female labour supply can be traced to the effects of World War II. The role of women in the reconstruction of states during the second half of the 20<sup>th</sup> Century ('rubble women') has been largely recognised by academics and policy makers. Among others, Acemoglu et al. (2004) found that female labour force participation grew from 28% in 1940 to 34% in 1945 in the United States as a consequence of the military mobilization of males. Even though as much as half of all women withdrew from the labour force at the end of the decade, a substantial number remained in employment, indicating a change in women's preferences and opportunities as a result of WWII. Evidence discussed in Akbulut-Yuksel et al. (2011) shows that women returned to their traditional roles once the war was over. They find

that post-WWII mandatory employment programmes in Germany reduced female full-time labour participation and the number of hours that women worked.

Micro-level quantitative literature on more recent civil wars has reported similar findings. Menon and Rodgers (2011) show that, in Nepal, as a result of the Maoist insurgency and the consequent high levels of migration and displacement of males, the probability of a woman being employed outside the home was 10% higher than before the outbreak of fighting. In the case of Tajikistan, Shemyakina (2011) has found that young women in regions affected by the 1992-97 civil war were more likely to be employed than older women living in the same areas and than younger women living in non-affected regions.

A significant proportion of the literature has focused on displaced populations, also reporting increases in female labour market participation among these groups. Lehrer (2010) finds that, in Northern Uganda, the longer men stayed in refugee camps, the less likely they were to find employment. No statistically significant effect was found for women, who continue to work as previously. Kondylis (2010) documents the effects of displacement in Bosnia and Herzegovina six years after the war, finding higher unemployment rates among displaced men. In Colombia, Calderon et al. (2011) report that displaced married women work eight hours more per week than their rural (not displaced) counterparts, and that their contribution to household earnings increases by 14% after displacement. These are large effects due to the fact that women's skills were more suitably matched to the needs of urban labour markets than the skills possessed by male IDPs, thereby leading to a better integration of women into urban job markets in Colombia.

Similar changes in the gender division of labour have been recorded in several policy-oriented and in-depth case studies on gender, conflict and peace. Increases in women's participation in the labour force have been observed during and shortly after the end of the conflict in Bosnia and Herzegovina, Cambodia, El Salvador, Georgia, Guatemala, and Rwanda (Kumar 2000, Date-Bah 2003), Timor Leste (Allden 2008), Indonesia (Adam 2008) and Sudan, Angola, Mali, Uganda and Somalia (El-Bushra and Sahl 2005). Similarly to Calderon et al. (2011), this last study argues that integration in urban labour markets, mostly informal, is easier for women. For instance, in Angola, women took over petty trading in markets and streets, while men that lost former jobs in teaching or in military service were reluctant to take up such lower status jobs. Likewise, displacement into towns in Sudan allowed women to acquire new skills through exposure and interaction, while men were unable to fulfil their previous roles due to the loss of land and animals (El-Bushra and Sahl 2005).

It is important to note that most studies reviewed above highlight that, despite the overall reported rise in female employment across conflict-affected contexts, women are particularly active in low skilled jobs and in the informal sector. Of 1,784 women surveyed in the DRC in 2009 (mostly rural), 93% were found to be working, but only 7.4% in the formal economy (Women for Women 2010).<sup>8</sup> In general, women's participation in the informal sector rises further during the post-conflict period. Kumar (2000) speaks of a 'feminization' of the informal sector in Bosnia and Herzegovina, Cambodia, El Salvador, Georgia, Guatemala, and Rwanda. Petty trade and small scale businesses seem to grow considerably in importance for women during the post-war period as they do not require land rights or large investments, and returns are made more quickly (Sorensen 1998). One of the common challenges for women in the post-conflict period is the lack of access to credit, which forces them to focus on petty trade (Allden 2008).

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<sup>8</sup> <http://www.womenforwomen.org/news-women-for-women/assets/files/Congo-Briefing.pdf>.

The proportionately higher involvement of women in the informal sector is not an exclusive characteristic of conflict contexts, but a general trend among developing countries. Chen et al. (2005) report that more than 60% of women in developing countries are engaged in informal activities. However, the findings discussed above seem to suggest that exposure to violent conflict further strengthens the presence of women in informal markets.

Based on the findings from the literature on gender roles during conflict, we derive the second testable hypothesis:

***Hypothesis 2:*** Violent conflict increases the participation of women in labour markets and in income generating activities via an ‘added worker’ effect, due to changes in household composition, and as a livelihood coping strategy against harsh economic conditions.

Based on this hypothesis, we expect to observe in our empirical analysis an increase in the rates of female labour market participation in households affected by conflict, and/or an increase in the number of hours worked by women in conflict-affected households, when compared to women in households not affected by violence.

This impact can in principle be mediated by other individual and household characteristics and choices. One of the most important factors affecting the functioning of labour markets in conflict-affected areas is the decision to migrate (voluntarily or forcibly) from conflict-affected areas. This often translates into population movements from rural to urban areas. If the entire household migrates, we may not find an added worker effect when the main workers in the household are able to find work in the new location. Remittances sent by relatives may also act as a disincentive for women’s involvement in labour markets.

We would expect to observe a larger ‘added worker’ effect if migration is associated with the disintegration or separation of families, forcing women into the labour market. We would also expect to observe a significant ‘added worker’ effect if, as emphasised in some of the studies above, women’s experiences are more appropriate to low-skilled activities found in informal urban markets, and men may struggle to find jobs suitable to their agricultural skills.

Migration or displacement may only affect male members of the household, while female members stay behind to look after property and assets. In these contexts, we could still observe an increase in the time women spend in productive tasks. This increase would be mostly associated with self-employment in agriculture, usually as unpaid family workers.

Another point open to empirical testing is whether the effects on women’s participation in labour markets persist after the conflict ends, due to increased experience, acquired knowledge and access to information on job opportunities (Acemoglu et al. 2004). In addition, female- or widow-headed households may have no other option but to engage in income generating activities, unless they can rely on relatives, social networks or assistance. This long-term effect will determine whether we will observe an ‘added worker’ effect in datasets collected several years after the conflict (as some of the available datasets do).

Several case studies and policy oriented reports have noted that, during the post-conflict period, and after the first spur in economic growth is over and economic growth shrinks again, women are generally the first to lose their jobs, especially in the organised formal sector (Kumar 2000, Date-Bah 2003). High unemployment of men after the conflict (due to the resettlement of displaced people, demobilization and reintegration processes, and economic restructuring after



conflict) often forces women out of the formal sector. This has been observed in Angola, Mozambique, former Yugoslavia and Zimbabwe (de Watteville 2002), and Nicaragua (Spencer 1997).

Some women in a few countries may have been able to benefit from new opportunities, like women employed in the tourism sector in Guatemala (Sorensen 1998), well-educated women in Bosnia and Herzegovina (Walsh 1997, cited in Bouta et al. 2005: 98), and some women employed in the agricultural export sector in Guatemala and El Salvador (Kumar 2000). In Georgia, some groups of women started trading citrus fruits and other goods because, unlike men, they were not considered potential guerrillas and therefore were perceived as safer and easier to trade with (Holtzman and Nezam 2004, cited in Bouta et al. 2005). Despite these positive examples, most existing evidence suggests that pre-war social and cultural institutions tend to limit women's access to economic resources and opportunities, such as land, education, credit and formal employment (Brück and Vothknecht 2011). In particular, female- and widow-headed households face many social and economic constraints after the conflict, such as the lack of property rights over the land of parents or dead husbands (Kumar 2000, Greenberg and Zuckerman 2009), land shortage, pressures from the return of refugees and inadequate legal protection (UNIFEM 2002). In some contexts, women's mobility is severely restricted due to security risks, which prevents their more active participation in social, economic and political activities outside their homes (Pratt and Werchick 2004, Kalungu-Banda 2004). We return to this discussion in chapter 3.

### ***2.1.3. Impact of conflict on women's social and political roles***

One of the more destructive impacts of conflict is the disruption of social relations and networks. Yet the relationship between violent conflict and institutional change is one of the least researched aspects of armed conflict (see Blattman and Miguel 2010, Justino 2012). Some case studies have shown evidence for intensification in the levels of female civic engagement, individually and through women's organisations, in conflict and post-conflict contexts. These accounts originate from a small number of descriptive case studies, as discussed below. More rigorous empirical evidence on the impact of conflict on civic and political engagement is extremely limited and, within it, gender-differentiated analyses are practically nonexistent. This is largely associated with the lack of appropriate data on social capital and political engagement measures in household surveys, particularly of data disaggregated by gender. A few recent studies have reported a positive causal relationship between conflict exposure and civic engagement, with no significant differences found between female and male respondents (Bellows and Miguel 2006, 2009, DeLuca and Verpoorten 2011). These results focus on post-conflict effects, contrasting with accounts of women's civic engagement during armed conflict. In the remainder of this section, we will make use of the limited information we have been able to compile from policy reports and case studies on the social and political roles that women assume in conflict and post-conflict contexts to derive testable hypotheses.

The available literature provides descriptions of the social and political roles of women in a variety of post-conflict countries. Women in conflict areas engage with a number of organisations including churches, schools, hospitals and charities, self-help groups and local political institutions (Kumar 2000, Sorensen 1998). Kumar (2000) reports the presence of hundreds of active women's organisations in Bosnia and Herzegovina, El Salvador, Guatemala, and Rwanda, and smaller numbers in Cambodia and Georgia. Most of these organisations emerged at the end of conflict. Rehn and Johnson Sirleaf (2002) found many examples of

women providing social services during conflict and emergencies, often voluntarily.<sup>9</sup> Sorensen (1998) describes many instances of women active in restoring social services, such as health and education, helping refugees, and providing counselling, training, and psychological support in Mozambique, Uganda, Algeria, Liberia, Uganda, Somalia, Sri Lanka, and former Yugoslavia.

We have found limited evidence on whether and how these organisations remain active in the long-term and on their contribution to post-conflict reconstruction. It is possible that this contribution is significant, but rigorous programme evaluation is scarce (see chapter 4 below). Some studies seem to indicate that rises in women's civil engagement during and after violent conflict may influence important social attitudes. In Guatemala, for example, women's groups have been pivotal in changing social attitudes towards domestic violence through awareness raising campaigns. In Sudan, sexual violence is being discussed publicly, while in Sierra Leone women's groups have promoted the social acceptance of women's political participation. The rise in women's social roles seems also to have some association with a more visible presence of women in the political sphere of post-conflict countries. Women's organisations in post-conflict settings have promoted political awareness amongst women through voter registration drives, given assistance to women candidates in order to support the political empowerment of women, and raise awareness about gender issues (Sorensen 1998). In Sudan and Kosovo, women's groups have successfully mobilised women to take part in elections and local consultation processes (Castillejo 2010). Lobbying campaigns by women have been associated with the improved representation of women in parliament and in government positions. For instance, recently, Kosovo established a quota of 30% of women representatives in the Kosovo Assembly. Burundi implemented similar 30% quotas for the upper and lower houses, and Northern Sudan's women's quota in the National Assembly rose to 13%. The Legislative Assembly in Southern Sudan has a quota of 25% (Castillejo 2010). Some advances have also been made in relation to female participation in elections in Liberia, DRC, Afghanistan, Pakistan and Sierra Leone, and in formal politics in Nepal, Bosnia and Herzegovina, Cambodia, El Salvador, Georgia, South Africa, Mozambique, Angola, the FYR of Macedonia, Burundi, Timor Leste and Rwanda (O'Connell 2011, Kumar 2000, Zuckerman and Greenberg 2004, UNIFEM 2002). From this (small) body of literature, we have derived the following hypothesis:

***Hypothesis 3:*** Violent conflict increases the participation of women in social and political organisations at the local and national levels.

Potential mechanisms underlying these effects of conflict on women's social and political engagement may be related to changes in gender roles within households and the increased allocation of women's time to productive activities outside their households, which may promote social relations and interactions, and alter women's preferences and behaviour in relation to political involvement. Similarly, women may also have to step in during conflict to fill leadership positions left vacant by migration, displacement or deaths of male members within communities.

At the same time, the literature above has also highlighted the fact that social and political inclusion may not necessarily guarantee changes in outcomes. Despite advances in the political sphere, patriarchal attitudes that perceive women as too 'soft' for politics have prevented many women from voting (International Alert 2010: 33). Although women may have played key roles in conflict prevention and peacebuilding in many conflicts (for instance in India, Colombia, Sri Lanka and Sierra Leone), they are usually excluded from formal peace and political processes (Sorensen 1998, O'Connell 2011, El-Bushra 2002, Castillejo 2010, International Alert 2010, UNIFEM 2009). The implication of these accounts is that greater civic and political participation

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<sup>9</sup> The areas included Bosnia and Herzegovina, Cambodia, Colombia, DRC, East Timor; Macedonia, Yugoslavia, Kosovo, Guinea, Israel, Liberia, Rwanda, Sierra Leone, Somalia and the occupied Palestinian territories.

of women during the conflict may fade away in the post-conflict period. In addition, changes in gender roles and activities may lead to a greater work-load for women, who often increase their time allocated to productive tasks without reducing in similar proportions their time spent in reproductive and domestic chores. This overburden on women can limit their participation in social groups and organisations. We return to this discussion in chapter 3, although the evidence that we have been able to collect on the social and political impact of conflict is limited by the availability of suitable data.

## **2.2. The impact of women's new roles on peacebuilding and economic recovery**

The second question we address in this study is concerned with the ways in which the changes in female roles reviewed above may affect the status of women after the conflict, the capacity of their households to recover from the conflict and the sustainability of community-level processes of stability and economic recovery. We have been unable to find direct answers to this question in the literature. Existing studies on the roles of women in contexts of violent conflict focus quite substantially on documenting changes in new roles and activities. Less evidence exists on the (positive or negative) consequences of those social, economic and political changes. This situation is to a large extent due to the lack of rigorous evidence on the mechanisms that underlie these processes of social, political and economic transformation, as well as to the absence of rigorous enough evaluations of policy programmes in post-conflict contexts (see chapter 4). Notwithstanding this lack of evidence, we have been able to identify general hypotheses based on related bodies of literature that may point towards some partial or indirect answers to the question above. We make use of this literature to identify and refine the research hypotheses which we test in the empirical analysis in chapter 3. Below we summarise and discuss existing evidence on the impact of women's new roles and activities during conflict on (i) women's own empowerment, (ii) household levels of welfare, and (iii) processes of economic recovery at the community level.

### **2.2.1. Women's empowerment**

Any analysis of the mechanisms shaping post-conflict economic welfare and recovery must take into account intra-household distributions of power and decision-making processes, as these determine household investment, production and consumption decisions. As the literature review provided above has shown, conflict affects gender relations and roles. In particular, exposure to conflict appears to be associated with increases in women's engagement in economic, social and political spheres. Consequently, we should expect to observe positive effects of conflict on women's status via increased female empowerment and bargaining strength within households, increased economic independence and greater confidence and self-esteem (Nakamura 2004). Moreover, the experience and knowledge gained through women's increased engagement in economic, social and political activities should maintain these expected benefits in the long-term. In that sense, conflict may potentially open a window of opportunity to transform social structures and promote greater gender equality:

***Hypothesis 4:*** Greater participation of women affected by conflict in labour markets, and greater civic engagement, is associated with increases in women's economic empowerment within households, particularly among female-headed households.

Several studies have reported increases in women's power following displacement or encampment (Byrne 1996, El-Bushra et al. 2002, El-Bushra and Sahl 2005). However, increased responsibilities and the assuming of traditionally male activities by women during the conflict can have ambivalent effects. First, even though women might speak proudly and positively about

their new opportunities, traditional patriarchal values tend to restrict any new opportunities that may be available for women in the post-conflict period (Handrahan 2004, Date-Bah 2003). Second, some evidence on gender roles in post-conflict periods has reported alarming rises in domestic violence, which can be a decisive factor in rolling back women's gains and pushing their return to pre-war roles (International Alert 2010, Date-Bah 2003). Third, increases in women's power can be constrained by the type of jobs that women can access during and after conflict. Jobs that command higher wages may be associated with increased female empowerment. However, low-skilled, low-paid work or unpaid work – which characterise the majority of new female jobs in conflict contexts – may not result in marked improvements in women's economic empowerment (Chiappori et al. 2002, Pollack 2005, Anderson and Eswaran 2009).

A recent micro-level empirical study on the consequences of conflict on women has provided unique evidence on the impact of women's increased participation in labour markets after conflict on female empowerment (Calderon et al. 2011). The authors find no positive impact of increased labour participation on female empowerment within households (measured by women's involvement in household decision-making processes). The result is explained by the fact that women increase their contributions to household income because they work more hours per week, but not because they are able to find better paid jobs. The authors find, in addition, a visible causal impact of female labour participation on increases in domestic violence against women, which they attribute to male frustration, the stress of poverty and the legacies of violence.

The main conclusion we draw from these findings is the fact that gender roles may change during the conflict but gender identities remain unchanged. The social acceptance of women as income providers is often only temporary, due to war needs, and the pressure for society to return to pre-war conditions is high. As emphasised in El-Bushra and Sahl (2005: 88): “important though these changes are, they remain at the level of everyday practice and do not imply radical shifts of values. Men are still expected to use their power and resources to protect and provide for their families, and women are still expected to ensure care and provisioning – through long hours of hard and unfamiliar work if necessary. What has changed is only the ways in which these aspirations can be fulfilled, given the circumstances of war.” In these situations, hypothesis 4 will not hold empirically (i.e. we will not observe improvements in women's empowerment as a consequence of the new roles they adopt during conflict), unless interventions are explicitly implemented to support greater and more meaningful participation of women in labour markets and in social and political organisations once the war is over.

### **2.2.2. Household welfare**

We would expect changes in gender roles as a consequence of conflict to have a positive impact on household welfare via two channels. First, increases in the labour market participation of women in households affected by conflict may be associated with improvements in household income, or at least may help to compensate for income losses due to the conflict. Second, greater female economic empowerment may lead to improved investments in education of children, health and food consumption, with positive effects on overall household welfare. We have derived the following hypothesis on the potential consequences of women's new roles during conflict on household welfare:

**Hypothesis 5:** Greater participation in labour markets among women affected by conflict is associated with positive household welfare effects, when accompanied with improvements in

women's empowerment, and after controlling for other observed individual and household characteristics.

We have not been able to find empirical evidence on the relationship between female labour market participation, female empowerment and household welfare in conflict-affected contexts. We base this hypothesis on a large body of micro-level and experimental literature in development economics on the links between women's economic empowerment and household welfare. Evidence accumulated over the last two decades has shown that changes in intra-household distribution of resources, assets or power that favour women are often associated with positive household effects. For instance, in Brazil, Thomas (1990) shows that child survival rates increase 20-fold with marginal increases in female (but not male) earned income. In a later study, Thomas (1997) shows that spending on education and health in Brazil is almost six times higher when women experience an increase in individual income. Female preferences for child-related investments results in children with a weight-for-height score eight times higher, and a height-for-age score four times higher, than if men controlled the same levels of increased income. Another study in Brazil has found that more decision-making power in the hands of women, in terms of extension of alimony rights and obligations, has resulted in increased investments in the education of children, particularly girls (Rangel 2006). Similar results have been found for Cote d'Ivoire (Hoddinott and Haddad 1991, Duflo and Udry 2004), Mexico (Atanasio and Lechene 2010) and China (Qian 2008).

Evidence from the impact evaluation of large cash transfer and microfinance programmes has provided similar evidence. In a groundbreaking study, Duflo (2003) found that, in South Africa, pensions received by women (grandmothers) were associated with significant improvements in the height-for-age scores and weight-for-height of girls by 1.16 and 1.19 standard deviations, respectively. Replicating these effects across the whole population would be sufficient to close the current gaps in nutrition and health outcomes between South African and American girls. The study found no effect when the grandfathers received the pension. In Nicaragua, conditional cash transfers paid to women have resulted in a more than doubling of household expenditure on milk, and a 15% increase in food expenditures (Gitter and Barham 2008).

Successful interventions in the improvement of the education levels of women have yielded similar results. In Nicaragua, improvements in the education levels of mothers have had a strong positive impact on the education of boys, and a nonlinear impact on girls' schooling (Gitter and Barham 2008). In a recent study, Fafchamps and Shilpi (2011) found that improvements in women's primary education in Nepal have been associated with higher survival rates of children, while higher female secondary education has been associated with women bearing smaller numbers of children and in better schooling outcomes for both boys and girls.

This evidence stands in contrast with the results discussed in a handful of empirical studies on the impact of conflict on household welfare that compare outcomes between male- and female-headed households. These studies find in general increased levels of vulnerability and poverty among female-headed households as a result of their exposure to conflict. This has been reported for Rwanda (Vepoorten and Berlage 2007, Justino and Verwimp 2006), Burundi (Bundervoet 2009), Mozambique (Bruck 2004), and Colombia (Ibañez and Moya 2006). Many factors explain these findings, including higher dependency ratios in female-headed households (due to lower numbers of working age adults), lower levels of education, and constrained access to resources and services. It may also be the case that, even though women may work and earn more in these households, this does not result in observed improvements in household welfare due to their type of employment.

We should note that higher vulnerability among female-headed households is a consistent fact across both conflict and non-conflict societies, and even in developed countries (Brück and Vothknecht 2011). In order to determine the causal impact of the contribution of women's roles to household welfare, we need to assess outcomes across comparable groups, notably by comparing households with similar compositions but different in terms of female engagement in economic activities. The studies above report results on household welfare outcomes across all female-headed households without taking into consideration the new employment status of some of these women. It may well be that household welfare improves when women are engaged in certain types of productive activities. We test some of these effects in conflict and non-conflict affected households in Bosnia and Herzegovina, Colombia, Kosovo, Nepal, Tajikistan and Timor Leste in chapter 3.

### ***2.2.3. Community economic recovery and sustainable peace***

As discussed in chapter 1, peacebuilding is understood in this report as all “action[s] to identify and support structures which tend to strengthen and solidify peace to avoid a relapse into conflict” (UN 1994). This definition encompasses not only formal peace processes but also any measure that can prevent conflict from occurring or relapsing. These measures include efforts to mitigate or reduce the risks and determinants associated with conflict, such as poverty and economic inequality, horizontal inequalities, polarization, social and political exclusion, state weakness and repression, among others (Goodhand 2003, Stewart 2005, 2008, Justino 2010). Among them, economic recovery and functioning institutions have received particular attention in the post-conflict literature (Collier 2006, David et al. 2011), as key drivers of credible and sustainable peace.

Similarly to the discussion in the previous section, we expect changes in gender roles as a consequence of conflict to have a positive impact on community recovery via two channels. First, increases in labour market participation among women in areas affected by conflict may spur local economic recovery by generating higher aggregate wealth, sustaining the functioning of markets and increasing productivity in the use of resources. Second, increases in women's social and political roles may improve social relations and trust among members of the community and enhance institutional quality. We have derived the following hypotheses:

***Hypothesis 6:*** Greater participation of women in labour markets in conflict-affected areas positively affects community welfare.

***Hypothesis 7:*** Increases in female civic and political engagement in conflict-affected areas positively affect the quality of local institutions, thereby contributing to improved economic recovery and sustainable peace.

The first hypothesis is supported by a relatively new body of evidence that has highlighted the beneficial role of increased women's economic participation on aggregate growth. FAO (2011) estimates that agricultural outputs in developing countries could be increased by between 2.5 to 4% by granting male and female farmers equal access to productive resources. Other sectors and occupations could benefit from similar positive impacts by facilitating the entry of women (World Bank 2012). Klasen and Lamanna (2009) show that gender inequality in education and employment in the Middle East and North Africa and in South Asia directly affects economic growth by lowering the average level of human capital.

In a cross-section estimation of the average long-run effect of female and male education on output per worker, Knowles et al. (2002) show that female education has a statistically significant

positive effect on labour productivity. The authors conclude that education gender gaps are an impediment to economic development. Lutz and McGillivray (2009) find that gender inequalities in literacy have a statistically significant negative effect on economic growth across a panel of countries. Petesch (2011) reports, based on a cross-country analysis of conflict-affected communities, that once the violence ended the set of conflict-affected communities that experienced the most rapid economic recovery and poverty reduction were those that had more women reporting higher levels of empowerment.

It has also been argued that the long-run economic and demographic development in Europe is better understood when related to long-term increasing trends in gender equality (in particular, rises in female-to-male human capital and lower fertility and mortality rates). In a unique study, Lagerlöf (2003) has shown, using simulation models, that even though linear increases in gender equality affect per-capita income growth rates only very slowly in the beginning, the effects accelerate significantly as time progresses.

The second hypothesis is supported by emerging literature arguing that social cohesion and strong institutions are fundamental for the establishment of economic stability in conflict-affected contexts (Justino 2009), and are critical elements in the state's ability to mediate between competing groups within society (Hutchison and Johnson 2011). Although this research agenda is still in its infancy, some empirical micro-level evidence from peaceful contexts points towards a positive impact of women's social and political participation on community welfare and institutions. Beaman et al. (2006) report that children in villages in India headed by female leaders have experienced higher immunization rates and improved school attendance rates (for girls). Other research in India has shown that local government leaders invest relatively more in infrastructure that is important to the needs of their own gender. Women invest more in drinking water (in West Bengal and Rajasthan), and in roads (in West Bengal women are employed to build them) (Chattopadhyay and Duflo 2004). A recent study by Bhalotra and Clots-Figueras (2011) has found that increases in women's political representation in India have resulted in significant reductions in neonatal mortality because women politicians are more likely to build public health facilities and support antenatal care, provision of conditions for safer deliveries and the immunization of children.

In addition, an important body of evidence based on cross-country empirical analysis has found that women perform important roles as peace-builders. In particular, gender equality – measured in terms of low birth rates and a high percentage of women in parliament – has been found to be associated with a lower risk of inter-state conflicts (Regan and Paskeviciute 2003). Another study reaches the same results when measuring gender equality through an index that combines fertility rates and female labour force participation (Caprioli 2003, 2005). Proxies for gender equality have also been linked to lower risk of intra-state conflicts across countries. Caprioli (2005) reports that states with high fertility rates (3.01 and higher) are nearly twice as likely to experience internal conflict as states with low fertility rates (3 and below). Likewise, states with 10% women in the labour force are nearly 30 times more likely to experience internal conflict than are states with 40% women in the labour force. Gender equality has also been linked to improved respect for human rights (Melander 2005), the promotion of democracy (Barro 1997), and lower corruption in society (Swamy et al. 2001, Dollar et al. 2001), factors that are arguably central to successful peacebuilding processes. We return to this discussion in chapter 3, and in chapter 4, where we examine the structure and impact of a range of policy interventions aimed at supporting economic recovery in post-conflict societies.

### **2.3. Summary and way forward**

The literature review above provides a comprehensive account of studies conducted in the last couple of decades on the topic of women, conflict and peace, and throws some light on potential hypotheses on the links between violent conflict, changes in women's roles and subsequent effects of those changes on local processes of stability and economic recovery.

The empirical literature on the impact of armed conflicts has benefited from improved access to micro-level data in conflict-affected countries during the last decade. However, this research has not yet provided much evidence on the different channels whereby conflict and violence may affect men and women differently. Only in recent years have we observed an increasing trend in gender-differentiated analysis, mostly focused on the impact of violent conflict on education and health for girls and boys and, to a lesser extent, on the impact of conflict on male and female labour outcomes. Analyses of the impact of conflict and violence on individual and household welfare disaggregated by gender are rare, and almost no study has considered the impact of these gender-differentiated effects on local economies or communities. Consequently, existing empirical evidence is of limited use in understanding the significance of shifts in women's activities for themselves, their families, their communities and the wider economy and society.

Contrary to the trend observed in quantitative studies, an extensive body of qualitative and policy-oriented literature has addressed explicitly the gender-differentiated effects of armed conflicts. This information is, however, usually based on small-scale, non-replicable and non-comparable methodologies. No attempt has been made to date to produce systematic, comparable empirical evidence for a significant range of countries that allows the rigorous identification of general trends and transmission channels, in addition to context-specific results. Yet, the identification of the mechanisms and determinants of women's contribution to peacebuilding processes and economic recovery is a necessary step to improve the design and targeting of future interventions, in order to identify and mitigate costs and negative impacts of violence, as well as to better reap the benefits of positive changes in gender roles. This literature gap is addressed in the next chapter.



### 3. EMPIRICAL ANALYSIS

The objective of this chapter is to provide a first attempt at addressing the hypotheses discussed in chapter 2 around the two main research questions that frame this report: How does violent conflict change the roles that women take on within their households and communities? How do changes in female roles during the conflict affect their own status after the conflict, and the capacity of their households and communities to recover from the conflict?

To this purpose, we have identified and assessed existing quantitative datasets in conflict-affected countries that could be used to conduct rigorous comparable empirical analysis. We found an important set of individual and household surveys covering distinct geographical areas affected by conflict. This data reveals a great potential to broaden our understanding of women's roles in post-conflict recovery. We selected six countries - Bosnia and Herzegovina, Colombia, Kosovo, Nepal, Tajikistan and Timor Leste – where publicly available datasets allowed us to conduct initial analyses and outline the possibilities that a micro-level approach offers. Section 3.1 below describes the datasets, variables and the methodology used to conduct this analysis. In section 3.2, we present and discuss the main findings in relation to our set of hypotheses on the impact of conflict on women's roles, and their links with post-conflict recovery patterns across the six country case studies.

In addition to the micro-level analysis conducted for the six case studies, we reviewed available macro-level information related to gender and development in a wider range of countries affected by conflict in recent decades. The type of analysis that can be done with this information is more limited in terms of its potential to allow the identification of mechanisms of transmission from conflict to gender roles, and from these to recovery and peace. The quality of aggregated data is also variable, particularly for low income, conflict-ridden countries. Nonetheless, this type of analysis has the advantage of providing a more comprehensive picture of some key impacts and trends across a broader sample of countries. Moreover, some indicators are available for a long-term period, which allowed us to assess changes in different periods (pre-, during and post-conflict), which is not usually possible with micro-level datasets (often available for only one or two years). Section 3.3 provides a review of available cross-country, time series datasets and presents the results of the statistical analysis we conducted for a selection of variables.

Time and budget constraints have limited the depth of the analysis we were able to conduct in this phase of the study. In section 3.4, we summarise the main results of the empirical analysis, identify common trends, as well as context-specific findings, and discuss the possibilities of further empirical analysis that can be conducted in the future to provide a more rigorous body of evidence on the role on women in post-conflict recovery, to better inform policy design and implementation.

#### 3.1. Micro-level analysis of six case studies

##### 3.1.1. *Datasets*

To assess the possibility of conducting empirical analysis on gender and conflict at the micro-level we have carried out a comprehensive review of two types of data: socio-economic surveys and conflict event datasets.<sup>10</sup> A common practice in empirical research on conflict has been the

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<sup>10</sup> Research programmes at the forefront of new data collection efforts in conflict-affected countries include the MICROCON programme at IDS funded by the European Commission FP6 Framework ([www.microconflict.eu](http://www.microconflict.eu)),

use of general purpose socio-economic surveys collected in conflict-affected countries (Brück et al. 2010). The main goal of these surveys is to analyse living conditions over a representative random sample of households. They usually include standardised modules on household composition, education, health, employment, consumption and housing conditions. Depending on the context and nature of the research, additional modules can be included on civic and political engagement, shocks and coping strategies, intra-household relations, and security, among others. The community level surveys that sometimes accompany them usually provide additional information on the local economy, infrastructure, institutions and community organisations.

The most commonly used surveys are the Living Standards Measurement Surveys (LSMS) designed and implemented by the World Bank in partnership with national statistical institutions over recent decades. Their objective is to assess the effectiveness of interventions designed to improve the living standards of individuals, households and communities in developing countries. In a few cases, the LSM surveys incorporate questions on experiences of conflict and violence. The Demographic and Health Surveys (DHS) are another source of cross-country surveys that provide detailed information on sexual and reproductive health of women, health and nutrition status of children, fertility and mortality, decision-making within households and domestic violence. One major advantage of this type of household surveys is that they are publicly available to download and use.

There are also specialised surveys collected in a few conflict-affected countries with the specific purpose of analysing micro-level processes and consequences of violent conflict. They include specific modules on conflict and experiences and perceptions of violence, and are usually directed towards specific population groups, such as ex-combatants, victims, displaced persons, or beneficiaries of post-conflict reconstruction programmes. Though particularly useful to conducting micro-level empirical analysis of violent conflict, the downside of this type of surveys is that many are not publicly available.<sup>11</sup>

General purpose surveys conducted in conflict-affected countries are useful to generate quantitative evidence on the socio-economic situation of households living in those countries. However, they do not usually include information on localised violent events that allow a direct identification of the level of exposure of each household or community to the conflict. In some cases, these surveys have asked respondents about a (limited) number of their conflict experiences (for instance, whether someone in the family was killed due to the conflict, or whether the household or individual lost assets or was displaced). However, answers to these questions are subject to significant reporting biases. The usual practice is to combine or merge general purpose socio-economic surveys with external information on localised conflict event data, which often provides more reliable information on conflict exposure. There are several sources that can be used for this purpose, from cross-country datasets on the occurrence of violent events (IISS Armed Conflict Database, CEWARN Reporter, ACLED, CERAC, among others),<sup>12</sup> to country-specific data collected by researchers or local institutions (see footnote 10).

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the Households in Conflict Network ([www.hicn.org](http://www.hicn.org)), the Program on Order, Conflict and Violence at Yale University (<http://www.yale.edu/macmillan/ocvprogram/index.html>), the Centre for Research on Inequality, Human Security and Ethnicity (<http://www.crise.ox.ac.uk>), and the “A Comprehensive Study of Civil War” project at the Peace Research Institute Oslo (<http://www.prio.no/CSCW>).

<sup>11</sup> We are currently negotiating access to some of these surveys for Phase II of this study (Burundi, Rwanda and Colombia). Members of the Households in Conflict Network are also currently conducting fieldwork in Angola, which will result in an additional case study for Phase II of the project.

<sup>12</sup> <http://www.iiss.org/>; <http://www.cewarn.org/>; <http://www.acleddata.com/>; <http://www.cerac.org/co/en/>.

We selected six countries for which information from household surveys and on conflict incidence is available: Bosnia and Herzegovina, Colombia, Kosovo, Nepal, Tajikistan, and Timor Leste. The selection of countries under study was mainly determined by immediate availability of data. Due to differences in methodologies and research goals, not all datasets used contain information required to test each and every one of the hypotheses outlined in chapter 2. However, the information provided constitutes an important step towards providing a systematic, comprehensive and comparable body of evidence on gender roles in conflict contexts. The indicators used in the empirical analysis below are included in appendix 1, along with a brief definition of each variable.

We conducted two different types of statistical analysis. The first involves the calculation of descriptive statistics to assess the gender impact of conflict. To this purpose, we compared outcomes of interest across female- and male-headed household in conflict-affected areas, in comparison to those living in the same country but not exposed to the conflict. When possible, we conducted empirical analysis at the individual level, comparing outcomes separately for men and women within households affected by conflict, in relation to men and women not affected by conflict. The second type of analysis involved the estimation of simple correlations, in selected case studies, using simple regression analysis to assess the degree and significance of key relationships for which descriptive statistical analysis was not sufficient.

### ***3.1.2. Empirical hypotheses***

The review in chapter 2 found some evidence on the causal impact of violent conflict on changes in women's roles for a limited set of countries where empirical research has been done. We were unable to find rigorous enough empirical evidence on the links between women's new roles and outcomes in terms of household or local economic recovery. We found some insights, which may point towards such links. These need to be tested more rigorously as the literature suggests a number of competing hypotheses. Based on existing evidence and accounts of gender roles in conflict settings, we were able to derive a series of hypotheses to address the report's two main research questions. Below we summarise the hypotheses and discuss our approach to testing them using datasets for Bosnia and Herzegovina, Colombia, Kosovo, Nepal, Tajikistan and Timor Leste.

#### ***Question 1: How does violent conflict change the roles that women take on within their households and communities?***

The first set of hypotheses we derived from the existing literature is that (i) *violent conflict increases the responsibilities of women within households and changes the gender division of tasks through its impacts on household composition* and (ii) *violent conflict increases the participation of women in labour markets and in income generating activities via an 'added worker' effect, due to changes in household composition, and as a livelihood coping strategy against harsh economic conditions*. The literature shows that violent conflict is in general accompanied by increases in the shares of separated, divorced and widowed women, of female-headed households, and of dependency ratios in conflict-affected areas. This evidence is quite robust, has been produced for a significant number of countries and suggests that women in households affected by conflict spend more time in productive tasks, when compared to women in households less affected by violence. In general, we may expect to observe increases in the rate of female participation in labour markets, and/or an increase in the number of hours worked by women in conflict-affected households, when compared to women in households not affected by violence. Other studies have indicated that, in some circumstances, married women and widows may decide to join households of relatives or form new extended households with non-relatives. In those cases, we may not observe significant changes in women's activities

within the household. The literature suggests also that this impact may depend on other factors such as the nature of migration and displacement of conflict-affected households. The ‘added worker’ effect is likely to be present when migration leads to the disintegration of families or when women’s skills are more suitable to local labour demands. The effect may disappear when entire households migrate and men are able to find jobs, or in households where remittances may compensate for the migration of men. We test these competing views in the six case studies.

In chapter 2, we discussed also the hypothesis is that *violent conflict increases the participation of women in social and political organisations at local and national levels*. This hypothesis is related to the previous two hypotheses: the increased allocation of women’s time to productive activities outside their households may promote stronger social relations and interactions at local level, and alter women’s preferences and behaviour in relation to political involvement. Women may also step in during conflict to fill in leadership positions left vacant by migration, displacement or the death of male members within communities. We were able to only partially test for this hypothesis in the case of Timor Leste. Information on civic and political participation is very rarely included in existing socio-economic surveys collected in conflict-affected countries. We will be able to conduct more detailed analysis on this hypothesis in Phase II of the project, subject to successful negotiation of access to specialised datasets (see chapter 5).

***Question 2: How do changes in female roles during the conflict affect their own status after the conflict, and the capacity of their households and communities to recover from the conflict?***

Rigorous evidence on the consequences of changes in women roles is extremely limited. We have derived four possible answers to address this question. The first hypothesis is that *greater participation of women affected by conflict in labour markets, and greater civic engagement, is associated with increases in women’s economic empowerment within households, particularly among female-headed households*. Several qualitative studies report improvements in women’s power and female social, economic and political engagement following exposure to violent conflict. These increased responsibilities may have ambivalent effects when traditional values restrict women’s access to new opportunities in the post-conflict period. Moreover, women that join the labour market as a result of violent conflict typically take on low-paid, low-skilled jobs that may not yield particular benefits in terms of women’s own economic status and empowerment within households and communities. The net effect of changes in women’s roles during conflict on women’s levels of empowerment and gender equality during the post-conflict period is still a matter of debate and open to further empirical testing. We were able to test this hypothesis empirically for Colombia, Nepal, Tajikistan and Timor Leste. Only in the cases of Colombia and Nepal were we able to obtain direct information on women’s involvement in household decision-making processes. In the other case studies, female empowerment was proxied by the share of women’s contribution to overall household income. Although it is known that women’s income contributions may not necessarily translate into empowerment gains, this analysis provides at least some indication on whether increased women’s participation in labour markets may be reflected in improved economic status for women within their households.

The second hypothesis is that *greater participation in labour markets among women affected by conflict is associated with positive household welfare effects, when accompanied with improvements in women’s empowerment, and after controlling for other observed individual and household characteristics*. We have not been able to find direct empirical evidence in the existing literature on the relationship between female labour market participation, female empowerment and household welfare in conflict-affected contexts. We have found, however, important evidence in development economics studies showing that greater female labour market participation that results in improvements in women’s

empowerment may lead to positive effects on household welfare in terms of higher income/consumption levels and improved child welfare. This literature has shown that changes in intra-household distribution of resources, assets or power that favour women are often associated with positive household effects. To the best of our knowledge, these effects have not been tested in conflict-affected contexts. We were able to conduct a preliminary analysis of this complex relationship across the six case studies, and propose ways for further rigorous analysis in Phase II of this study. Household welfare is measured in all case studies in terms of consumption expenditure.

The third hypothesis is that *greater participation of women in labour markets in conflict affected areas positively affects community welfare*. This hypothesis is an extension of the hypothesis above to encompass community-level outcomes. Similarly to household effects, this hypothesis is supported by a relatively new body of evidence that has highlighted the beneficial impact of increased women's economic participation on aggregate growth. To the best of our knowledge, this relationship has not been tested at the micro-level or in conflict-affected contexts. This report provides a first attempt at disentangling this important relationship. We have conducted comparative empirical analysis in the case studies, with the exception of Nepal for which community-level welfare information is not available.

The final hypothesis is that *increases in female civic and political engagement in conflict-affected areas positively affect the quality of local institutions, thereby contributing to improved economic recovery and sustainable peace*. Emerging empirical micro-level evidence from peaceful contexts (mostly India) has provided strong evidence of a positive impact of women's political participation on community welfare. This relationship has not been tested in conflict contexts. In addition, an important body of evidence based on cross-country empirical analysis has found that women perform important roles as peace-builders. In particular, gender equality has been found to be associated with a lower risk of inter-state conflicts, improved respect for human rights, the promotion of democracy and lower corruption in society, factors that are central to successful peacebuilding processes. These studies have suggested for the first time a direct link between gender equality and peace, although the mechanisms underlying this potential relationship have not been tested empirically. We were only able to (partially) test this hypothesis in the case of Timor Leste, given that information on institutional arrangements in conflict-affected areas is very rarely available. We provide additional information on this hypothesis in the cross-national analysis discussed in section 3.2. We propose to conduct more detailed analysis on this hypothesis in Phase II of the project, subject to successful negotiation of access to specialised datasets (see chapter 5).

### **3.1.3. Case Study 1: Bosnia and Herzegovina**

Bosnia and Herzegovina was a republic within the territory of former Yugoslavia, which declared independence after a referendum in 1992, despite a contrary decision by the Yugoslav Constitutional Court and the boycott of the referendum by the Serb population. Bosnian Serbs, who feared suppression by Croat and Muslims, subsequently declared their own state, leading to an outbreak of violence. The war in Bosnia and Herzegovina took place between 1992 and 1995, with intense fighting between Serbian troops and Bosnian Serbs, Bosnian Croats and Bosnian Muslims. During that time an estimated 200,000 people were killed. Between one and two million people were displaced, both internally and internationally. Women were subjected to rape and torture as weapons of war. In 1993, the United Nations Security Council declared that Sarajevo, Srebrenica and other Muslim enclaves were to be "safe areas", protected by UN peacekeepers. During this time, in the safe area of Srebrenica, the Serbs committed the largest massacre in Europe since World War II, where an estimated 8,000 Bosnian Muslims were killed

(Cigar 1995). Since the end of the war, approximately 1.1 million people have resettled back in Bosnia and Herzegovina (Kondylis 2010).

This section provides a summary of the statistical findings on the relationship between violent conflict, changes in women's roles and the impact of those changes on women's empowerment and households and municipality welfare in post-conflict Bosnia and Herzegovina. The empirical analysis was done using the panel data set from the World Bank's Living Standards Monitoring Surveys for Bosnia and Herzegovina conducted in 2001 and 2004. We compare households in municipalities that have been differently (low, medium and highly) affected by the conflict.<sup>13</sup> We make also use of information on displacement reported in the household surveys to distinguish between households that have or have not been displaced during the conflict. The availability of two survey years is rare in socio-economic data collected in conflict-affected countries, and allows us to observe differences in the medium and longer-term following the end of the war in 1995. This is also the only panel dataset that we were able to access, where the exact same households were traced across time.<sup>14</sup>

The 2001 survey conducted interviews with 2,783 households. 33% of all households in the sample live in municipalities that were highly affected by the conflict. 13% live in medium-affected areas and around 54% live in municipalities that were less affected by the conflict. The 2004 surveyed 2,617 of the same households interviewed in 2001. The percentage of households living across the three regions is similar to that in 2001 (31, 13 and 56%, respectively).

a) *Impact of conflict on gender roles*

We start by examining the impact of the 1992-95 civil war in Bosnia on household composition (table 1). The results show that, in 2001, between 23 and 30% of all households were headed by a woman. The share of female-headed households increases with levels of violence, reflecting the large proportion of widowed women in Bosnia: 82 (in 2001) and 81 (in 2004) percent of all female-headed households in the World Bank surveys are widows. The highest share of female-headed household (30%) is found in municipalities that were highly affected by the conflict. We observe an increase in 2004 in the share of female-headed households in low-affected municipalities. However, municipalities that were highly affected by the war still exhibit the highest rates of female-headed households. Female-headed households are in general smaller than male-headed households (table 1).

Displacement was very significant during the war in Bosnia and Herzegovina, and explains many of the findings in this section. Regions that were more intensively affected by the war report the highest numbers of displacement. Rates of displacement are highest among non-rural high-conflict intensity areas and among female-headed households, particularly those in areas most affected by the violence (table 1).

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<sup>13</sup> We use the methodology proposed in Swee (2009), whereby each municipality is classified as being 'low', 'medium' and 'highly' exposed to the conflict. Levels of intensity are measured by the level of casualty rates in each municipality as defined by Swee (2009) according to information from the Bosnian Book of the Dead (see [http://www.hicn.org/research\\_design/rdn5.pdf](http://www.hicn.org/research_design/rdn5.pdf)).

<sup>14</sup> Panel data is the gold standard in micro-level empirical analysis because it allows researchers to control for household characteristics that are normally unobservable and may influence the empirical results in unexpected ways.

**Table BH 1. Impact of conflict on household composition changes in Bosnia and Herzegovina**

Descriptive Statistics	2001 – By conflict-affected regions				2004 – By conflict-affected regions			
	Obs	Low	Medium	High	Obs	Low	Medium	High
<b>Total numbers of households</b>	2783	1496	352	935	2617	1469	328	820
Share of households in rural areas		42.45	57.95	15.51		42.41	65.24	15.85
<b>Years of age (head)</b>	2183	54.48	51.807	53.996	2618	55.926	55.618	56.048
<b>Grade of completed education (head)</b>	2468	4.376	4.526	4.32	2535	3.897	4.191	3.826
<b>Average number of household members</b>	2783	3.19	3.48	3.01	2617	3.06	3.31	2.94
in male headed households	2081	3.53	3.82	3.38	1937	3.43	3.70	3.34
in female headed households	702	2.04	2.36	2.15	680	1.95	1.97	1.97
in displaced households	872	3.39	3.83	2.93	828	3.06	3.48	2.84
in non-displaced households	1911	3.11	3.33	3.07	1789	3.07	3.24	3.00
<b>Share of female-headed households</b>	2783	0.23	0.24	0.30	2617	0.25	0.23	0.29
<b>Share of households with children up to the age of 5</b>	2783	0.16	0.22	0.16	2617	0.12	0.17	0.11
<b>Respondents displaced/refugee during the war *</b>	8692	0.254	0.296	0.397	6213	0.298	0.378	0.478
in non-rural areas	5409	0.301	0.218	0.415	3807	0.355	0.286	0.495
in rural areas	3283	0.213	0.325	0.315	2406	0.250	0.411	0.397
in male headed households	7228	0.249	0.293	0.385	3156	0.290	0.378	0.475
in female headed households	1464	0.283	0.308	0.444	657	0.341	0.381	0.490

\* Responses to status of living are at times inconsistent between the two waves: For example, some respondents state that they were displaced during the war in the first, but not in the second wave. Therefore, this information has been ‘combined’: if a respondents states that he/she has been displaced in only one of the waves, he/she will be coded as having been displaced during the conflict for both waves.

Source: Own calculations based on BiH LSMS 2001 and 2004.

**Table BH 2. Impact of conflict on economic roles in Bosnia and Herzegovina**

Labour Market Indicators (for individuals of ages between 15 – 64)	2001 – By conflict-affected regions				2004 – By conflict-affected regions			
	Obs	Low	Medium	High	Obs	Low	Medium	High
<b>All households</b>								
<b>Male labour market participation rate</b>	2938	0.498	0.560	0.570	2441	0.573	0.577	0.575
in non-rural areas	1819	0.522	0.474	0.564	1468	0.558	0.453	0.553
in rural areas	1119	0.477	0.589	0.611	973	0.587	0.613	0.672
non-displaced	1770	0.519	0.566	0.593	1405	0.597	0.597	0.592
Displaced	1168	0.454	0.551	0.551	1036	0.525	0.550	0.559
<b>Female labour market participation rate</b>	3048	0.270	0.243	0.293	2487	0.298	0.418	0.316
in non-rural areas	1923	0.298	0.324	0.269	1501	0.282	0.314	0.30
in rural areas	1125	0.245	0.212	0.399	986	0.312	0.454	0.382
non-displaced	1840	0.265	0.255	0.358	1463	0.274	0.469	0.356
Displaced	1208	0.283	0.222	0.227	1024	0.348	0.346	0.277

Source: Own calculations based on BiH LSMS 2001 and 2004.

Table 2 reports the results for how these significant changes in household composition may have resulted in changes in women’s roles and responsibilities in terms of their participation in labour markets. The estimates in table 2 show that between 49.8 and 57% of men were active in the

labour market in 2001 (defined as having carried out income-generating work as employees, self-employed, seasonal worker or contracted work, as well as working for cash, in-kind or family benefits during the week prior to the interview). Male labour market participation is highest in regions that were more intensively exposed to the conflict. The percentage of male labour market participation increases to 57% in 2004, with fewer differences observed across levels of conflict intensity.

Female participation rates are almost half of those of men in all regions. The rates of female labour market participation in 2001 vary between 24.3% in regions of medium conflict intensity, to 29.3% in regions highly affected by the conflict. In 2004, female labour market participation was highest in areas of medium conflict intensity. The comparison between displaced and non-displaced women shows that displaced women in regions of medium and high conflict intensity are less likely to be economically active than women that were not displaced during the war, both in 2001 and 2004. This is probably due to the fact that displaced women (and men) would have moved from areas most affected by violence into safer areas. One additional point to note is that contrary to findings in some of the literature, the participation of women affected by conflict in labour markets tends to increase (and not decrease) with time (six and nine years) after the conflict ends. The increase is most significant in regions of medium conflict intensity.

*b) Impact of changes in gender roles on household welfare*

Table 3 provides an overview of the relationship between labour force participation and household welfare. Household welfare is measured in terms of the level of per capita consumption of the household. Overall, per capita consumption levels are very similar across degrees of conflict intensity. They are slightly (significantly) lower in municipalities of medium conflict intensity in 2001, and (significantly) higher in regions of medium conflict intensity in 2004. We find significant differences between female- and male-headed households.<sup>15</sup> First, we find that levels of per capita consumption expenditure are higher among female-headed households (in 2001 and 2004). Second, consumption expenditure among female-headed households is highest in regions more intensively exposed to the conflict. These results seem to suggest that female-headed households in conflict-affected areas exhibit higher level of economic welfare than male-headed households in conflict-affected areas and than the average household in regions less affected by the conflict.

There are many reasons why we observe these results, related to differences between female- and male-headed households in terms of household composition, dependency rates, displacement patterns and employment trends. Disentangling these effects requires the use of more sophisticated statistical techniques than those employed in this report. We were nonetheless able to examine more closely how different employment patterns are associated to changes in household consumption expenditure across all three levels of conflict intensity (as per hypothesis 5). To that purpose, we have looked separately at households with active household heads (male and female) and households where the head does not participate in labour markets. The results show that households with active household members have higher levels of consumption expenditure than the average household in Bosnia and Herzegovina. The difference is particularly notable for female-headed households. This result seems to suggest that employment status is on the whole quite significant in explaining the welfare levels of female-headed households.

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<sup>15</sup> We do not report levels of significance in the tables because it is difficult to tabulate them in an easy way when calculations take place between three (and not just two) outcomes (low, medium and high). We have calculated levels of significance for all results discussed in this section and report them directly in the text.



**Table BH 3. Impact of changes in gender roles on household welfare in Bosnia and Herzegovina**

Labour Market Participation and Household Welfare Indicators	2001 – By conflict-affected regions				2004 – By conflict-affected regions			
	Obs	Low	Medium	High	Obs	Low	Medium	High
<b>All households</b>								
total per capita consumption (excluding health)	2783	3020.51	2825.32	3018.13	2617	3247.38	3480.77	3216.0
total pcc male headed households	2081	2969.48	2770.06	2928.71	1937	3171.8	3379.28	3097.13
total pcc female headed households	702	3193.35	3004.41	3229.46	680	3475.16	3823.12	3504.97
<b>Households with active household head</b>								
total per capita consumption (excluding health)	1209	3307.06	3084.95	3219.26	1239	3570.62	3882.62	3545.1
total pcc male headed households	1065	3213.15	2898.96	3202.59	1082	3469.37	3782.83	3444.74
total pcc female headed households	144	4021.27	4265.58	3345.63	157	4249.67	4600.15	4261.32
<b>Households with inactive household head</b>								
total per capita consumption (excluding health)	1574	2797.94	2585.56	2876.7	1378	2945.84	3037.70	2960.98
total pcc male headed households	1016	2725.39	2617.07	2633.2	855	2794.03	2781.87	2688.33
total pcc female headed households	558	2955.90	2520.96	3207.03	523	3215.10	3520.95	3334.31
<b>Average welfare of households in municipalities with...</b>								
... below average participation of women in labour force*	1769	2959.07	2936.19	2666.70	1636	3204.48	3056.75	2943.50
... above average participation of women in labour force*	1012	3188.30	2672.50	3373.33	981	3344.54	3996.47	3526.92

Source: Own calculations based on BiH LSMS 2001 and 2004.

Notes: Consumption expenditure is provided in convertible marks (BAM), the currency of Bosnia and Herzegovina. US\$1 is approximately 1.5 BAM.

As shown in table 3, total per capita consumption levels in female-headed households are slightly higher in households with active heads than in those where the head is inactive. Consumption expenditure for female-headed households (where the head is employed) is highest in areas less exposed to violence, but recovers the most significantly in female-headed households in areas most affected by the conflict (from 3345.6 to 4261.3 convertible marks).

*c) Impact of changes in gender roles on municipality welfare*

In order to investigate the relationship between female labour force participation and community-level welfare (municipality-level in the case of the Bosnia and Herzegovina datasets), we have calculated the average shares of female labour force participation across municipalities and across levels of conflict intensity (table 3). The results show that average per capita consumption is significantly higher in municipalities with higher than average shares of women active in the labour market in regions that were exposed to both low and high conflict intensities in 2001. The results are likely to reflect the importance of female employment in areas of conflict exposure (where many men perished), as well as the importance of employment among displaced women in areas of lower conflict intensity (as discussed above). In 2004, we observe significant differences in medium and highly affected regions: regions with higher than average female participation display higher levels of economic welfare in these two regions. The results show that municipalities with less than average levels of female labour market participation have significantly lower per capita consumption rates. The effect is particularly pronounced in municipalities that experienced high conflict intensity. This result seems to provide support for the hypothesis (hypothesis 6) that greater participation of women in labour markets in conflict-affected areas affects positively community welfare. This effect is even more significant in Bosnia

and Herzegovina given that female levels of labour market participation are in general almost half of those of male labour force participation rates.

### ***3.1.4. Case Study 2: Colombia***

Colombia has been affected by a protracted internal conflict for more than 50 years, involving fighting between irregular guerrilla groups, state forces and, from the 1990s onwards, paramilitary groups. Drug trafficking fuelled the conflict during the 1980s and 1990s, intensifying confrontation between the groups, and generating large movements of population from rural to urban areas. It is estimated that more than 4 million people have been displaced in the last 15 years, representing almost 10% of the total population of Colombia, and covering 90% of all municipalities (Accion Social 2010, cited in Calderon et al. 2011). These numbers are second only to the situation in Darfur.

The availability of data in recent years has allowed several empirical analyses around the determinants and consequences of the Colombian conflict at the micro-level (Ibañez and Moya 2006, 2009, Calderon et al. 2011, among others). The descriptive analysis presented in this section will aim to expand this body of research, by providing evidence on the impact of the Colombian conflict on women's role and activities, their status within their households, and their contribution to household welfare and community recovery. The analysis makes use of a cross-sectional household survey conducted in 2010 – the Demographic and Health Survey (CODHS) – collected by Profamilia and funded by USAID. The survey includes a nationally representative sample of over 50,000 households, located in urban and rural areas. It contains information on household composition, dwelling characteristics, household assets, detailed information on women of reproductive age (13-49 years) and their partners (including economic occupations) and intra-household decision-making processes. The survey also includes self-reported information on migration patterns of women aged 13-49 years in the 5 years prior to the interviews, including migration caused by violence. We use this information to identify households exposed to the conflict, assigning a value of one to those households in which at least one member of the household reported migration due to violence (displacement). We have followed the methodology adopted by Calderon et al. (2011), and compare displaced households with non-displaced households living in rural areas, as displacement in Colombia involves migration from rural to urban areas in a large proportion.<sup>16</sup> The sample used in the analysis in this section includes 14,856 not displaced rural households, and 650 displaced households, located in 45 clusters.

#### *a) Impact of conflict on gender roles*

Table 1 reports our main findings on the impact of displacement on household composition. In general, the results in table 1 show that displaced households in Colombia are larger than non-displaced rural households, exhibit larger dependency rates, have more female members and are more likely to be headed by a woman. These results (with the exception of the latter result) are similar across male- and female-headed households, although dependency rates are significantly higher in female-headed households. These effects are due to the fact that displacement in Colombia often results in the formation of new extended households, with women being responsible for the care of their children, as well as those of relatives and friends (Ibañez and Moya 2006, 2009).

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<sup>16</sup> Even though we adopt a similar methodology, the results presented here are not entirely comparable to those presented in Calderon et al (2011), first, because we use the 2010 DHS survey while the authors use the 2000 and 2005 surveys and, second, because we do not restrict the sample to married or cohabiting partners, as our purpose is to capture *any* changes in households composition associated to displacement.

**Table CL 1. Impact of conflict on household composition changes in Colombia**

Indicator	All					Female headed households					Male headed households				
	Obs	Non-displaced	Displaced	Diff	t-test	Obs	Non-displaced	Displaced	Diff	t-test	Obs	Non-displaced	Displaced	Diff	t-test
<b>HH size (average)</b>	15,506	4.229	5.443	-1.215	***	3,861	3.866	5.214	-1.348	***	11,645	4.347	5.556	-1.210	***
<b>Composition</b>															
Share of children 0-6 yrs	15,506	0.130	0.179	-0.049	***	3,861	0.114	0.151	-0.037	***	11,645	0.135	0.193	-0.058	***
Share of children 7-15 yrs	15,506	0.174	0.259	-0.084	***	3,861	0.189	0.311	-0.122	***	11,645	0.170	0.233	-0.063	***
Share of males 16-65 yrs	15,506	0.318	0.236	0.081	***	3,861	0.197	0.141	0.057	***	11,645	0.357	0.284	0.073	***
Share of females 16-65 yrs	15,506	0.282	0.313	-0.031	***	3,861	0.374	0.380	-0.006	n.s.	11,645	0.253	0.280	-0.028	***
Share of elders >65 yrs	15,506	0.096	0.013	0.083	***	3,861	0.126	0.018	0.108	***	11,645	0.086	0.010	0.076	***
<b>Dependency ratio (&lt;16 and &gt;65 / 16 to 65 yrs)</b>	14,760	0.846	1.109	-0.263	***	3,597	0.970	1.375	-0.405	***	11,163	0.807	0.978	-0.171	***
<b>Female/male ratio (16 to 65 yrs)</b>	37,148	0.486	0.555	-0.070	***	8,262	0.599	0.693	-0.094	***	28,886	0.454	0.497	-0.043	***
<b>Female headed household</b>	15,506	0.245	0.331	-0.085	***	3,861	1.000	1.000	0.000	n.s.	11,645	0.000	0.000	0.000	n.a.

Source: Own calculations based on CODHS 2010.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

**Table CL 2. Impact of conflict on economic roles by gender in Colombia**

Position in HH / Indicator	Females					Males				
	Obs	Non-displaced	Displaced	Diff	t-test	Obs	Non-displaced	Displaced	Diff	t-test
<b>Labor Force Participation, HH Heads</b>										
Employed	3,853	0.447	0.572	-0.125	***	11,632	0.901	0.885	0.016	n.s.
Unemployed	3,853	0.005	0.028	-0.023	***	11,632	0.014	0.060	-0.045	***
Inactive	3,853	0.548	0.400	0.148	***	11,632	0.085	0.055	0.030	**
<b>Labor Force Participation, Others</b>										
Employed	16,178	0.254	0.321	-0.067	***	9,297	0.715	0.646	0.069	***
Unemployed	16,178	0.007	0.023	-0.016	***	9,297	0.032	0.087	-0.055	***
Inactive	16,178	0.740	0.657	0.083	***	9,297	0.253	0.267	-0.014	n.s.

Source: Own calculations based on CODHS 2010.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

**Table CL 3. Impact of conflict on employment characteristics in Colombia (women aged 15-49 years)**

Indicator	Women aged 15-49				
	Obs	Non-displaced	Displaced	Diff	t-test
<b>Labour situation</b>					
Not worked in last year	13,436	0.411	0.349	0.062	***
Work in last year	13,436	0.129	0.155	-0.026	**
Currently working	13,436	0.460	0.497	-0.037	**
<b>Type of occupation</b>					
Professional, managerial	7,968	0.089	0.088	0.001	n.s.
Service-related	7,968	0.613	0.764	-0.151	***
Agricultural workers	7,968	0.245	0.098	0.147	***
Manual workers and others	7,968	0.012	0.007	0.005	n.s.
<b>Type of earnings</b>					
Not paid	7,968	0.127	0.076	0.051	***
Cash	7,968	0.848	0.919	-0.072	***
In kind only	7,968	0.025	0.005	0.020	***

Source: Own calculations based on CODHS 2010.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

Table 2 compares patterns of labour market participation across displaced and non-displaced individuals and households. The results show that displaced women are significantly more likely to be employed than non-displaced women. The increase in employment rate is 12.5% for female heads of households, and 6.7% for other women in the household. Unemployment rates are, however, also higher amongst all women, indicating that not only more displaced women are employed but also that more were looking for jobs in 2010, resulting in lower rates of inactivity among working age females in Colombia. These results contrast with the situation of displaced men, who experience a decrease in employment rates, when compared to non-displaced rural men. Male heads of households faced a 1.6% reduction in employment when displaced, while other men are 6.9% less likely to be employed in relation to their non-displaced rural counterparts. As in the case of women, displaced men are also more likely to be looking for jobs than non-displaced men. This finding is in line with the results reported for Colombia in Calderon et al. (2011), and also with research on displaced populations in Bosnia, as discussed in the previous section (Kondylis 2010).

The results in table 2 complement other findings in the literature that displacement may bring about additional responsibilities for women, as they are more likely to be the main breadwinners in their households, and have more members depending on them. The increase in labour market participation of displaced women in Colombia may be due to displaced women being better able to cope with displacement as their skills are more suitably matched to the needs of urban labour markets (as highlighted in Calderon et al. 2011). As with other case studies, these results confirm the hypothesis that exposure to violent conflict may be associated with changes in women's roles and responsibilities, notably in terms of increased female labour market participation (hypotheses 1 and 2).

Table 3 presents more disaggregated information on the characteristics of reproductive age females (15-49 years). We find that displaced women are 15% more likely to be employed in service-related activities, and less likely to be employed as agricultural workers. They are also 7.2% more likely to be earning cash than non-displaced women. Although it is not clear what exactly service-related activities include, the results do show that at least in the case of Colombia growing employment trends among displaced women seem to take place in better-paid jobs than what they would be able to attain if they had stayed in rural areas. In the sections below, we analyse the impact of these employment trends on women's empowerment, and community and household welfare.

#### *b) Impact of changes in gender roles on women's empowerment*

The CODHS 2010 collects very rich information on intra-household decision-making processes. In particular, the dataset allowed the analysis of women's contribution to household income, as well as women's direct participation in decision-making processes in the household with respect to the money they earn, and with respect to household decisions about health issues, large household purchases, household daily needs, food expenditure and other non-specified household matters.<sup>17</sup> We start by analysing the share of women's contribution to household income. Table 4 shows that women in displaced households contribute quite significantly to household income. The difference for 'more than half' contribution is statistically significant.

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<sup>17</sup> We considered that women are highly involved in household decision-making processes if decisions are made by themselves only or jointly with their partners. Decisions about the use of their money are restricted to a sample of married employed women that earn cash in exchange for their work. Decisions about other household matters refer to all women of reproductive age (15-49 years old).

In line with findings reported in Calderon et al. (2011), the results in table 4 show that women's contribution to overall household income does not translate into larger participation of women in household decision-making processes in relation to how women's own money is spent. In terms of other household decisions, the results in table 4 indicate that displaced women that report having been employed in the year prior to the survey are more likely to be involved in household decision-making processes in relation to household health issues, large household purchases, household daily needs and other not specified household matters.<sup>18</sup> We have not found any statistically significant results with respect to women's participation in household decision-making processes when women are not employed. This result departs slightly from the findings reported in Calderon et al. (2011), suggesting the presence of potential gains in terms of women bargaining power within households after displacement when displaced women are employed.<sup>19</sup>

**Table CL 4. Impact of changes in gender roles on women's status in Colombia**

Indicator / Status of Woman	Women aged 15-49				
	Obs	Non-displaced	Displaced	Diff	t-test
<b>Woman contribution to hh expenditure (currently married, and earn cash last year)</b>					
Nothing or almost nothing	4,295	0.268	0.212	0.056	**
Less than half	4,295	0.237	0.226	0.011	n.s.
Half	4,295	0.315	0.319	-0.004	n.s.
More than half	4,295	0.101	0.139	-0.038	**
Everything	4,295	0.079	0.104	-0.025	n.s.
<b>Who decides how to spend woman's money (currently married, and earn cash last year)</b>					
Woman alone	4,295	0.711	0.719	-0.008	n.s.
Woman and husband or other member	4,295	0.256	0.236	0.020	n.s.
Husband or partner alone	4,295	0.033	0.045	-0.012	n.s.
<b>Woman is involved in decision</b>					
Women has not worked in last year					
<i>Own health care</i>	5,468	0.703	0.701	0.002	n.s.
<i>Large household purchases</i>	5,468	0.465	0.441	0.024	n.s.
<i>Household daily needs</i>	5,468	0.525	0.505	0.020	n.s.
<i>Food to eat</i>	5,468	0.756	0.727	0.029	n.s.
<i>On all issues</i>	5,468	0.382	0.363	0.019	n.s.
Women has worked in last year					
<i>Health issues</i>	7,968	0.814	0.843	-0.029	*
<i>Large purchases</i>	7,968	0.620	0.673	-0.053	**
<i>Daily needs</i>	7,968	0.669	0.709	-0.040	**
<i>Food to eat</i>	7,968	0.821	0.787	0.035	**
<i>On all issues</i>	7,968	0.517	0.565	-0.047	**

Source: Own calculations based on CODHS 2010. Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

<sup>18</sup> Interestingly, the results for women's involvement in decisions about food expenditure are not statistically significant. We have not been able to provide an explanation for this result, and further econometric analysis would be needed.

<sup>19</sup> However, more sophisticated econometric analysis would be needed to confirm these results fully, and make them strictly comparable to the causal effects reported in Calderon et al. (2011). It is however possible that these effects are present in the 2010 dataset but not in the 2000 and 2005 datasets analysed by Calderon et al. (2011).

c) *Impact of changes in gender roles on household welfare*

Table 5 presents the results of the analysis of the impact of changes in the economic roles of men and women as a result of the conflict in Colombia on overall household welfare. We make use of the wealth index provided in CODHS, which measures the socio-economic status of each household based on assets possessed by the household, access to services, housing conditions, and other key wealth-related characteristics. The index is used to classify households within wealth quintiles, with households in the last 2 quintiles considered to be poor or severely poor. Contrary to other case studies where household welfare is measured in terms of per capita income or consumption expenditure, we refer here to household welfare in terms of household levels of poverty using an asset-based measure of wealth.

The results in table 5 show that displaced households have a significantly lower incidence of poverty (by 33%) than non-displaced households. This result is probably due to the fact that displaced households move to urban locations where access to services and assets is higher. The impact of women's greater participation in labour markets on household welfare levels is striking. Displaced households that have at least one women working are almost 40% less likely to be poor or severely poor than households that were not displaced. The impact of employed displaced women on household welfare is particularly significant in cases when the household head is not employed. In those cases, the household is 60.8% less likely to be poor or severely poor than households that were not displaced. These results strongly point towards the substantial importance that female employment entails for displaced households in Colombia in terms of keeping them out of poverty. This result is probably highly related to the difficulties experienced by displaced men in finding jobs that match their skills in urban areas in Colombia, as reported in Calderon et al. (2011). Overall this analysis shows strong support for the hypothesis that greater participation in labour markets among women affected by conflict is associated with positive household welfare effects (hypothesis 5).

**Table CL 5. Impact of changes in gender roles on household welfare in Colombia**

Indicator / Status of Woman	All				
	Obs	Non-displaced	Displaced	Diff	t-test
<b>Average poverty per hh</b>					
All households	15,506	0.989	0.658	0.330	***
<i>No female member employed</i>	8,949	0.991	0.729	0.263	***
<i>At least 1 female member employed</i>	5,176	0.982	0.584	0.398	***
When hh head is employed	12,219	0.989	0.687	0.302	***
<i>No female member employed</i>	6,442	0.992	0.758	0.234	***
<i>At least 1 female member employed</i>	4,603	0.983	0.624	0.360	***
When hh head is not employed	3,287	0.988	0.556	0.431	***
<i>No female member employed</i>	2,507	0.990	0.652	0.337	***
<i>At least 1 female member employed</i>	573	0.975	0.367	0.608	***

Source: Own calculations based on CODHS 2010.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant



d) *Impact of changes in gender roles on community welfare*

This final section examines how changes in women’s economic roles associated with the Colombian conflict affect economic welfare at the community level. In order to conduct this analysis, we have classified different communities (clusters) according to the level of conflict-affected households living within them. We have assigned a value of 1 to communities where at least one household was displaced and 0 otherwise. Due to the Colombian context, it is plausible to assume that if one displaced household was found in a particular cluster, the real proportion of displaced households living in the same area is very high, as displaced households tend to cluster together (Ibañez and Moya 2006). We have, in addition, estimated the aggregated average proportion of poor households in each community, and identified communities according to the share of women in employment (below or above the sample average).

Table 6 shows the results of the exercise. In general, we find that communities with displaced households have lower incidence of poverty than rural communities. This result is due to the fact that displaced communities are more likely to be located in urban areas. We observe that both communities with below and above average shares of employed women are less likely to exhibit high levels of poverty incidence. However, communities affected by displacement that have above average shares of female workers are 46.4% less likely to be classified as poor in relation to their non-affected counterparts. In contrast, communities affected by displacement with below the average shares of employed women are only 32.5% less likely to be classified as poor.

**Table CL 6. Impact of changes in gender roles on community welfare in Colombia**

Indicator / Status of Women	All				
	Obs	Non-displaced	Displaced	Diff	t-test
<b>Average poverty per hh</b>					
All Communities	1,885	0.990	0.596	0.394	***
Below average share of working females	1,204	0.992	0.667	0.325	***
Above average share of working females	681	0.985	0.521	0.464	***

Source: Own calculations based on CODHS 2010.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

The establishment of a causal relationship between female employment in displaced households and community poverty levels would require more sophisticated econometric analysis. This is beyond the scope of phase I of this study due to the complexity of the technical issues involved, notably the need to correct for possible selectivity biases in self-reported displacement data. However, the results discussed above suggest strong support for the hypothesis that increased female labour market participation, as a result of the exposure of households to armed conflict, may result in positive economic gains for their communities, as well as for their households (hypothesis 6).

**3.1.5. Case Study 3: Kosovo**

After the Republic of Yugoslavia ceased to exist, Kosovo lost its autonomy. This was accompanied by large increases in levels of poverty and reductions in the living standards of some population groups. Ethnic, religious and social differences between Serbs and Albanians in particular led to a civil war in 1998. The war resulted in the death of over 13,000 people, large damage to housing and public infrastructure and the displacement of more than 1 million people

(UNHCR 2011). In 1999, NATO intervened in the region and the UN declared it as a Protectorate ever since.

In this section, we analyse the impact of the 1998-1999 Kosovo war on women's roles and activities, and their contribution to household welfare and community economic recovery. This empirical analysis is based on the 2000 Kosovo Living Standards Measurement Survey (KLSS), conducted just over a year later after the end of the NATO campaign. The sample includes 2,880 households and 17,917 individuals. The survey was designed to be nationally representative. It contains detailed information on individuals and households allowing us to analyse the short term impact of violence in terms of household composition, distribution of activities within households, participation in labour markets, and welfare indicators.

The survey also includes detailed self-reported information on the exposure of individuals and households to the 1998-1999 conflict in terms of displacement and the situation of current living conditions (whether the household dwelling was damaged or whether the household is living in temporary shelters due to the violence). We use this information to identify households exposed to conflict, assigning a value of one to those that reported either that they were living in damaged dwelling or in temporary shelters, and for those in which the entire household was displaced. Throughout the analysis we will compare households directly affected by the incidence of violence with those not affected, disaggregating results by conflict incidence and gender. The sample involves 993 households living in regions not affected by conflict (35%), located in 134 communities, and 1,887 households in conflict affected regions during war (66%), located in 226 communities.

*a) Impact of conflict on gender roles*

Table 1 reports our main findings on the impact of the 1998-1999 conflict on household composition. In general, we find that households in Kosovo face low dependency ratios (below 1 dependant for each working age member). Female-headed households, almost entirely headed by a single woman, represent 8-9% of the overall sample. The results in table 1 show further that households in conflict-affected households are significantly likely to have less young children, more older children and less old age household members. Households are more likely to be headed by a woman in households less affected by the conflict.

The comparison of results between female- and male-headed households shows that dependency rates (the share of children and old age members in the total household size) are significantly lower in male-headed households affected by the conflict. Dependency rates are higher in female-headed households affected by the conflict, but the estimates are not statistically significant (possibly due to small cell sizes). Female-headed households that were most affected by the conflict are significantly more likely to be headed by single women and less likely to be headed by married women. This finding is in line with existing evidence discussed in chapter 2.

**Table KS 1. Impact of conflict on household composition changes in Kosovo**

Indicator	All					Female headed households					Male headed households				
	Obs	Non-affected	Conflict-affected	Diff	t-test	Obs	Non-affected	Conflict-affected	Diff	t-test	Obs	Non-affected	Conflict-affected	Diff	t-test
<b>HH size (average)</b>	2,880	6.064	6.304	-0.239	*	239	3.871	4.575	-0.704	*	2,641	6.291	6.449	-0.157	n.s.
<b>Composition</b>															
Share of children 0-6 yrs	2,880	0.133	0.113	0.020	***	239	0.064	0.089	-0.025	n.s.	2,641	0.140	0.115	0.025	***
Share of children 7-15 yrs	2,880	0.142	0.184	-0.042	***	239	0.139	0.146	-0.007	n.s.	2,641	0.142	0.187	-0.045	***
Share of males 16-65 yrs	2,880	0.302	0.306	-0.004	n.s.	239	0.152	0.198	-0.046	*	2,641	0.318	0.316	0.002	n.s.
Share of females 16-65 yrs	2,880	0.321	0.319	0.001	n.s.	239	0.409	0.421	-0.011	n.s.	2,641	0.311	0.311	0.001	n.s.
Share of elders >65 yrs	2,880	0.102	0.078	0.025	***	239	0.236	0.146	0.090	**	2,641	0.089	0.072	0.016	**
<b>Dependency ratio (&lt;16 and &gt;65 / 16 to 65 yrs)</b>	2,783	0.769	0.797	-0.028	n.s.	209	0.755	0.801	-0.046	n.s.	2,574	0.770	0.796	-0.027	n.s.
<b>Female/male ratio (16 to 65 yrs)</b>	10,772	0.512	0.514	-0.002	n.s.	618	0.658	0.622	0.036	n.s.	10,154	0.502	0.507	-0.005	n.s.
<b>Type of households</b>															
Single female headed household	2,880	0.091	0.077	0.013	n.s.	239	0.968	1.000	-0.032	**	2,641	0.000	0.000	0.000	n.a.
Married female headed households	2,880	0.003	0.000	0.003	**	239	0.032	0.000	0.032	**	2,641	0.000	0.000	0.000	n.a.
Single male headed household	2,880	0.057	0.067	-0.010	n.s.	239	0.000	0.000	0.000	n.a.	2,641	0.063	0.073	-0.010	n.s.
Married male headed households	2,880	0.849	0.855	-0.006	n.s.	239	0.000	0.000	0.000	n.a.	2,641	0.937	0.927	0.010	n.s.
<b>HHs directly affected by conflict</b>															
Displacement (%)	2,880	0.000	0.722	-0.722	n.a.	239	0.000	0.589	-0.589	n.a.	2,641	0.000	0.733	-0.733	n.a.
Damage to dwelling (%)	2,865	0.000	0.592	-0.592	n.a.	238	0.000	0.603	-0.603	n.a.	2,627	0.000	0.591	-0.591	n.a.
<b>Other household characteristics</b>															
Access to land (% with >0.5 ha)	2,880	0.403	0.568	-0.165	***	239	0.226	0.459	-0.233	***	2,641	0.421	0.577	-0.156	***
Rural location (% of households)	2,880	0.550	0.749	-0.199	***	239	0.462	0.664	-0.202	***	2,641	0.559	0.756	-0.197	***

Source: Own calculations based on KLSS 2000.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

Table 2 provides comparative estimates on female and male participation in labour markets in households affected and not affected by the conflict. The results show significant effects of the Kosovo conflict on the economic roles of women and men. Similarly to other case studies, we observe that female household heads affected by the war are 9.3% more likely to be employed than those not affected by the conflict. Other female members in households headed by a woman and affected by war are 3% more likely to be employed than women living in households not affected by violence. This result is statistically significant at the 1% level of significance. In the case of men, we found more mixed results: male household heads are more likely to be employed if they were directly affected by conflict (by 5.8%). However, other men living in households affected by the conflict (and that are not household heads) are less likely to be employed by the same proportion. Men in households affected by the conflict are also significantly more likely to be inactive. These results confirm the hypothesis that women tend to join the labour market in situations of conflict through an ‘added worker’ effect (hypothesis 2). In line with some findings in the literature reviewed in chapter 2, men in Kosovo are more likely to be unemployed when their household was directly exposed to violence (in this case, with the exception of men that are household heads).

Table 3 presents more disaggregated information on the characteristics of females and males employed in Kosovo. We find that both men and women affected by conflict work similar hours than their counterparts not directly affected by the conflict. We do find that women work fewer hours per week than men (9 hours per week less). We cannot assess differences in earnings given that the information on incomes from the KLSS 2000 is incomplete (Douarin et al. 2010). We find further that women affected by conflict are less likely to be working as waged employees, and considerably more likely to be engaged in self-employment, both in agriculture and other sectors, when compared to women not affected by conflict. Although men affected by conflict exhibit similar patterns, their access to wage employment is higher than that of women. Men also depend much less on self-employment agricultural work in comparison to women. This finding is in line with accounts in the literature and other empirical evidence we obtained for other case studies that women that join labour markets in conflict contexts tend to be employed in low-paid, low-skilled jobs.

*b) Impact of changes in gender roles on household welfare*

We have analysed the impact of changes in the economic roles of men and women as a result of the ethnic conflict in Kosovo on household welfare. Household welfare is again measured in terms of household consumption expenditure per capita. The results in table 4 show that households affected by the conflict have lower values of consumption expenditure per capita, although in general the differences are not statistically significant. Further econometric analysis will be needed in order to better understand these results, controlling for other factors affecting the levels of consumption across households. Contrary to some of the other case studies, we have found that increased levels of employment against women in Kosovo has resulted in statistically significant *negative* effects on household consumption expenditure in households directly affected by the conflict. This effect is particularly pronounced among female-headed households, and explained by the adoption of low status jobs by women in Kosovo (see table 3).

**Table KS 2. Impact of conflict on economic roles in Kosovo**

Position in HH / Indicator	Females					Males				
	Obs	Non-affected	Conflict-affected	Diff	t-test	Obs	Non-affected	Conflict-affected	Diff	t-test
<b>Labor Force Participation, HH Heads</b>										
Employed	239	0.215	0.308	-0.093	n.s.	2,641	0.590	0.648	-0.058	***
Unemployed	239	0.043	0.014	0.029	n.s.	2,641	0.079	0.079	0.000	n.s.
Inactive	239	0.742	0.678	0.064	n.s.	2,641	0.331	0.272	0.059	***
<b>Labor Force Participation, Others</b>										
Employed	5,888	0.222	0.252	-0.030	***	3,074	0.512	0.454	0.058	***
Unemployed	5,888	0.064	0.057	0.007	n.s.	3,074	0.167	0.149	0.018	n.s.
Inactive	5,888	0.714	0.691	0.023	*	3,074	0.321	0.397	-0.076	***

Source: Own calculations based on KLSS 2000.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

**Table KS 3. Impact of conflict on employment characteristics in Kosovo**

Indicator	Females					Males				
	Obs	Non-affected	Conflict-affected	Diff	t-test	Obs	Non-affected	Conflict-affected	Diff	t-test
Average hours worked per week	1,442	33.599	32.809	0.791	n.s.	3,041	42.705	41.803	0.902	n.s.
<b>Type of employment</b>										
Wage employment	1,443	0.408	0.230	0.178	***	3,041	0.524	0.503	0.021	n.s.
Self-employment - agriculture	1,443	0.389	0.523	-0.134	***	3,041	0.250	0.318	-0.068	***
Self-employment – not agriculture	1,443	0.203	0.247	-0.044	*	3,041	0.226	0.179	0.047	***
Access to secondary jobs	1,490	0.013	0.017	-0.004	n.s.	3,118	0.056	0.080	-0.024	**

Source: Own calculations based on KLSS 2000.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

(1) Excluding zeros for hours worked.

**Table KS 4. Impact of changes in gender roles on household welfare in Kosovo**

Indicator / Status of HH Head	All					Female headed households					Male headed households				
	Obs	Non-affected	Conflict-affected	Diff	t-test	Obs	Non-affected	Conflict-affected	Diff	t-test	Obs	Non-affected	Conflict-affected	Diff	t-test
<b>Average expenditure per capita</b>															
All households															
<i>No female member employed</i>	1,657	115	112	2	n.s.	150	98	116	-19	*	1,507	117	112	5	n.s.
<i>At least 1 female member employed</i>	1,184	138	130	9	*	89	152	118	33	*	1,095	137	130	7	n.s.
When hh head is employed															
<i>No female member employed</i>	824	128	121	7	n.s.	n.a.	n.a.	n.a.	n.a.	n.a.	824	128	121	7	n.s.
<i>At least 1 female member employed</i>	879	142	134	9	n.s.	65	146	106	40	**	814	142	136	6	n.s.
When hh head is not employed															
<i>No female member employed</i>	833	104	102	2	n.s.	150	98	116	-19	*	683	105	99	6	n.s.
<i>At least 1 female member employed</i>	305	128	118	10	n.s.	24	164	156	8	n.s.	281	124	115	10	n.s.

Source: Own calculations based on KLSS 2000.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant. Consumption expenditure is provided in euro.

c) *Impact of changes in gender roles on community welfare*

In table 5, we report differences in average welfare at the community level associated to changes in gender roles due to conflict. For this purpose, we have estimated aggregate average consumption per capita in each community. In order to assess further the impact of women's involvement in economic roles due to conflict, we have identified communities according to the share of women in employment (below or above average) (table 5). In general, the differences are not significant (most likely due to small cell sizes). We observe nonetheless that communities that have above the average shares of female workers have higher levels of consumption per capita (3% increase). Table 5 shows an opposite result for communities with below the average shares of female employment (5% reduction in consumption welfare levels).

**Table KS 5. Impact of changes in gender roles on community welfare in Kosovo**

Indicator / Status of Women	All				
	Obs	Non-affected	Conflict-affected	Diff	t-test
<b>Average expenditure per capita</b>					
All Communities	360	119	118	1	n.s.
Below average share of working females	201	121	116	5	n.s.
Above average share of working females	159	117	120	-3	n.s.

Source: Own calculations based on KLS 2000.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant. Consumption expenditure is provided in euro.

This result seems to suggest that although rises in female employment in Kosovo due to the war are associated with reductions in welfare at the household level (and thus not confirming hypothesis 5), higher rates of female employment have positive benefits for community welfare levels in areas affected by the war in Kosovo (thus confirming hypothesis 6). This is an important result but further confirmation is needed through the use of more sophisticated econometric techniques outside the scope of this phase of the study. We have run simple regression analysis (as in other case studies) that still shows statistically insignificant results. The results in those regressions are not, however, reliable. In the case of Kosovo, the conflict exposure variable is provided at the household-level and is self-reported. It is therefore very likely that the results are contaminated by serious endogeneity problems (resulting from potential omitted variable and reverse causality biases). These issues can only be addressed through the use of an instrumental variable approach, to be pursued in phase II of the study.

### **3.1.6. Case Study 4: Nepal**

During the ten-year-long People's War between the government and the Maoist movement in Nepal, approximately 13,000 people lost their lives and between 50,000-70,000 people were recorded as internally displaced. Some estimates suggest that the number of displaced people could be as high as 200,000 (Shakya 2009). Lack of political representation, gender and caste discrimination, suppression and exploitation, and economic inequality have been acknowledged as some of the foremost causes of the conflict (Shakya 2009, Murshed and Gates 2002). Women were severely affected by the war, but also extremely engaged in ending the violence, and initiating the 2006 peace process (Geiser 2005, Falch 2010). Despite this, women were not included in the formal peace talks, or in decision-making processes once the war was over. Marginalised groups, including women, continue to struggle for attention to be paid to their needs. It is felt that the government continues to ignore ordinary people's demands, and so these groups resort to violent protests and general strikes in order to gain notice (Shakya 2009)

The following is a descriptive analysis of the situation of women towards the end of the conflict in Nepal in 2006 using the Nepal Demographic and Health Survey (NDHS). The fieldwork took place between February and August 2006. The peace agreement between the government and Maoists was signed in November 2006, three months after the data collection was finished. A total of 10,793 women between the ages of 15 and 49 were surveyed in the NDHS 2006. Using information from Do and Iyer (2010), we divided districts into quintiles of conflict intensity using the total number of conflict deaths per 1,000 populations, in order to investigate differences in the situation of these women.

Table 1 provides an overview of the situation of women aged 15-49 in Nepal in 2006. About 84% live in rural areas. The average household size in rural areas is 5.49, including 0.97 children below the age of five. Urban households are smaller on average, have less children below the age of five (0.68), and report lower numbers of other children.

**Table NP 1. Women in Nepal in 2006**

Variable	Total number of observations	Overall	Urban areas	Rural areas	Male headed households	Female headed households
Share of respondent in rural areas	10793	0.84	0	1	0.85	0.84
Average number of household members per household	7376	5.49	5.04	5.58	5.90	4.15
Share female headed households	7376	0.24	0.22	0.24	0	1
Share women working	10793	0.71	0.49	0.75	0.71	0.7
<i>for family</i>		36.87	19.49	38.99	38.62	30.43
<i>for someone else</i>		15.69	39.36	12.8	15.4	16.75
<i>self-employed</i>		47.44	41.14	48.21	45.98	52.82
<i>in agricultural sector</i>		70.13	23.55	78.43	70.26	69.64
Share women earning money for work	8818	0.33	0.66	0.28	0.32	0.33
Share of women with husband away	8244	0.26	0.2	0.27	0.14	0.81
Average number of all children ever born	10793	2.44	1.88	2.54	2.47	2.32
Average number of births in last 5 years	10793	0.51	0.4	0.53	0.52	0.48
Share women ever married	10793	0.81	0.76	0.81	0.81	0.78
Average household wealth index	7376	0.02	1.40	-0.24	0.03	0.002
Average number of children to the age of 5	10793	0.93	0.68	0.97	0.98	0.73
Average age of women in households	10793	28.76	28.41	28.82	28.77 (45.68)*	22.39 (32.90)*

Source: NDHS 2006

Notes: \* Numbers in brackets refer to the average age of the household heads.

There is a large difference between the share of women working in rural and urban areas: 75% of women in rural areas work, but only 49% of women in urban areas are employed. The results show also significant differences in earnings: In rural areas, only 28% of all women receive at least partially monetary compensation for their work, compared to 66% in urban areas. The household wealth index<sup>20</sup> shows that women in urban areas are more likely to live in wealthy families (the average wealth index is 1.40 compared to -0.24 in rural areas), with husbands more likely to work in professional, technical and managerial sectors, and to perform clerical and sales

<sup>20</sup> Computed using principal component analysis based on information on household's assets ownership, materials used for house construction and types of water and sanitation facilities. The index is provided in the NDHS data set.



jobs. Thus, urban women are more likely not to need to work, and if they do they are able to secure paid jobs (most in sales and services, and as skilled manual labour).<sup>21</sup>

We find fewer differences between male- and female-headed households. One exception is the type of work performed: Women in female-headed households work significantly less for family members, and are significantly more likely to be self-employed. Also, they have fewer children below the age of 5 and their households are smaller. 79% of female household heads are currently married, although 92.4% of those women have a husband who lives somewhere else.<sup>22</sup> Around 15% are widowed and separated, and 5% had never been married in 2006.

a) *Impact of conflict on gender roles*

Due to the availability of conflict data for Nepal at low levels of aggregation, we divided all 75 districts in Nepal into quintiles (fifteen districts per quintile) characterized by the intensity of the conflict during 1996 and 2006. The measure of intensity is the number of people per 1,000 inhabitants in each district that lost their lives during the conflict. The average number of deaths per 1,000 inhabitants in the fifteen least affected districts is 0.19, climbing to 2.46 in the highest conflict-affected districts. The number of observations across the quintiles ranges from 1,306 observations in the districts most affected by the conflict to 2,776 in the least affected districts.

Table 2 shows the relationship between conflict, household composition and the economic situation of women in Nepal in 2006. We first look at household characteristics and then turn to the economic situation of women with a focus on differences that might be correlated to the conflict.<sup>23</sup>

The results show that women living in districts more affected by the conflict have slightly (but statistically significant) more children below the age of five. We do not find any statistically significant correlation between the age of the respondents and intensity of conflict, which indicates that age is not the main explanation for observed fertility trends. The results show that in districts of higher conflict intensity there are slightly, but significantly, more female-headed households. In female-headed households, the correlation between conflict intensity and number of births given in the last five years is almost three times the size of the same correlation in male-headed households (0.11 versus 0.04). This correlation is higher again when we restrict this analysis to female household heads only (0.13). This result indicates an increase in the levels of fertility (and dependence ratios) amongst female-headed households is explained by levels of conflict exposure.

We find that the intensity of conflict is significantly positively correlated (coefficient equals 0.198) with the probability of women working. While only 59% of women in the lowest conflict affected district report to be working, 84% do so in districts most affected by the conflict. This may be due to the type of residence: 74% of women in the lowest conflict affected regions live in rural areas, compared to 94% in districts most affected by violence. In order to investigate this result further, we estimated the same coefficients for rural areas only (table 2). The results reveal

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<sup>21</sup> Information computed from the NDHS 2006 but tables not shown.

<sup>22</sup> Migration was a very important means to escape the conflict and to search for work in Nepal (DHS 2006). In 2006, 37 percent of the households had reported at least one person from the household away, with men almost three times as likely to have migrated as women, and two thirds away for at least 6 months during the year prior to the survey (*ibid*).

<sup>23</sup> We do not report levels of significance in the tables because it is difficult to tabulate them in an easy way when calculations take place between multiple outcomes (five quintiles of conflict intensity). We have calculated levels of significance for all results discussed in this section and report them directly in the text.

a similar pattern: the correlation coefficient is now slightly smaller (0.23 for all and 0.21 for rural areas), but still highly significant.

**Table NP 2. Impacts of Conflict on Household Composition Changes in Nepal**

	Conflict intensity quintile				
	1- lowest	2	3	4	5- highest
Average number of deaths per 1,000 inhabitants 1996 – 2006	0.186987	0.421169	0.670085	1.043196	2.457797
Number of respondents	2,776	2,506	1,718	2,487	1,306
Rural areas	0.74	0.88	0.89	0.89	0.94
Female headed	0.19	0.28	0.25	0.22	0.29
Employed women	0.59	0.67	0.83	0.82	0.84
Employed women in rural areas	0.64	0.69	0.87	0.85	0.85
Earning cash	0.51	0.31	0.23	0.24	0.19
Children under 5	0.79	1.00	0.87	1.16	0.86
Children ever born	2.22	2.57	2.46	2.58	2.58
Births last 5 yrs	0.46	0.56	0.54	0.50	0.57
Ever married	0.79	0.85	0.79	0.78	0.80
Household members	5.30	5.65	5.24	6.19	5.03
Age	28.78	28.95	28.88	28.53	28.47

Source: NDHS 2006; replication data set from Do and Iyer (2010).

Table 3a sheds further light on the economic situation of women in conflict-affected areas in Nepal in 2006. We find that more intense conflict exposure makes it less likely that women receive compensation for their work: 51% of the women working in the least affected districts earn at least some money. In the second lowest affected districts, that share decreases to 31%. Women in districts most affected by the conflict are more likely to work for in-kind payment only, or receive nothing in return for their work, presumably because they work more for family members or are self-employed.<sup>24</sup> A closer look at the type of occupation taken by women reveals a striking pattern that can well explain the previous observations: about 86.5% of employed women in highly conflict affected districts work in the agricultural sector. Of those, 84% are self-employed. In lower conflict affected areas about 50% of employed women work in agriculture (11% as employees).

Table 3b compares the employment status of women in female- and male-headed households. Confirming the overall trend, women in female-headed households work less often for family members, and are more likely to be self-employed (these differences are significant in the second and fourth conflict intensity quintiles). They also report more often to be working for someone else. The differences between women in male- and female-headed households are only significant in one of the conflict intensity quintiles (the fourth). Regarding their occupation, again we observe that households in areas most affected by the conflict are more engaged in agricultural work. Women in female-headed households are slightly less likely to be engaged in agricultural work. This result is statistically significant in the districts most affected by violence.

<sup>24</sup> In 1996, 83.47% of women were working for family members, 10.12% for someone else, and 6.41% were self-employed (own calculations based on NDHS 1996 data). When comparing these figures with the NDHS 2006 data, we observe a large shift in type of work performed by women before and after the conflict. After the conflict, women are more likely to be self-employed (most probably in the informal sector). Menon and Rodgers (2011) also find that the propensity of women to work and be self-employed increases due to the conflict.

We do not find any strong significant differences in the probability of women being paid for their work when they belong to male- or female-headed households. The results show that, in both male- and female-headed households, the probability of women being paid for their work decreases as exposure to conflict increases.

**Table NP 3a. Conflict and Women's Economic Roles in Nepal 2006**

	Conflict intensity quintile				
	1- lowest	2	3	4	5- highest
<b>Earnings for work</b>					
not paid	23.38	32.98	30.79	40.4	34.45
cash only	29.27	10.28	9.92	6.1	7.9
cash and kind	21.75	20.93	12.97	17.5	10.96
in kind only	25.6	35.8	46.31	36	46.69
<b>Type of work</b>					
for family member	28.95	38.54	37.54	44.2	39.1
for someone else	29.28	16.27	8.19	7.37	6.2
self-employed	41.77	45.18	54.27	48.43	54.7
<b>Occupation: in agriculture</b>					
self-employed	38.69	63.64	77.32	81.45	84.22
Employee	11.11	9.17	3.15	4.5	2.3

Source: NDHS 2006; replication data set from Do and Iyer (2010).

**Table NP 3b. Conflict and Women's Economic Roles in Nepal 2006 by gender of household head**

	Conflict intensity quintile				
	1- lowest	2	3	4	5- highest
<b>Share of women working...</b>					
For family members					
<i>In male headed households</i>	29.32	41.68***	38.75	47.29***	40.59
<i>In female headed households</i>	27.20	29.23	33.45	29.77	35.13
For someone else					
<i>In male headed households</i>	28.66	15.77	8.26	6.78**	5.38
<i>In female headed households</i>	32.21	17.75	7.97	10.10	8.39
Self-employed					
<i>In male headed households</i>	42.02	42.54***	53.00	45.92***	54.03
<i>In female headed households</i>	40.59	53.02	58.58	60.13	56.48
In agriculture					
<i>In male headed households</i>	0.50	0.73	0.81	0.87**	0.89**
<i>In female headed households</i>	0.48	0.74	0.80	0.83	0.81
Earns at least partially money for work					
<i>In male headed households</i>	0.51	0.30*	0.24	0.23	0.18
<i>In female headed households</i>	0.52	0.35	0.21	0.24	0.22

Source: NDHS 2006; replication data set from Do and Iyer (2010).

In summary, the empirical results discussed above suggest that Nepalese women in higher conflict-intensity areas have more children below the age of five, are more likely to be household-heads, and are more likely to be working. When they work, they are more likely to be self-employed in the agricultural sector, and less likely to earn money for their work. These results show strong support for the hypothesis that violent conflict increases the responsibilities of women within households through its impact on household composition (hypothesis 1) and that these responsibilities take the form of increased labour market participation (hypothesis 2). We find significant differences between women living in rural and urban areas, even when equally affected by the conflict. Notably, women affected by the conflict that stay in rural areas (while their male relatives migrate or are displaced) are more likely to be engaged in self-employment activities, possibly in the informal sector and in unpaid occupations.

*b) Impact of changes in gender roles on women's empowerment*

The Nepal dataset allows us to measure women's empowerment directly by examining explicitly how decisions are taken by different household members. The NDHS collects information from married employed women that earn money on who, within the household, makes decisions about how to spend that money. Overall, almost 31% of the respondents report that they make decisions themselves. 55.7% of women decide jointly with their husbands or partners on how the money is spent (table 4a). However, there are some differences: Women in rural areas, in larger households, with no education and with larger numbers of young children (below the age of five) are less likely to make decisions alone. Age is strongly correlated with joint decision making, as is living together with the husband.

**Table NP 4a. Women's empowerment – spending her own income**

Who decides how to spend money	Respondent alone	Respondent and husband	Husband or partner alone	Someone else
Overall	30.77	55.72	9.98	3.53
Husband away	72.36	17.33	1.33	8.98
Husband at home	21.00	64.75	12.01	2.25
No education	25.87	60.34	10.77	3.02
Primary education	38.56	47.83	8.86	4.74
Secondary education	39.15	46.44	10.21	4.2
Higher education	43.02	51.3	1.56	4.13
Average number of children up to the age of 5	0.71	0.82	1.05	1.09
Average number of household members	4.75	6.09	6.60	7.85
Average age	32.19	34.78	32.94	25.63
Urban	50.37	37.8	9.41	2.42
Rural	25.78	60.29	10.12	3.81

Source: NDHS 2006.

We find indications that conflict exposure affects processes of decision-making. The results in table 4b show a significant negative correlation between conflict intensity and the probability of women reporting making decisions about their money themselves. Other results show a more positive picture: The result is stronger in urban areas (-0.05 in rural and -0.10 in urban areas). We observe a positive correlation (0.05) between conflict intensity and joint decision making in urban areas (table 4b). We observe also that the correlation coefficient between husband-only

decisions and conflict in rural areas is negative and statistically significant (-0.04). This result shows some support for the hypothesis (hypothesis 4) that greater participation of women affected by conflict in labour markets and other activities may be associated with increases in women's empowerment within households. As we will discuss below, this result may be due to the type of employment taken by women affected by the conflict in Nepal.

**Table NP 4b. Women's empowerment and conflict intensity**

Who decides how to spend money	Conflict intensity quintiles				
	1	2	3	4	5
<b>Urban areas</b>					
respondent alone	59.94	46.92	21.37	33.87	35.83
respondent and husband	27.86	43.95	63.73	53.25	55.88
husband/partner alone	9.74	7.25	11.53	10.47	6.4
someone else	2.45	1.88	3.36	2.41	1.89
<b>Rural areas</b>					
respondent alone	27.09	28.04	30.47	16.06	25.67
respondent and husband	57.94	57.52	52.37	72.83	67.25
husband/partner alone	10.25	9.83	13.49	9.41	5.75
someone else	4.72	4.61	3.67	1.69	1.33

Source: NDHS 2006; replication data set from Do and Iyer (2010).

The NDHS has also collected information on women's participation in decision-making processes within the household regarding their own health care, large household purchases, purchases for daily needs and visits to families and relatives. We report in table 5 the numbers of decisions *married* women are involved in as an aggregated measure of empowerment. First, we find that most women either report to having no share in decision-making or to participating in all types of decisions asked about. Second, women in rural areas are more likely to report that they have no share in household decision-making processes than women in urban areas. As one would have expected, women that work and earn money are more likely to participate in all decisions: the correlation coefficient for women earning money is three times as large as the coefficient for women that work (but do not necessarily earn a salary) (0.31 versus 0.10). This result is very suggestive of the importance of women's economic contribution to household for women's own empowerment. This result is in line with the development economics literature reviewed in chapter 2.

The results on the relationship between conflict intensity and women empowerment is less clear. There is a slight negative but significant correlation between conflict intensity and the number of decisions a woman is involved. In order to further investigate this result, we have computed a simple regression exercise where we were able to control for a variety of household characteristics including urban and rural residence, education, age, gender of household head, working status of the woman and whether she earns money for her work (table 6). The results show a positive correlation: women in districts more affected by the conflict appear to have a larger participation in decision-making processes within the household (when the decision is not about money matters – in that case the association remains negative as discussed above).

**Table NP 5. Women's empowerment in decision making**

	Number of decisions the woman is involved in				
	0	1	2	3	4
<b>Overall</b>	31.22	9.85	9.6	12.31	37.02
<b>Urban</b>	18.46	8.36	11.62	19.71	41.84
<b>Rural</b>	33.45	10.11	9.25	11.02	36.18
<b>No education</b>	30.4	9.29	9.3	12.07	38.95
<b>Primary education</b>	35.37	9.95	7.17	14.02	33.48
<b>Secondary education</b>	32.43	11.29	12.12	10.8	33.36
<b>Higher education</b>	15.59	12.22	14.61	17.48	40.09
<b>Male headed household</b>	34.28	11.04	10.55	13.13	31
<b>Female headed household</b>	17.91	4.68	5.47	8.73	63.21
<b>Husband away</b>	36.27	7.11	5.25	7.03	44.35
<b>Woman not working</b>	33.76	11.29	11.35	12.21	31.38
<b>Woman working</b>	30.29	9.32	8.95	12.35	39.09
<b>Woman not earning cash</b>	40.69	10.61	8.39	9.04	31.28
<b>Woman earning cash</b>	12.24	8.32	11.59	17.87	49.98
<b>Conflict intensity quintiles</b>					
1 – lowest	25.5	11.23	11	13.49	38.79
2	36.19	8.84	7.64	9.91	37.42
3	31.6	10.95	8.14	12.66	36.65
4	36.72	6.98	9.46	14.05	32.79
5 – highest	26.17	11.52	12.82	11.02	38.47

Source: NDHS 2006; replication data set from Do and Iyer (2010).

**Table NP 6. Drivers of women's empowerment**

Dependent variable	Number of decisions a woman is involved in	Who decides how to spend woman's earned money ^
Explanatory variables	Coefficient (standard error)	Coefficient (standard error)
Age	0.0471 *** (0.002)	0.003 (0.004)
Rural area	-0.134 *** (0.045)	0.534 *** (0.089)
Female headed household	0.932 *** (0.045)	-1.400 *** (0.105)
Woman is working	0.072 (0.051)	
Woman earns money	0.622 *** (0.036)	
Primary education	0.088 ** (0.047)	-0.091 (0.100)
Secondary education	0.089 (0.132)	-0.200 (0.172)
Conflict deaths per 1000 population	0.062 *** (0.022)	0.071 * (0.040)

Source: NDHS 2006; replication data set from Do and Iyer (2010).

Notes: \*\*\*, \*\* and \* denote significances at 1 %, 5 % and 10 % level respectively; ^ coded as 1 = respondent alone, 2 = joint, 3 = husband/partner alone.

c) *Impact of changes in gender roles on household welfare*

We have also examined the relationship between changes in gender roles in Nepal and their contribution to household welfare. We measure household welfare in the Nepal case using the wealth index discussed above. These results are reported in table 7. Table 7 shows average household welfare indices by subgroups across the five levels of conflict intensity. Overall, and in every subgroup tabulated – urban/rural and female/male-headed households – the average wealth index is much smaller in districts more intensively affected by the conflict than in less affected areas.

We compare also wealth indices between households where at least one woman works, and households where no woman reports being employed. We separated these calculations between rural areas and urban areas because most employed women reside in rural areas. These results show the level of women’s contribution to household welfare. Interestingly, we find no household welfare improvements when women report being actively working. The results suggest in fact that women have to work because of the levels of poverty they live in.

**Table NP 7. Conflict intensity and household welfare**

Wealth Index	Conflict intensity quintile				
	1- lowest	2	3	4	5- highest
Overall	0.56	-0.05	-0.25	-0.41	-0.45
Urban areas	1.81	1.16	0.96	0.62	0.28
Rural areas	0.11	-0.22	-0.40	-0.55	-0.50
Male headed household	0.55	-0.06	-0.26	-0.42	-0.46
Female headed households	0.58	-0.02	-0.22	-0.39	-0.45
No woman working in the household	0.89	0.23	0.52	0.17	-0.16
<i>in rural areas</i>	0.34	-0.01	0.12	-0.32	-0.30
At least 1 woman working	0.38	-0.15	-0.36	-0.49	-0.50
<i>in rural areas</i>	0.01	-0.29	-0.45	-0.57	-0.53

Source: NDHS 2006; replication data set from Do and Iyer (2010).

Overall we find that in the case of Nepal increased female labour market participation does not translate into improved household welfare. Most likely this is due to the low-skilled, low-paid nature of this additional work taken by women in conflict-affected areas in Nepal. However, women that work – particularly those that earn a more decent living – report higher levels of engagement in household decision-making processes.

**3.1.7. Case Study 5: Tajikistan**

The civil war in Tajikistan (1992-1997) affected approximately 40% of the population directly: at least 600,000 people were displaced internally, 60,000 people became refugees, 500,000 people left the country permanently, at least 50,000 men died, 55,000 children became orphans and 20,000 women became widows (Falkingham 2000). The violence had clear regional and temporal impacts, with the Southern and Central regions being disproportionately affected by the war. Recent empirical analyses have shown the significant consequences of the war on women and girls in terms of family roles, education outcomes and employment (Shemyakina 2006, 2011, Justino and Shemyakina 2010).

In this section, we analyse the impact of the 1992-1997 civil war in Tajikistan on women's roles and activities, and their contribution to household welfare and community economic recovery. This empirical analysis is based on the 1999 Tajik Living Standards Measurement Survey (TLSS), conducted by the World Bank to assess the short-term impact of the conflict (two year after the end of the civil war). The sample includes 2,000 households and 14,142 individuals. The survey was designed to be nationally representative. The 1999 TLSS collected information on the exposure of individuals and households to the war in terms of displacement and house damage. Some studies have found that this self-reported information significantly underestimates the full extent of the violence faced by individuals and their families in Tajikistan (see Shemyakina 2006). In order to minimise this bias, we have used an external classification of Tajikistan's regions according to the incidence of conflict (highly affected versus low or not-affected areas).<sup>25</sup> The overall household sample includes 681 households living in regions not affected by conflict (34%), located in 43 communities, and 1,293 households in conflict affected regions (66%), located in 81 villages.

a) *Impact of conflict on gender roles*

Table 1 reports our main findings on the impact of the 1992-1997 civil war on household composition in Tajikistan two years after the end of the war. The results show a significant impact of the conflict on household composition. Most notably, households in conflict-affected areas in Tajikistan are larger than those in less affected areas, and are characterised by higher dependency rates. This result was expected due to the high level of house damage experienced by households in Tajikistan during the war (see discussion in Shemyakina 2006). In areas of more intense violence, households were likely to have provided a home to friends and relatives not able to immediately reconstruct their dwellings (note that the survey was collected only two years after the end of the war).

Female-headed household represent 16% of the overall household sample. These consist almost entirely of single women, in contrast with male-headed households, which are mostly married men. The results show a slightly higher incidence of female-headed households in conflict-affected areas, but the result is not statistically significant. Rates of dependency among female-headed households are higher than those of male-headed households, particularly in conflict-affected areas (table 1).

Conflict-affected households exhibit higher rates of migration at the end of the war. This result was expected: official data for Tajikistan indicates that 492.2 thousand people left the country between 1991 and 2005 (around 8% of the population). About 83.8% of all migrants left during the civil war period between 1991 and 1998 (Kireyev 2006). The result is consistent across both female- and male-headed households but migration rates are higher among female-headed households. This is because, in 1999, migrants would have been predominantly middle-age males who took low-skilled jobs in agriculture or construction (Kireyev 2006). Female headed households were affected by damage to dwelling in higher proportions than male headed households (Table 1). The results do not show any significant differences in levels of exposure to displacement between male- and female-headed households.

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<sup>25</sup> The classification was made Olga Shemyakina (2006, 2011) based on media, reports, and official records. She used this information to compile chronological events of the 1992-1998 Tajik armed conflict, their geographical location and impact. We are very grateful to Olga for making this dataset available for this study.



**Table TJ 1. Impact of conflict on household composition changes in Tajikistan**

Indicator	All						Female headed households						Male headed households					
	Obs	Non-affected	Conflict-affected	Diff		t-test	Obs	Non-affected	Conflict-affected	Diff		t-test	Obs	Non-affected	Conflict-affected	Diff		t-test
<b>HH size (average)</b>	1,974	6.213	7.477	-1.264	0.000	***	346	5.438	6.588	-1.150	0.002	***	1,628	6.396	7.656	-1.260	0.000	***
<b>Composition</b>																		
Share of children 0-6 yrs	1,974	0.158	0.197	-0.040	0.000	***	346	0.136	0.149	-0.013	0.454	n.s.	1,628	0.163	0.207	-0.044	0.000	***
Share of children 7-15 yrs	1,974	0.227	0.257	-0.030	0.001	***	346	0.227	0.284	-0.057	0.019	**	1,628	0.227	0.251	-0.025	0.013	**
Share of males 16-65 yrs	1,974	0.272	0.239	0.033	0.000	***	346	0.203	0.164	0.039	0.028	**	1,628	0.288	0.254	0.034	0.000	***
Share of females 16-65 yrs	1,974	0.288	0.259	0.029	0.000	***	346	0.353	0.305	0.048	0.025	**	1,628	0.273	0.250	0.023	0.000	***
Share of elders >65 yrs	1,974	0.056	0.048	0.008	0.261	n.s.	346	0.081	0.098	-0.017	0.455	n.s.	1,628	0.050	0.038	0.012	0.073	*
<b>Dependency ratio (&lt;16 and &gt;65/16 to 65 yrs)</b>	1,941	0.991	1.287	-0.295	0.000	***	330	1.001	1.452	-0.450	0.000	***	1,611	0.989	1.255	-0.266	0.000	***
<b>Female/male ratio (16 to 65 yrs)</b>	7,151	0.510	0.511	-0.002	0.886	n.s.	1,071	0.591	0.610	-0.019	0.548	n.s.	6,080	0.493	0.495	-0.002	0.894	n.s.
<b>Type of households</b>																		
Single female headed household	1,974	0.176	0.156	0.020	0.253	n.s.	346	0.923	0.935	-0.012	0.669	n.s.	1,628	0.000	0.000	0.000	.	n.a.
Married female headed households	1,974	0.015	0.011	0.004	0.458	n.s.	346	0.077	0.065	0.012	0.669	n.s.	1,628	0.000	0.000	0.000	.	n.a.
Single male headed household	1,974	0.037	0.051	-0.014	0.149	n.s.	346	0.000	0.000	0.000	.	n.a.	1,628	0.045	0.061	-0.016	0.186	n.s.
Married male headed households	1,974	0.772	0.782	-0.010	0.629	n.s.	346	0.000	0.000	0.000	.	n.a.	1,628	0.955	0.939	0.016	0.186	n.s.
<b>HHs directly affected by conflict</b>																		
Migration of hh head during conflict (%)	1,974	0.037	0.134	-0.097	0.000	***	346	0.031	0.153	-0.122	0.000	***	1,628	0.038	0.130	-0.092	0.000	***
Displacement (%)	1,965	0.009	0.011	-0.002	0.677	n.s.	345	0.015	0.023	-0.008	0.617	n.s.	1,620	0.007	0.008	-0.001	0.822	n.s.
Damage to dwelling (%)	1,958	0.012	0.100	-0.088	0.000	***	343	0.008	0.153	-0.145	0.000	***	1,615	0.013	0.089	-0.076	0.000	***
<b>Other household characteristics</b>																		
Access to land (% with >0.1 ha)	1,951	0.538	0.652	-0.115	0.000	***	339	0.449	0.462	-0.013	0.811	n.s.	1,612	0.558	0.690	-0.132	0.000	***
Rural location (% of households)	1,974	0.721	0.729	-0.008	0.694	n.s.	346	0.654	0.593	0.061	0.258	n.s.	1,628	0.737	0.757	-0.020	0.381	n.s.

Source: Own calculations based on TLSS 1999.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

**Table TJ 2. Impact of conflict on economic roles in Tajikistan**

Position in HH / Indicator	Females						Males					
	Obs	Non-affected	Conflict-affected	Diff		t-test	Obs	Non-affected	Conflict-affected	Diff		t-test
<b>Labor Force Participation, HH Heads</b>												
Employed	341	0.326	0.396	-0.071	0.191	n.s.	1,583	0.718	0.721	-0.003	0.900	n.s.
Unemployed	341	0.054	0.094	-0.040	0.185	n.s.	1,583	0.036	0.073	-0.037	0.003	***
Inactive	341	0.620	0.509	0.111	0.046	**	1,583	0.247	0.206	0.040	0.067	*
<b>Labor Force Participation, Others</b>												
Employed	3,478	0.338	0.388	-0.050	0.004	***	2,043	0.558	0.496	0.062	0.009	***
Unemployed	3,478	0.051	0.086	-0.035	0.000	***	2,043	0.100	0.162	-0.062	0.000	***
Inactive	3,478	0.611	0.526	0.085	0.000	***	2,043	0.342	0.342	0.000	0.985	n.s.

Source: Own calculations based on TLSS 1999.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

As reported in all other case studies, the civil war in Tajikistan has had considerable effects on female labour market participation (see also Shemyakina 2011, Justino and Shemyakina 2010). Table 2 compares participation in labour markets between households in areas highly affected by the conflict, and those living in areas less affected by the war. We have found significant effects of the conflict on the economic roles of women and men in Tajik households. The results show that women that head households affected by the war are 7% more likely to be employed than those less affected by the conflict, while female members in households affected by the war are 5% more likely to be employed than those living in areas less affected by violence. Only the latter result is statistically significant. Women are also less likely to be inactive (i.e. not employed and not looking for a job).

Overall, the results show that conflict exposure is associated with an increase of around 9-11% in female labour force participation rates (those who are working plus those who are unemployed but looking for jobs) (table 2). Interestingly, we find that men are less likely to be employed in conflict-affected areas, in relation to men living in areas less affected by the conflict, particularly those men that are not household heads (table 2).

These results confirm that women in Tajikistan that were affected by conflict are more likely to be engaged in labour markets through an 'added worker' effect to compensate for men's lower access to the job market (hypotheses 2). This result is likely to be associated to the patterns of migration and displacement of household heads during the war.

Table 3 presents more disaggregated information on the characteristics of female and male employment. We find that both men and women in conflict-affected areas of Tajikistan work fewer hours than their counterparts living in areas less affected by the conflict (four hours less per week). Women work slightly fewer hours per week than men (39.5 versus 41.9 hours per week), and earn significantly less than men: in conflict-affected areas, women's average hourly wage is less than half of the rate received by men. This result seems to indicate that even though the war in Tajikistan has been associated with increases in the labour market participation of women, women tend to engage more in low-skilled, low-paid activities. This appears to be a consistent finding across most case studies.

Furthermore, we find that both women and men in conflict-affected regions are less likely to be working as waged employees (9 and 7%, respectively), and more likely to be engaged in self-employment, both in agriculture and other sectors (15 and 9%, respectively), compared to individuals living in regions less affected by the war. The results show that self-employment is more prevalent among women (table 3). Women are also more likely to be employed as family workers, more likely to be working as manual labourers and more likely to be working in the agricultural sector than men, especially in conflict-affected areas. These differences in the types of employment that women and men can access in post-conflict Tajikistan are likely to be a key explanation for the differences in wages observed between men and women.

**Table TJ 3. Impact of conflict on employment characteristics in Tajikistan**

Indicator	Females						Males					
	Obs	Non-affected	Conflict-affected	Diff		t-test	Obs	Non-affected	Conflict-affected	Diff		t-test
<b>Average hours worked per week (1)</b>	1,248	43.302	39.525	3.777	0.000	***	1,995	46.194	41.978	4.215	0.000	***
<b>Average hourly labour income (1)</b>	496	75.065	88.751	-13.686	0.272	n.s.	938	103.899	174.193	-70.295	0.020	**
<b>Type of employment</b>												
Wage employment	1,419	0.697	0.603	0.094	0.001	***	2,193	0.684	0.611	0.073	0.001	***
Self-employment - agriculture	1,419	0.050	0.142	-0.092	0.000	***	2,193	0.056	0.124	-0.068	0.000	***
Self-employment - not agriculture	1,419	0.073	0.137	-0.063	0.001	***	2,193	0.135	0.157	-0.022	0.170	n.s.
Family worker	1,419	0.043	0.070	-0.028	0.048	**	2,193	0.024	0.060	-0.035	0.000	***
<b>Type of occupation</b>												
Professional, managerial	1,347	0.058	0.094	-0.037	0.028	**	2,109	0.097	0.166	-0.069	0.000	***
Service-related	1,347	0.228	0.120	0.108	0.000	***	2,109	0.192	0.151	0.040	0.018	**
Farmers	1,347	0.060	0.135	-0.075	0.000	***	2,109	0.068	0.145	-0.077	0.000	***
Manual workers and others	1,347	0.654	0.651	0.004	0.899	n.s.	2,109	0.643	0.537	0.106	0.000	***
<b>Main sector of activity</b>												
Agriculture, fishing, forestry	1,347	0.547	0.587	-0.039	0.187	n.s.	2,109	0.491	0.476	0.014	0.532	n.s.
Mining, industry, construction	1,347	0.034	0.022	0.012	0.196	n.s.	2,109	0.072	0.099	-0.027	0.043	**
Trade, retail, restaurants	1,347	0.073	0.057	0.016	0.262	n.s.	2,109	0.078	0.071	0.006	0.610	n.s.
Finance, insurance, real state	1,347	0.005	0.004	0.001	0.787	n.s.	2,109	0.003	0.006	-0.004	0.277	n.s.
Health, education, other services	1,347	0.317	0.305	0.012	0.665	n.s.	2,109	0.330	0.287	0.043	0.043	**
Public administration, military	1,347	0.024	0.026	-0.002	0.805	n.s.	2,109	0.027	0.059	-0.032	0.001	***
<b>Access to secondary jobs</b>	1,419	0.097	0.104	-0.007	0.670	n.s.	2,193	0.175	0.160	0.015	0.361	n.s.

Source: Own calculations based on TLSS 1999.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

(1) Excluding zeros. Average hourly wage rates are reported in somoni (5 somoni are roughly equivalent to USD\$1).

**Table TJ 4. Correlates of employment in Tajikistan**

	Women			Men		
	(1)	(2)	(3)	(4)	(5)	(6)
	empl1	empl1	empl1	empl1	empl1	empl1
<b>conflict_region</b>	0.0520**	0.0599***	0.0632***	-0.0364*	-0.0229	-0.0279
	(0.0165)	(0.0175)	(0.0179)	(0.0173)	(0.0162)	(0.0168)
<b>uzbek</b>		0.0576**	0.0464*		0.0336	0.0326
		(0.0191)	(0.0193)		(0.0174)	(0.0177)
<b>other_ethn</b>		-0.00639	0.0219		-0.120*	-0.113*
		(0.0492)	(0.0503)		(0.0537)	(0.0554)
<b>head</b>		0.108*	0.134**		0.182***	0.154***
		(0.0431)	(0.0488)		(0.0230)	(0.0280)
<b>married</b>		0.0450	0.0233		0.380***	0.369***
		(0.0235)	(0.0251)		(0.0220)	(0.0235)
<b>separat</b>		0.0592	0.0641		0.233***	0.222***
		(0.0378)	(0.0381)		(0.0521)	(0.0522)
<b>age</b>		-0.0000312	-0.000266		-0.00444***	-0.00354***
		(0.000817)	(0.000827)		(0.000961)	(0.00103)
<b>compl_educ</b>		0.114***	0.109***		0.0625**	0.0592**
		(0.0191)	(0.0191)		(0.0196)	(0.0196)
<b>hh_size</b>			-0.00850***			-0.00351
			(0.00248)			(0.00253)
<b>sh_hhdepend</b>			0.141*			0.160*
			(0.0693)			(0.0724)
<b>sh_hhadultmal</b>			0.208*			0.0397
			(0.0980)			(0.0985)
<b>fem_head</b>			-0.0362			0.0126
			(0.0271)			(0.0253)
<b>land_hh</b>			0.0544*			0.0289
			(0.0264)			(0.0255)
<b>transfers</b>			0.0548**			0.0472*
			(0.0204)			(0.0192)
<b>rural</b>			0.0577*			0.00136
			(0.0233)			(0.0223)
<b>_cons</b>	0.334***	0.212***	0.0999	0.626***	0.410***	0.320***
	(0.0135)	(0.0335)	(0.0599)	(0.0142)	(0.0328)	(0.0712)
<b>N</b>	3848	3556	3556	3643	3367	3367
<b>adj. R-sq</b>	0.002	0.018	0.028	0.001	0.175	0.178

Standard errors in parentheses

="\* p<0.05      \*\* p<0.01      \*\*\* p<0.001"

Source: Own calculations based on TLSS 1999.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

In order to better understand these results, we have conducted a series of simple multivariate regressions. These results are reported in table 4. Table 4 analyses the relationship between the probability of women and men being employed and the incidence of conflict in their place of residence. We have conducted three different regressions for women and men separately. The first regression (columns 1 and 4) reports the simple correlation coefficient between employment status and conflict exposure. Columns 2 and 5 show the same regressions including individual-level controls. Columns 3 and 6 include additional household-level controls. The results confirm

that conflict has had a significant and positive impact on women's likelihood of employment and a negative effect on male employment: women in conflict-affected areas were 5% more likely to be employed, whereas men were 4% less likely to be in formal employment. The effect of conflict on women's employment remains statistically significant (and even increases) when we control for individual and household characteristics. The impact on male employment disappears when further controls are introduced indicating that reductions in male employment are explained by individual and household characteristics not necessarily associated with the conflict.

We have found further that there are common factors associated with increases in the probability of both men and women being employed. These include being the head of the household (13 and 15%, respectively), having completed basic secondary education (11 and 6%, respectively), living in households with higher dependency ratios (14 and 16%, respectively) and having access to transfers or remittances (6 and 5%, respectively). We have found some significant differences in the determinants of employment status across gender. Marital status, for instance, has a significant impact for men (single males are less likely to be employed) but not for women. Access to land and being in rural areas increases the probability of employment for women but not for men (table 4). Land access is strongly linked to the economic welfare of households in Tajikistan, women in particular (Shemyakina 2011), and is significantly higher amongst male-headed households (see Shemyakina 2006, and results in table 1). Women that are more successful in accessing land are therefore also likely to exhibit larger welfare outcomes.

*b) Impact of changes in gender roles on women's empowerment*

The TLSS 1999 does not contain direct information on levels of women's empowerment within the household, or on direct decision-making processes disaggregated by gender. We have however been able to proxy changes in women's empowerment with a measure of the contribution of women to overall household income (similarly to Calderon et al. 2011). The first few rows in table 5 present the results on the relationship between conflict exposure and the contribution of women and men, separately, to household income. The results show no significant differences in the contribution of women to household income between conflict-affected and non-affected regions. Female contributions are higher in conflict-affected regions when the household is headed by a woman, and when the household head is not employed.

There are two main reasons why we may not observe a significant contribution of women's increased participation in labour markets on their own level of empowerment. The first is a technical reason due to the small sample size of some of the categories included in table 5 and lack of control variables. Estimating the association between women's employment status and female bargaining power using regression analysis may result in different findings if we are able to include some of the variables in table 5 as explanatory variables. The second reason is related to the fact that women's increased participation in labour markets in conflict-affected areas refers mostly to low-paid, low-skilled jobs. These changes in employment status will not necessarily result in improved female income contributions. In order to examine these results in more detail, we have estimated multivariate regressions where we test for the impact of conflict exposure on women's share of income contribution to household income. These results are reported in table 6 (first two columns). The results confirm that the conflict in Tajikistan has not been associated with improvements in women's contribution to household income, despite increases in female labour market participation. Hypothesis 4 is therefore not supported in the case of Tajikistan. We believe this result is associated with a series of interlinked factors, where low status female employment and low wages paid to women may play central roles.

**Table TJ 5. Impact of changes in gender roles on women's status and household welfare in Tajikistan**

Indicator/Status of HH Head	All						Female headed households						Male headed households					
	Obs	Non-affected	Conflict-affected	Diff		t-test	Obs	Non-affected	Conflict-affected	Diff		t-test	Obs	Non-affected	Conflict-affected	Diff		t-test
<b>Contribution to labour income</b>																		
All households																		
<i>Males' contribution</i>	920	0.711	0.712	-0.001	0.971	n.s.	149	0.458	0.374	0.084	0.270	n.s.	771	0.765	0.774	-0.009	0.736	n.s.
<i>Females' contribution</i>	920	0.289	0.288	0.001	0.971	n.s.	149	0.542	0.626	-0.084	0.270	n.s.	771	0.235	0.226	0.009	0.736	n.s.
When hh head is employed																		
<i>Males' contribution</i>	686	0.740	0.758	-0.017	0.555	n.s.	73	0.073	0.099	-0.026	0.667	n.s.	613	0.818	0.837	-0.018	0.458	n.s.
<i>Females' contribution</i>	686	0.260	0.242	0.017	0.555	n.s.	73	0.927	0.901	0.026	0.667	n.s.	613	0.182	0.163	0.018	0.458	n.s.
When hh head is not employed																		
<i>Males' contribution</i>	234	0.642	0.562	0.081	0.168	n.s.	76	0.738	0.687	0.051	0.578	n.s.	158	0.592	0.505	0.087	0.236	n.s.
<i>Females' contribution</i>	234	0.358	0.438	-0.081	0.168	n.s.	76	0.262	0.313	-0.051	0.578	n.s.	158	0.408	0.495	-0.087	0.236	n.s.
<b>Average expenditure per capita</b>																		
All households																		
<i>No female member employed</i>	886	15,895	18,916	-3,021	0.004	***	142	17,071	16,590	481	0.796	n.s.	744	15,666	19,354	-3,689	0.002	***
<i>At least 1 female member employed</i>	1,018	15,770	17,286	-1,516	0.078	*	198	15,669	19,122	-3,452	0.176	n.s.	820	15,799	16,882	-1,083	0.212	n.s.
When hh head is employed																		
<i>No female member employed</i>	485	16,404	20,621	-4,217	0.014	**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	485	16,404	20,621	-4,217	0.014	**
<i>At least 1 female member employed</i>	745	16,640	17,676	-1,036	0.318	n.s.	126	17,854	19,407	-1,553	0.609	n.s.	619	16,375	17,336	-961	0.376	n.s.
When hh head is not employed																		
<i>No female member employed</i>	401	15,278	16,857	-1,579	0.122	n.s.	142	17,071	16,590	481	0.796	n.s.	259	14,262	17,000	-2,738	0.024	**
<i>At least 1 female member employed</i>	273	13,773	16,118	-2,345	0.123	n.s.	72	12,888	18,506	-5,618	0.227	n.s.	201	14,196	15,413	-1,217	0.310	n.s.

Source: Own calculations based on TLSS 1999.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

Expenditure per capita expressed in somoni (5 somoni are roughly equivalent to USD\$1).

c) *Impact of changes in gender roles on household welfare*

We have analysed the impact of changes in the economic roles of men and women as a result of the civil war in Tajikistan on household welfare. Household welfare is measured in terms of consumption expenditure per capita (second half of table 5). The results show that households affected by the conflict have higher values of consumption expenditure per capita. The results are statistically significant for the whole sample and for male-headed households only. We observe no statistically significant differences in female-headed households living in conflict-affected areas in relation to those living in areas less affected by violence. This result may be driven by the higher wages commanded by men in conflict-affected areas.

In order to disentangle these results further, we conducted a simple regression analysis where we examine the relationship between conflict exposure, female labour market participation and household welfare. We found again no support for the impact of conflict on household expenditure per capita via the increased participation of women in employment. We believe that this result is due to the difficulties faced by employed women in conflict-affected areas in Tajikistan.

d) *Impact of changes in gender roles on community welfare*

This final section examines how changes in gender roles associated with the conflict affect welfare at the community level. For this purpose, we have estimated aggregate average consumption per capita in each community. In order to assess the impacts of women's involvement in economic roles due to conflict, and similarly to other case studies, we have identified communities according to the share of women in employment (below or above average).

Table 6 presents the results of the exercise. The estimates show that communities affected by conflict have higher average consumption expenditure per capita than those not affected. We observed that conflict-affected communities with shares of employed women above the sample average have higher incomes than similar communities in areas less affected by the war. However, this result is not statistically significant. In contrast, the difference in community welfare measures is higher and statistically significant in conflict-affected communities that have shares of employed women below the country average. This result suggests that greater involvement of women in economic activities is not reflected in higher contributions to community-level welfare.

We have repeated this analysis using regression analysis. The results confirm the findings in table 6 below. This is probably due to the fact that the low wages women receive and the type of employment they undertake: this effect is particularly detrimental in terms of community welfare.

**Table TJ 6. Impact of changes in gender roles on community welfare in Tajikistan**

Indicator / Status of Women	All					
	Obs	Non-affected	Conflict-affected	Diff		t-test
<b>Average expenditure per capita</b>						
All Communities	124	15,178	17,233	-2,054	0.027	**
Below average share of working females	71	15,511	18,887	-3,376	0.008	***
Above average share of working females	53	14,670	15,165	-495	0.679	n.s.

Source: Own calculations based on TLSS 1999. Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant



### **3.1.8. Case Study 6: Timor Leste**

The conflict in Timor Leste lasted for 25 years, from the military occupation of the territory by Indonesia in 1974, until the referendum for independence in 1999. It is estimated that 102,800 people died as a direct result of the conflict between Timorese rebels and the Indonesian troops. 55% of the population are estimated to have been displaced during the conflict (CAVR 2006). The 1999 referendum, and consequent decision to secede from Indonesia, generated a further widespread wave of destruction, killings, displacement and human rights violations in the wake of the withdrawal of Indonesian troops from the country. Estimates for this last wave of violence show that 1,500 people were killed and more than 250,000 people fled or were forced to displace, mostly to West Timor in Indonesia (Amnesty International 2003). The conflict ended after the government finally agreed to hand the territory to UN management on October 25, 1999. Timor Leste became an independent nation on May 20, 2002.

Empirical analyses on the magnitude and impact of the Timor Leste conflict are scarce. The descriptive analysis presented in this section aims to partially address this gap by providing evidence on the impact of the 1999 wave of violence on women's role and activities, and their contribution to household welfare and community recovery. The analysis is based on two cross-sectional household surveys: the Timor Leste Living Standard Measurement Surveys (TLSS) conducted in 2001 and 2007 jointly by the National Statistics Directorate in Timor Leste and the World Bank. The 2001 TLSS interviewed 1800 households and contains the usual information included in comprehensive socio-economic household surveys. It also includes detailed self-reported information on the exposure of individuals and households to the 1999 wave of violence in terms of displacement and the level of destruction of their houses due to the violent events following the withdrawal of Indonesian forces in 1999. We consider that households were affected by the violence if they report that entire household was displaced, or that their house was completely destroyed.<sup>26</sup> The 2007 TLSS covered a sample of 4,477 households. Contrary to the TLSS 2001, the 2007 survey does not contain direct information on violence exposure. However, we have been able to access information on the level of violence in each district of Timor Leste from a dataset collected by the Commission of Reception, Truth and Reconciliation.<sup>27</sup> This information has allowed us to identify individuals and household interviewed in 2007 that were affected by the 1999 wave of violence (because they lived in that district). We have shown in previous work that this variable reliably identifies households affected by the violence, given the path taken by the Indonesian troops in generating violence as they left the country in 1999 (Justino, Leone and Salardi 2011). These two datasets do not constitute a panel as in the case of Bosnia (i.e. different households were interviewed in 2001 and 2007). However, the availability of two survey years allows us to distinguish between short- and long-term effects of the violent events that took place in 1999 in Timor Leste.

#### *a) Impact of conflict on gender roles*

Table 1 reports our main findings on the impact of the 1999 wave of violence on household composition in 2001. Table 2 provides the same information six years later (in 2007). The results show that households in Timor Leste face high dependency ratios both in 2001 and 2007 (above one dependant for each working age member). The results in table 1 show that female-headed households are smaller than male-headed households and have fewer dependents. Table 1 shows in addition that female-headed households were more affected by displacement than male-

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<sup>26</sup> We are not able to distinguish between districts affected by different levels of violence because we have not been granted access to district codes in this wave of the LSMS.

<sup>27</sup> Commission for Reception, Truth and Reconciliation & Benetech Human Rights Data Analysis Group. Human Rights Violations Database. 9 February, 2006. Website: [http://www.hrdag.org/resources/timor-leste\\_data.shtml](http://www.hrdag.org/resources/timor-leste_data.shtml).

headed households, but less affected in terms of dwelling damage. Overall, we have not found many statistically significant differences in 2001 between households exposed to violence and households not affected by the violence in 1999. The results for 2007 show significantly more adult females in households that were most affected by the 1999 wave of violence, particularly among male-headed households (table 2). This is probably due to the migration of men to urban areas in that period (Muggah et al. 2010). Dependency rates are significantly lower in conflict-affected households, particularly in male-headed households (table 2).

In general, the 1999 wave of violence in Timor Leste did not result in major demographic effects, contrary to other conflicts. This is likely explained by the fact that the last of wave of violence was mostly targeted to terrorise the population against voting for independence, with looting and burning of households and infrastructure as the main strategies employed by the Indonesian troops (Campbell-Nelson and Pereira 2006). Therefore, mortality and family disintegration effects were lower compared to the long-term effects of the 25 years of conflict in the country. The fairly large proportion of single female-headed households found in post-conflict Timor Leste is largely due to the longer term conflict, rather than just the last wave of violence in 1999.

Table 3 provides a comparison of patterns of time use and participation in labour markets across violence-affected and not-affected individuals and households in 2001. This is the only case study where we have direct information on how women and men use their time. The results show that female household heads affected by violence dedicate more hours of their week to both domestic and productive tasks (3.4 and 4.8%) than those not affected by violence. Their greater involvement as main breadwinners is also evident in the observed increase in female labour market participation. Women that are household heads are more likely to be employed (by 16.6%) than female household heads not affected by the violence. The results also indicate a possible increase in the workload of female household heads, as their added time to income-generating activities does not reduce their time spend in child care and other domestic chores.

Table 4 presents more disaggregated information on the characteristics of men and women that report being employed in 2001. The TLSS 2001 dataset contains very rich information on individual labour market characteristics. The results show that men, in general, work more hours per week than women. Women in conflict-affected households work slightly more hours per week than women in households not affected by the violence. This result is, however, not statistically significant. On the contrary, men in violence-affected households work significantly less hours per week than men in households not affected by violence. Interestingly, the results show also that women in violence-affected households earn *more* than males (in both violence-affected and not affected households). This is a surprising result and stands in contrast with the results discussed for other case studies. We expect that this result is explained by the flight of men from violence prone areas, as men deemed to support the anti-Indonesian movement would have been targeted by the troops. Table 4 indicates, in addition, that women in violence-affected households in Timor Leste were more likely to take up jobs in mining, industry, construction, finance, insurance and real estate, jobs that are likely to pay relatively well. This result is probably not explained by the direct effects of the conflict on labour markets, but rather by the fact that the violence took place in urban areas and along main roads as the Indonesian troops moved towards the safety of West Timor (CAVR 2006). These areas are also likely to be where more developed industries and services would have been located. The fact that women were more likely than men to be employed in those sectors is probably explained by the flight of men to safer areas. Only small numbers of women are employed in these sectors, although these seem to drive the overall results that women in Timor Leste have increased participation in labour markets as a result of the exposure of their household to violence (hypotheses 1 and 2).

**Table TL 1. Impact of conflict on household composition changes in Timor Leste in 2001**

Indicator	All					Female headed households					Male headed households				
	Obs	Non-affected	Conflict-affected	Diff	t-test	Obs	Non-affected	Conflict-affected	Diff	t-test	Obs	Non-affected	Conflict-affected	Diff	t-test
<b>HH size (average)</b>	1,800	5.114	4.958	0.156	n.s.	273	3.360	2.966	0.395	n.s.	1,527	5.433	5.302	0.131	n.s.
<b>Composition</b>															
Share of children 0-6 yrs	1,800	0.206	0.202	0.004	n.s.	273	0.111	0.127	-0.017	n.s.	1,527	0.223	0.215	0.008	n.s.
Share of children 7-15 yrs	1,800	0.190	0.195	-0.005	n.s.	273	0.180	0.207	-0.027	n.s.	1,527	0.192	0.193	-0.001	n.s.
Share of males 16-65 yrs	1,800	0.283	0.276	0.006	n.s.	273	0.137	0.118	0.020	n.s.	1,527	0.309	0.304	0.005	n.s.
Share of females 16-65 yrs	1,800	0.282	0.297	-0.015	n.s.	273	0.467	0.497	-0.029	n.s.	1,527	0.248	0.263	-0.015	*
Share of elders >65 yrs	1,800	0.040	0.029	0.010	n.s.	273	0.105	0.051	0.054	*	1,527	0.028	0.026	0.002	n.s.
<b>Dependency ratio (&lt;16 and &gt;65/ 16 to 65 yrs)</b>	1,766	1.095	1.035	0.061	n.s.	252	0.915	0.992	-0.077	n.s.	1,514	1.125	1.042	0.083	*
<b>Female/male ratio (16 to 65 yrs)</b>	4,681	0.499	0.513	-0.014	n.s.	494	0.704	0.767	-0.063	n.s.	4,187	0.474	0.487	-0.013	n.s.
<b>Type of households</b>															
Single female headed household	1,800	0.151	0.147	0.004	n.s.	273	0.984	1.000	-0.016	n.s.	1,527	0.000	0.000	0.000	n.a.
Married female headed households	1,800	0.002	0.000	0.002	n.s.	273	0.016	0.000	0.016	n.s.	1,527	0.000	0.000	0.000	n.a.
Single male headed household	1,800	0.106	0.117	-0.011	n.s.	273	0.000	0.000	0.000	n.a.	1,527	0.125	0.137	-0.012	n.s.
Married male headed households	1,800	0.740	0.736	0.004	n.s.	273	0.000	0.000	0.000	n.a.	1,527	0.875	0.863	0.012	n.s.
<b>HHs directly affected by conflict</b>															
Displacement (%)	1,800	0.000	0.448	-0.448	n.a.	273	0.000	0.540	-0.540	n.a.	1,527	0.000	0.433	-0.433	n.a.
Damage to dwelling (%)	1,800	0.000	0.785	-0.785	n.a.	273	0.000	0.747	-0.747	n.a.	1,527	0.000	0.792	-0.792	n.a.
<b>Other household characteristics</b>															
Access to land (% with >1 ha)	1,800	0.695	0.726	-0.031	n.s.	273	0.613	0.690	-0.077	n.s.	1,527	0.710	0.732	-0.022	n.s.
Rural location (% of households)	1,800	0.621	0.587	0.034	n.s.	273	0.656	0.678	-0.022	n.s.	1,527	0.615	0.571	0.043	n.s.

Source: Own calculations based on TLSS 2001.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

**Table TL 2. Impact of conflict on household composition changes in Timor Leste in 2007**

	All sample			Female Headed HH			Male Headed HH		
	Not affected	Affected	t-test	Not affected	Affected	t-test	Not affected	Affected	t-test
<b>hh size</b>	5.5433	5.5370	0.0063 (0.0761)	3.7641	4.1787	-0.4146* (0.1993)	5.8160	5.7574	0.0586 (0.0794)
<b>share of adult females in hh</b>	0.2748	0.2858	-0.0110* (0.0056)	0.4621	0.4590	0.0031 (0.0238)	0.2461	0.2577	-0.0116* (0.0047)
<b>dependency ratio in hh</b>	1.1176	1.0519	0.0657* (0.0284)	0.7558	0.6954	0.0605 (0.0762)	1.1689	1.1062	0.0626* (0.0302)
<b>Observations</b>	2137	2285		284	319		1853	1966	

Source: Own calculations based on TLSS 2007.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%.

**Table TL 3. Impact of conflict on time use and economic roles by gender in Timor Leste in 2001**

Position in HH / Indicator	Females					Males				
	Obs	Non-affected	Conflict-affected	Diff	t-test	Obs	Non-affected	Conflict-affected	Diff	t-test
<b>Time Use, Household Heads</b>										
Domestic tasks (week hrs )	273	17.45	20.85	-3.40	n.s.	1,527	10.10	9.96	0.14	n.s.
Productive tasks (week hrs )	273	20.99	25.77	-4.78	n.s.	1,527	36.82	36.21	0.61	n.s.
TOTAL (week hrs )	273	38.44	46.62	-8.18	*	1,527	46.92	46.17	0.75	n.s.
<b>Time Use, Others</b>										
Domestic tasks (week hrs )	2,173	26.24	24.71	1.54	n.s.	904	8.64	8.83	-0.18	n.s.
Productive tasks (week hrs )	2,173	10.08	10.19	-0.12	n.s.	904	20.00	20.30	-0.30	n.s.
TOTAL (week hrs )	2,173	36.32	34.90	1.42	n.s.	904	28.64	29.12	-0.48	n.s.
<b>Labor Force Participation, HH Heads</b>										
Employed	273	0.581	0.747	-0.166	***	1,527	0.879	0.899	-0.020	n.s.
Unemployed	273	0.027	0.034	-0.008	n.s.	1,527	0.052	0.026	0.026	**
Inactive	273	0.392	0.218	0.174	***	1,527	0.069	0.075	-0.006	n.s.
<b>Labor Force Participation, Others</b>										
Employed	2,173	0.304	0.300	0.004	n.s.	904	0.466	0.502	-0.036	n.s.
Unemployed	2,173	0.079	0.064	0.016	n.s.	904	0.162	0.105	0.057	**
Inactive	2,173	0.617	0.636	-0.020	n.s.	904	0.372	0.393	-0.021	n.s.

Source: Own calculations based on TLSS 2001.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

**Table TL 4. Impact of conflict on employment characteristics in Timor Leste in 2001**

Indicator	Females					Males				
	Obs	Non-affected	Conflict-affected	Diff	t-test	Obs	Non-affected	Conflict-affected	Diff	t-test
<b>Average hours worked per week (1)</b>	746	35.98	36.38	-0.39	n.s.	1,738	42.31	40.33	1.98	***
<b>Average hourly labour income (1)</b>	279	2,631.99	5,748.74	-3,116.76	n.s.	794	2,834.50	4,753.02	-1,918.52	n.s.
<b>Type of employment</b>										
Wage employment	749	0.150	0.138	0.012	n.s.	1,742	0.213	0.192	0.022	n.s.
Self-employment - agriculture	749	0.447	0.429	0.018	n.s.	1,742	0.587	0.539	0.048	*
Self-employment - not agriculture	749	0.121	0.180	-0.059	**	1,742	0.071	0.092	-0.020	n.s.
Family worker	749	0.283	0.253	0.030	n.s.	1,742	0.128	0.178	-0.050	***
<b>Type of occupation</b>										
Professional, managerial	749	0.029	0.050	-0.021	n.s.	1,742	0.038	0.057	-0.019	*
Service-related	749	0.170	0.218	-0.048	n.s.	1,742	0.120	0.117	0.003	n.s.
Farmers	749	0.689	0.632	0.056	n.s.	1,742	0.700	0.693	0.007	n.s.
Manual workers and others	749	0.113	0.100	0.013	n.s.	1,742	0.142	0.133	0.009	n.s.
<b>Main sector of activity</b>										
Agriculture, fishing, forestry	749	0.740	0.667	0.073	**	1,742	0.723	0.718	0.005	n.s.
Mining, industry, construction	749	0.012	0.054	-0.041	***	1,742	0.052	0.059	-0.006	n.s.
Trade, retail, restaurants	749	0.111	0.149	-0.039	n.s.	1,742	0.059	0.057	0.002	n.s.
Finance, insurance, real state	749	0.002	0.011	-0.009	*	1,742	0.007	0.009	-0.002	n.s.
Health, education, other services	749	0.127	0.100	0.027	n.s.	1,742	0.143	0.136	0.006	n.s.
Public administration, military	749	0.008	0.019	-0.011	n.s.	1,742	0.015	0.021	-0.005	n.s.
<b>Access to secondary jobs</b>	831	0.033	0.039	-0.006	n.s.	1,783	0.095	0.086	0.009	n.s.

Source: Own calculations based on TLSS 2001.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant.

(1) Excluding zeros. Average hourly labour incomes are reported in rupiahs.

Some of these results change in 2007, eight years after the end of the violence (table 5). In 2007, both male and female household heads are less likely to be employed and more likely to be inactive in households that were affected by the violence in 1999. This result is likely to reflect the difficult economic situation of Timor Leste in 2007 in these areas, and we test this in more detail below using regression analysis. Interestingly, table 5 shows that household members that are not household heads are more likely to be employed and less likely to be inactive in households that were most affected by the 1999 wave of violence. We have not found any likely explanation for this result, although it may have to do with increased migration to towns by younger household heads (Muggah et al. 2010).

**Table TL 5: Impact of conflict on time use and labour force participation by gender in 2007**

	Females			Males		
	Not affected	Affected	t-test	Not affected	Affected	t-test
<b>Household heads</b>						
Working hours	29.5387	28.3135	1.2253 (1.5370)	39.7296	41.1684	-1.4387** (0.4932)
Domestic chores	9.2500	11.5172	-2.2672* (0.8788)	6.9228	9.7319	-2.8091*** (0.2786)
Employed	0.7289	0.6082	0.1207** (0.0383)	0.8505	0.7930	0.0575*** (0.0124)
Being unemployed	0.0246	0.0564	-0.0318 (0.0162)	0.0826	0.1068	-0.0242* (0.0095)
Being inactive	0.2465	0.3354	-0.0889* (0.0370)	0.0669	0.1002	-0.0333*** (0.0090)
Observations	284	319		1853	1966	
<b>Others</b>						
Working hours	9.8682	16.3745	-6.5063*** (0.4782)	14.4057	19.9702	-5.5645*** (0.7483)
Domestic chores	13.5290	17.9318	-4.4028*** (0.3700)	6.6395	9.3251	-2.6856*** (0.2955)
Employed	0.2226	0.2900	-0.0673*** (0.0113)	0.3035	0.3593	-0.0559** (0.0174)
Being unemployed	0.0685	0.0804	-0.0119 (0.0068)	0.1862	0.1533	0.0329* (0.0137)
Being inactive	0.7089	0.6297	0.0792*** (0.0122)	0.5103	0.4874	0.0229 (0.0184)
Observations	2686	3359		1262	1781	

Source: Own calculations based on TLSS 2007.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%.

In order to better understand patterns of labour market participation in 2007, we have estimated simple regressions in table 6. Columns 1, 4 and 7 show the results of the direct correlation between employment and exposure to violence for the whole sample and women and men, respectively. We introduce individual characteristics as controls in columns 2, 5 and 8, and household-level characteristics in columns 3, 6 and 9. The results show that when individual and household characteristics are controlled for, conflict exposure and employment status are no longer statistically correlated across the whole sample and in the male sample. However, the results for women remain statistically significant: women in areas affected by the 1999 wave of violence are more likely to be employed in 2007. This result strongly suggest that the violence experienced in Timor Leste in 1999 was associated with increases in female labour market participation that remained present up to eight years after the end of the violence.

**Table TL 6: Correlates of employment in 2007**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	All	All	All	Females	Females	Females	Males	Males	Males
	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se
<b>Wardistr</b>	0.002 (0.006)	0.027*** (0.004)	0.006 (0.007)	0.033*** (0.007)	0.042*** (0.006)	0.021** (0.009)	-0.028*** (0.009)	0.008 (0.006)	-0.008 (0.009)
<b>Age</b>		0.006*** (0.000)	0.006*** (0.000)		0.006*** (0.000)	0.007*** (0.001)		0.005*** (0.000)	0.005*** (0.001)
<b>Tetum</b>		-0.039*** (0.006)	-0.063*** (0.009)		-0.077*** (0.010)	-0.096*** (0.014)		0.004 (0.008)	-0.021** (0.010)
<b>Portuguese</b>		-0.024*** (0.006)	-0.006 (0.008)		0.010 (0.009)	0.034*** (0.012)		-0.057*** (0.009)	-0.041*** (0.011)
<b>Indonesian</b>		0.026*** (0.006)	0.014 (0.009)		0.006 (0.009)	-0.010 (0.014)		0.049*** (0.009)	0.047*** (0.012)
<b>edu grade</b>		0.002*** (0.001)	0.002** (0.001)		-0.002** (0.001)	-0.002 (0.002)		0.004*** (0.001)	0.005*** (0.001)
<b>Widow</b>		-0.104*** (0.021)	-0.073** (0.032)		-0.069** (0.033)	-0.093* (0.048)		0.114*** (0.039)	0.115** (0.059)
<b>divorced/separated</b>		0.105** (0.042)	0.124** (0.058)		0.106* (0.057)	0.160** (0.078)		0.340*** (0.061)	0.240*** (0.089)
<b>Married</b>		0.073*** (0.011)	0.123*** (0.017)		0.029** (0.014)	0.080*** (0.022)		0.370*** (0.023)	0.371*** (0.035)
<b>hh head</b>		0.464*** (0.009)	0.447*** (0.013)		0.368*** (0.030)	0.400*** (0.043)		0.183*** (0.022)	0.215*** (0.033)
<b>household size</b>			-0.003** (0.001)			-0.005*** (0.002)			-0.006*** (0.002)
<b>dependency ratio</b>			-0.025*** (0.003)			-0.027*** (0.004)			-0.019*** (0.004)
<b>Transfer</b>			-0.004 (0.002)			0.002 (0.004)			-0.009*** (0.003)
<b>hh head is a farmer</b>			0.020*** (0.007)			0.035*** (0.010)			0.006 (0.009)
<b>urban dummy</b>			-0.024*** (0.007)			-0.016 (0.010)			-0.029*** (0.009)
<b>Constant</b>	0.257*** (0.004)	0.026*** (0.006)	0.111*** (0.014)	0.154*** (0.005)	0.047*** (0.009)	0.123*** (0.020)	0.356*** (0.006)	0.010 (0.007)	0.118*** (0.019)
<b>N</b>	24686	24686	11487	12133	12133	5625	12553	12553	5862
<b>r2</b>	0.000	0.399	0.444	0.002	0.192	0.250	0.001	0.520	0.565

Source: Own calculations based on TLSS 2007.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. All s.e. are robust.



**Table TL 7. Impact of changes in gender roles on women's status and household welfare in Timor Leste in 2001**

Indicator / Status of HH Head	All					Female headed households					Male headed households				
	Obs	Non-affected	Conflict-affected	Diff	t-test	Obs	Non-affected	Conflict-affected	Diff	t-test	Obs	Non-affected	Conflict-affected	Diff	t-test
<b>Contribution to labour income</b>															
All households															
<i>Males' contribution</i>	872	0.798	0.747	0.051	*	112	0.229	0.053	0.176	**	760	0.887	0.839	0.048	**
<i>Females' contribution</i>	872	0.202	0.253	-0.051	*	112	0.771	0.947	-0.176	**	760	0.113	0.161	-0.048	**
When hh head is employed															
<i>Males' contribution</i>	801	0.827	0.767	0.060	**	87	0.112	0.029	0.083	n.s.	714	0.912	0.862	0.050	**
<i>Females' contribution</i>	801	0.173	0.233	-0.060	**	87	0.888	0.971	-0.083	n.s.	714	0.088	0.138	-0.050	**
When hh head is not employed															
<i>Males' contribution</i>	71	0.469	0.511	-0.042	n.s.	25	0.522	0.250	0.272	n.s.	46	0.423	0.559	-0.136	n.s.
<i>Females' contribution</i>	71	0.531	0.489	0.042	n.s.	25	0.478	0.750	-0.272	n.s.	46	0.577	0.441	0.136	n.s.
<b>Average expenditure per capita</b>															
All households															
<i>No female member employed</i>	989	310,103	366,142	-56,039	n.s.	69	404,115	383,145	20,970	n.s.	920	301,821	365,311	-63,490	n.s.
<i>At least 1 female member employed</i>	697	292,543	297,763	-5,220	n.s.	204	344,248	293,633	50,615	n.s.	493	271,734	299,565	-27,830	n.s.
When hh head is employed															
<i>No female member employed</i>	837	285,973	368,407	-82,435	n.s.	n.a.	n.a.	n.a.	n.a.	n.a.	837	285,973	368,407	-82,435	n.s.
<i>At least 1 female member employed</i>	605	296,261	297,466	-1,205	n.s.	173	365,894	285,103	80,791	**	432	270,058	303,008	-32,950	n.s.
When hh head is not employed															
<i>No female member employed</i>	152	430,970	350,612	80,358	n.s.	69	404,115	383,145	20,970	n.s.	83	456,411	331,842	124,569	n.s.
<i>At least 1 female member employed</i>	92	269,944	300,071	-30,126	n.s.	31	246,843	372,844	-126,001	n.s.	61	283,467	274,600	8,867	n.s.

Source: Own calculations based on TLSS 2001.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant. Consumption expenditure is reported in rupiahs.

*b) Impact of changes in gender roles on women's empowerment*

The TLSS 2001 does not contain direct information on intra-household decision-making processes disaggregated by gender. Following Calderon et al. (2011) we proxied changes in women's bargaining power within the household with a measurement of the contribution of women to household labour income. The results presented in table 7 show that in violence-affected households women's contributions to household income are 5.1% higher than women's contribution in households not affected by violence. Female income contributions are particularly significant in male-headed households. The income contribution of women in female-headed household is also significant, particularly so for households affected by the violent events in 1999. Another interesting finding is that even when the female head of the household is not employed, other females within the households contribute more to household income than males (75% versus 25%).

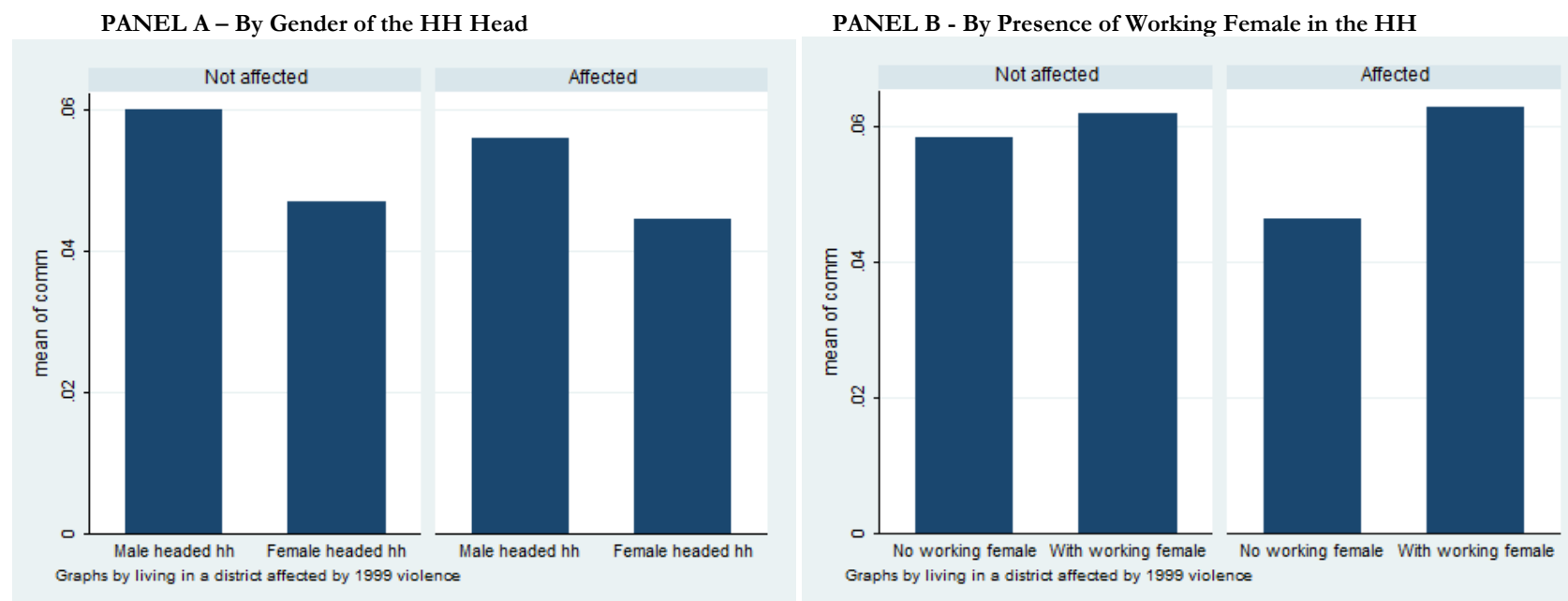
This result does not provide direct evidence for whether larger female income contributions may translate into real empowerment gains for women in Timor Leste. However, the results suggest – in line with hypothesis 4 – that women may gain economic status as a result of the exposure of their household to violence. In the case of Timor Leste, it is possible that higher female income contributions may be associated with increased bargaining power given their presence in higher paid jobs. We would need to resort to more sophisticated econometric estimations in order to confirm this result further.

Unfortunately it is not possible to estimate levels of female income contributions in 2007 due to data constraints. However, the 2007 dataset contains valuable information on the participation of women (and other household members) in community groups. These results are presented in figure 1. The results show that male-headed households are more likely to have household members involved in community groups. Participation in community groups is overall more likely among households not affected by the violence. However, figure 1 shows also that households with employed women are more likely to participate in community groups, particularly households more affected by the violence that took place in 1999. This result suggests partial support for increased female empowerment in households in Timor Leste more affected by the wave of violence in 1999. This may also be evidence for women's contribution to overall household welfare. We return to this argument below.

*c) Impact of changes in gender roles on household welfare*

Table 8 presents the estimates for the relationship between increased female labour market participation in Timor Leste and household welfare levels in 2001. As in other case studies, household welfare is measured in terms of total monthly per capita expenditure. Table 8 compares levels of household welfare across households with and without the presence of employed women. The table shows that the presence of female workers in households more affected by the wave of violence in 1999 have higher levels of consumption expenditure. However, this result is not statistically significant. We explore this result further through simple regression analysis, reported in table 9.

Figure TL 1. Participation in community groups in 2007



Source: Own calculations based on TLSS 2007.

Table TL 8. Household welfare and the presence of female workers in Timor Leste 2001

	Not affected			Affected		
	No presence of working female	With presence of working female	t-test	No presence of working female	With presence of working female	t-test
Household consumption expenditure per capita	12.3525	12.3331	0.0194	12.2975	12.3506	-0.0531
			(0.0430)			(0.0586)
Observations	671	461		329	236	

Source: Own calculations based on TLSS 2001.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. Consumption expenditure is reported in rupiahs.

Table 9 shows the correlation coefficients between household welfare and (i) exposure to conflict (first row), (ii) presence of female workers in the household (second row – variable ‘hhfemwork’) and (iii) the joint of effect of conflict exposure and presence of female workers in the household (third row – variable ‘conflict#hhfemwork’). The table presents the simple correlation coefficient in column 1. Columns 2 and 3 introduce increasingly stricter individual and household controls. The results show that the presence of employed women in the household is positively and significantly associated with higher household welfare levels (by 3.3%), particularly so when these households have been exposed to the violence that took place in Timor Leste in 1999 (by 5.6%). Although this result does not indicate a causal relationship and more advanced econometric analysis is necessary to confirm it, the estimates in table 9 suggest that the presence of female workers in households in Timor Leste affected by violence may be associated with improved household outcomes (hypothesis 5).

**Table TL 9. Correlates of per capita expenditure in Timor Leste 2001**

	(1)	(2)	(3)
	No clu	No clu	No clu
	b/se	b/se	b/se
<b>Conflict</b>	-0.017	-0.022	0.006
	(0.016)	(0.021)	(0.018)
<b>Hhfemwork</b>		0.005	0.033**
		(0.019)	(0.014)
<b>conflict#hhfemwork</b>		0.035	0.056**
		(0.033)	(0.024)
<b>hh size</b>			-0.065***
			(0.002)
<b>hh head education</b>			0.037***
			(0.001)
<b>dependency ratio</b>			-0.100***
			(0.006)
<b>hh head farmer</b>			-0.136***
			(0.016)
<b>Hhf</b>			0.053***
			(0.020)
<b>Urban</b>			0.408***
			(0.085)
<b>Constant</b>	12.271***	12.251***	12.907***
	(0.009)	(0.012)	(0.075)
<b>village effects</b>	No	No	Yes
<b>N</b>	8652	8466	8406
<b>r2</b>	0.000	0.000	0.529

Source: Own calculations based on TLSS 2001

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. The clustered s.e. are clustered at household level. Consumption expenditure is reported in rupiahs.

We were not able to test directly the contribution of women’s labour market participation to overall household welfare in 2007. However, as illustrated in figure 1, the presence of employed women in any given household is associated with increases in household participation in community groups, particularly in households affected by the 1999 violence. These community groups include social groups as well as self-help groups that may in principle be important to support households economically. Participation in these groups seems to be dependent on whether the household includes female members employed outside the home. There are many reasons why we may observe this result. In order to investigate this relationship further, we have made use of simple regression estimations in table 10. We are interested in two coefficients: the correlation between participation in community groups and conflict exposure (first row in table 10) and the correlation between participation in community groups and the presence of working

females. The variable ‘wardistr#hhfemwork’ shows the impact of working females in households affected by violence on household participation in community groups. The results in table 10 show that in general households affected by the violent events of 1999 are less likely to participate in community groups (the coefficient is negative and statistically significant). The results become positive when households affected by the violence include employed women. These households are 1.9-3.3% more likely to participate in community groups, which may in turn constitute important support groups for the household.<sup>28</sup>

**Table TL 10. Correlates of participation in community groups 2007**

	(1)	(2)	(3)	(4)
<b>Wardistr</b>	-0.007**	-0.009***	-0.016***	-0.025***
	(0.003)	(0.003)	(0.004)	(0.007)
<b>Hhfemwork</b>		0.014***	0.003	-0.005
		(0.003)	(0.005)	(0.008)
<b>wardistr#hhfemwork</b>			0.019***	0.033***
			(0.006)	(0.010)
<b>household size</b>				0.000
				(0.001)
<b>dependency ratio</b>				0.004
				(0.003)
<b>Transfer</b>				0.015***
				(0.002)
<b>female hh head</b>				-0.033***
				(0.009)
<b>hh head is a farmer</b>				-0.000
				(0.006)
<b>edugrade hh head</b>				0.004***
				(0.001)
<b>Constant</b>	0.064***	0.059***	0.063***	0.042***
	(0.002)	(0.003)	(0.003)	(0.011)
<b>N</b>	24686	24453	24453	11383
<b>r2</b>	0.000	0.001	0.001	0.013

Source: Own calculations based on TLSS 2007.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%.

*d) Impact of changes in gender roles on community welfare*

This final section examines how changes in gender roles associated with the 1999 wave of violence in Timor Leste may have affected welfare at the community level. For this purpose, we have classified different communities according to the level of intensity of violence experienced by the households within them. We have assigned a value of 1 to communities where at least three households (at least one in each sub-village) were directly affected by 1999 wave of violence. We estimated then aggregate average consumption per capita in each community. Furthermore, in order to assess the impact of women’s contribution to community to community welfare levels, we have identified communities according to the share of women in employment (below or above average), as in other case studies.

Table 11 shows the results of the exercise for 2001. In general, we find that communities affected by violence have higher average consumption expenditure per capita than communities less affected by violence. This result is consistent for communities with both below and above average numbers of employed women. This result may be due to the fact that the wave of

<sup>28</sup> Please note that these are not causal results and more sophisticated econometric techniques are needed to confirm further these results.

violence in 1999 took place in communities likely to have higher levels of income (in urban areas and those close to main roads) (Justino et al. 2011, CAVR 2006).

We are not able to test this hypothesis in 2007 due to data constraints. However, the results discussed in table 10 indicate that the presence of employed women in households affected by violence is strongly associated with the participation of these households in community groups. This may in turn result in stronger community institutions with better capacity to avoid further conflicts locally. We would need to explore the data more fully using more sophisticated techniques in order to establish a causal relationship between women's employment and community welfare and institutional processes in Timor Leste.

**Table TL 11. Impact of changes in gender roles on community welfare 2001**

Indicator / Status of Women	All				
	Obs	Non-affected	Conflict-affected	Diff	t-test
<b>Average expenditure per capita</b>					
All Communities	100	266,117	306,944	-40,827	n.s.
Below average share of working females	57	302,953	350,569	-47,615	n.s.
Above average share of working females	43	223,613	237,659	-14,045	n.s.

Source: Own calculations based on TLSS 2001.

Notes: \*\*\* statistically significant at 1%, \*\* statistically significant at 5%, \* statistically significant at 10%. n.s. indicates results that are not statistically significant. Consumption expenditure is reported in rupiahs.

## 3.2. Cross-country time series analysis

### 3.2.1. Datasets

As discussed in section 2.2, a growing body of research on gender, conflict and peace has used cross-country, time series information to conduct aggregated econometric analysis on the links between gender equality, conflict and peace. The studies vary from descriptive statistical analysis that compares trends in some key socio-economic and political indicators related to gender equality across conflict and non-conflict countries (Bruck and Vothknecht 2011, Dworkin and Schipani 2003) to advanced econometric analysis to assess the relationship between gender equality indicators and internal conflict onset, military aggression, conflict relapse, peacebuilding success and good governance (Caprioli 2003, 2005, Bussmann 2007, Melander 2005, DeMeritt et al. 2011, Gizelis 2009, Heaney 2009, Regan and Paskeviciute 2003).

There are several organisations and institutions that compile and publish socio-economic datasets with a gender focus. The most commonly used are the World Bank's Development Indicators.<sup>29</sup> Other organisations that compile gender statistics across countries include the United Nations (UNSTATS database, UN Peacekeeping resources and UNDP-HDR),<sup>30</sup> the International Labour Organisation<sup>31</sup> and the WomanStats Project and Database.<sup>32</sup>

The statistics in the databases listed above are built from information produced through national household surveys, national accounts estimation and other sources. The main advantage of these databases is that they allow a rapid analysis of general conditions and trends observed across

<sup>29</sup> <http://databank.worldbank.org/ddp/home.do?Step=1&id=4>.

<sup>30</sup> <http://unstats.un.org/unsd/demographic/products/default.htm>; <http://www.un.org/en/peacekeeping/resources/statistics/gender.shtml>; <http://hdr.undp.org/en/statistics/gii/>.

<sup>31</sup> <http://laborsta.ilo.org/applv8/data/segregate.html>.

<sup>32</sup> <http://womanstats.org/index.htm>.

countries, and over long periods of time. As such, it is possible to compare socio-economic conditions during conflict and in post-conflict periods for the same country and across countries. Disadvantages in the use of these datasets result from the unreliability of aggregated data, sometimes derived from estimates and not actual observed data, and the restriction of analyses to national-level averages, while it is commonly known that internal conflicts have clear spatial dimensions.

The use of this information for conflict analysis also requires the availability of data on the incidence of conflict across countries and time that can be matched to the socio-economic indicators included in the above datasets. A commonly used dataset is the UCDP/PRIO Armed Conflict Dataset, a joint project between the Uppsala Conflict Data Program (UCDP) at the Department of Peace and Conflict Research, Uppsala University and the Centre for the Study of Civil War at the International Peace Research Institute in Oslo (PRIO). The dataset provides information on location, intensity, type and actors involved in internal armed conflicts from 1946 to the present. The dataset is updated annually (Gleditsch et al. 2002).<sup>33</sup>

We use both the World Bank and the UCDP/PRIO datasets to provide a descriptive statistical analysis that compares key indicators related to women's status in conflict-affected countries in recent decades, and compare them with the situation of other developing countries not affected by conflict. The objective of this analysis is to provide some external validity to the micro-level results analysed in previous sections, by investigating the relationship between conflict, women's roles and economic recovery outcomes across a larger sample of countries. To that purpose we compare 74 low, low-middle and upper-middle income countries that had none or one conflict during the years 1980-2010,<sup>34</sup> across a series of development indicators in the WDI dataset. Of the 74 countries, 24 did not experience any form of violent conflict between 1980 and 2010, and 50 countries experienced one conflict spell in that time period. We define pre-, short-term and long-term post-conflict spells as follows. Up to five years preceding a conflict, a country is defined to be in a 'pre-conflict' state. The five years immediately after a conflict are defined as the 'short-term post-conflict' period (provided that no conflict reoccurs for at least three consecutive years). The six to ten years after a conflict are defined as 'long-term post-conflict'.

The WDI dataset contains information on variables disaggregated by gender related to demographic trends, health, education, employment, and political representation. However, the quality and regularity of information varies across time and countries, and there are gaps in some of these indicators, particularly for low-income countries. Based on the best available data, we have selected key statistics for which the information available covers a broad range of countries, and which are related to the hypotheses analysed in the previous section at the micro-level. These variables include fertility rates, age dependency ratios, labour market participation (female and male), female/male ratio of education enrolment, proportion of seats held by women in national parliaments and GDP per capita.

### **3.2.2. Results**

The main results of this time series analysis are presented in the table below. The results confirm findings reported in other studies (e.g. Chen, Loayza and Reynal-Querol 2008, Brück and Vothknecht 2011), as well as several of the hypotheses we tested above at the micro-level in the six case studies. In line with hypotheses 1 and 2, we find that the occurrence of violent conflict is associated with increases in female labour market participation across the large sample.

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<sup>33</sup> The dataset is available for download from <http://www.pcr.uu.se/research/ucdp/datasets/>

<sup>34</sup> We consider all conflicts – minor conflicts and civil wars – as defined by the UCDP/PRIO dataset.

**Table 1. Averages of indicators over the years 1990 – 2010**

Indicator	Peaceful countries between 1980 - 2010	Countries that have experienced conflict between 1980 - 2010				
		conflict phase	pre-conflict	short-term post-conflict	long-term post-conflict	Peace period
Mean age dependency ratio	77.08	79.04	77.7	75.99	75.64	70.19
Mean fertility rate	3.97	4.43	4.49	4.02	3.94	3.63
Mean GNI per capita	1172.72	1046.98	1011.12	1120.51	1463.19	1971.97
Mean GDP per capita	993.95	956.09	991.86	1129.25	1199.35	1421.88
Mean labour market participation women	59.95	55.84	53.45	56.51	55.15	54.50
Mean labour market participation men	81.69	80.49	78.81	80.42	79.94	79.35
Mean proportion of seats for women in parliaments	10.55	10.11	8.89	11.92	11.32	13.17
Mean female primary school enrolment	101.80	82.96	80.65	86.87	95.02	94.41
Mean male primary school enrolment	106.07	93.71	94.13	97.17	102.89	102.50
Mean female secondary school enrolment	59.35	36.05	38.78	42.68	48.52	53.44
Mean male secondary school enrolment	59.22	41.53	46.12	46.22	51.81	55.39
<i>Number of country years in each peace/ conflict spell</i>	<i>504</i>	<i>352</i>	<i>52</i>	<i>141</i>	<i>154</i>	<i>351</i>

Sources: UCDP/PRIO Armed Conflict Dataset, World Bank's Development Indicators, own calculations

Notes: Indicators of low, low middle and upper middle income countries only



The result holds when we compare pre-conflict and conflict countries, as well as conflict and short-term post-conflict periods. After that, in long-term post-conflict periods, female labour market participation rates seem to decrease slightly. These results confirm studies that have documented female labour participation increases during and shortly after the end of the conflict (see chapter 2). These figures are still lower on average than in countries that did not experience conflict in the same time period.

As explained previously, we were not able to test hypothesis 3 (i.e. the impact of conflict on women's social and political participation) at the micro-level, with the exception of Timor Leste. At the aggregate level, the WDI include information on the participation of women in political organisations at the national level, measured as the proportion of seats taken by women in parliaments across a sample of countries. The results in the table below show that this variable is higher during conflict phases than it was before the conflict. Rates of participation of women in political institutions continue to rise with time after the conflict. This result suggests that this is an important channel to pursue in future research during Phase II of this study.

We have examined the hypotheses about the impact of changes in women's employment on women's empowerment and household welfare using proxies that have been previously used in the literature. One of the most important proxies for both relationships is the level of school enrolment rates. As discussed in the literature survey in chapter 2, increases in women's empowerment have been found to be associated with increases in girls' schooling. We have found conflicting results in the existing literature regarding the impact of conflict on enrolment rates: Brück and Vothknecht (2011), for example, report a decrease in female secondary school enrolment during periods of conflict, particularly in Africa. Stewart, Huang and Wang (2001), in contrast, have found evidence for decreasing enrolment rates in only three, and increasing enrolment rates in five, out of 18 African countries that experienced violent conflict in the 1980s and 1990s. The table below shows evidence for increases in primary school enrolment rates for girls when a country enters the conflict phase, but reductions in primary school enrolment rates for boys. This result mirrors some empirical findings at the micro-level (Akresh and deWalque 2008, Justino, Leone and Salardi 2011). The results show further that secondary school enrolment rates for both boys and girls decrease during conflict compared to the pre-conflict phase, and that enrolment rates in both primary and secondary education increase for girls and boys after the conflict ends. These results indicate partial support for the hypothesis that conflict is associated with increased opportunities for women and their households, although the exact mechanisms shaping these macro-level results cannot be further investigated with the data available. In general, and based on the micro-level analysis discussed in previous sections, we would argue that the type of employment performed by women, and subsequent effects in terms of economic vulnerability, will determine how exposure to conflict will impact on the opportunities available for their children, particularly daughters.

The final set of hypotheses concern whether greater female civic and political participation may result in growing levels of welfare and better institutions at the community/national levels. In order to investigate this hypothesis across a sample of countries, we computed correlation coefficients between the WDI indicators and whether the country experiences conflict in any given year. We find that higher levels of school enrolment (coefficients between -0.13 to -0.20), lower levels of age dependency ratios (correlation coefficient 0.08) and lower fertility rates (correlation coefficient 0.15) are strongly negatively correlated (at 1% level of significance) with conflict occurrence.<sup>35</sup> Fertility rates, the share of seats taken by women in parliaments and GDP

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<sup>35</sup> Correlation coefficients are not shown in the table but were computed from the same data sources as above.

per capita are also significantly negatively correlated with conflict occurrence. These results support some recent findings in the literature (reviewed in chapter 2), arguing that measures of gender equality (in this case, fertility rates, girls' school enrolment rates, dependency ratios and shares of female seats in parliament) are associated with lower probability of armed conflict, and complement the micro-level findings for Bosnia, Colombia and Kosovo that better female integration in labour markets may result in benefits in terms of community economic recovery, an important factor in the establishment of sustainable peace. It also complements the results obtained for Timor Leste, where empirical results have shown that households in areas of violence that have larger shares of employed women are more likely to participate in community groups, thereby improving local institutional environments.

### **3.3. Summary of findings**

The results discussed above provide strong evidence for the considerable impact of violent conflict on the roles and activities that women adopt within their households and in their communities. In general, we find that women participate more actively in labour markets during conflict. The results show further that increases in the labour participation of women in conflict-affected areas are in some cases associated with improvements in women's empowerment, and in household and community welfare outcomes. This result is dependent on the type of employment performed by women: low-paid, low-skilled activities in the form of self-employment in the informal sector and unpaid family work yield few benefits for women, their families or their communities. However, we find that in some case studies the benefits of women's increased employment for households and communities affected by violent conflict hold despite the difficulties that women face when they join labour markets during the conflict. These difficulties are numerous: women remain vulnerable to changing economic conditions, and most social, economic and political gains that women may have achieved during the conflict tend to fade away in the post-conflict period. Below we summarise in more detail the main results we have obtained in chapter 3 in relation to the hypotheses derived in chapter 2 from existing literature.

In terms of the impact of violent conflict on women's economic, social and political roles, the results show:

1. Strong empirical evidence across the six case studies that violent conflict is associated with larger responsibilities for women through its impact on household composition. These responsibilities often take the form of increased participation in labour markets, often in addition to women's existing roles within the household. In all case studies, we found that women in areas most affected by violent conflict increase their participation in labour markets in relation to women not affected by conflict and in relation to men overall. Female employment in conflict contexts is, however, commonly characterised by low-paid, low-skilled jobs, self-employment in the informal sector or unpaid family (farm) labour.
2. Some support for the hypothesis that violent conflict may be associated with greater participation of women in social organisations (for Timor Leste). We were unable to analyse the impact of conflict on women's political roles in the other case studies due to the lack of appropriate data. We expect to be able to address this important issue in Phase II of this study.

In terms of the impact of women's new roles on women's own empowerment, on household welfare levels and on community-level development outcomes, the results show:

3. Some support for the hypothesis that greater participation of women affected by conflict in labour markets and social organisations contributes to women's empowerment within households. We were able to test this hypothesis for Colombia, Nepal, Tajikistan and Timor Leste. In the cases where this relationship could be tested, women's empowerment was measured as the share of women's contribution to household income. In the cases of Colombia and Nepal, we were able to directly measure the involvement of women in decision-making processes within the household. The results show a positive relationship between women's new roles and their levels of empowerment in the cases of Colombia, Timor Leste and, more weakly, Nepal. We found no significant links between women's employment and female empowerment for Tajikistan. The weak support found in some of the empirical results for an association between female labour market participation and women's empowerment is most likely due to the employment of women in conflict contexts in low-skilled, low-paid jobs.
4. Strong support in the cases of Bosnia, Colombia and Timor Leste for the hypothesis that greater participation of women in labour markets during conflict is associated with positive household welfare effects. We found no support for this hypothesis in cases of Kosovo, Nepal and Tajikistan. This latter result is associated with the low status jobs performed by women affected by the civil war in those countries. In Colombia and Timor Leste, women affected by violence seem to be able to access (slightly) better paid jobs, which entail more significant contributions to household economic security. In the case of Bosnia, the positive association between female employment and household economic welfare holds despite the low-status jobs performed by women affected by the conflict. These results represent overall a strong indication of the considerable benefits that women's integration in economic recovery may yield for households affected by violent conflict.
5. Support for the hypothesis that greater participation of women in labour markets is also associated with positive community-level welfare outcomes. We were able to conduct this analysis in all case studies, with the exception of Nepal (due to data constraints). This hypothesis was strongly supported by the results obtained for Bosnia and Colombia. The Kosovo case study provides weaker support for this hypothesis (the results were positive but not statistically significant). We found no support for this hypothesis in the case of Tajikistan, due to the low status jobs performed by women affected by the civil war in that country. In Timor Leste, we found no evidence of a link between female employment and community-level *economic* welfare, but we found strong support for a positive relationship between female employment and the participation of households in community group associations, which may in turn support better institutional development at the community-level in Timor Leste.

We must emphasise the fact that the results provided in this study are based on simple descriptive statistics. We tested all results for their statistical significance and report those levels. We also conducted simple regression analysis when descriptive results were not clear. However, the findings discussed in the sections above represent possible associations rather than causal relationships between armed conflict, changes in women's activities and subsequent changes in household and community welfare. The identification of causal relationships is possible given the quality of the datasets currently available for (some) conflict-affected countries. It requires, however, the use of more sophisticated econometric techniques – than what was possible within

the timeline and budget of phase I of the study – to deal with complex issues of identification, endogeneity, selection bias, and other common issues associated with quantitative statistical analyses. The results discussed in this chapter suggest nonetheless great potential for future research. We discuss a proposal for phase II in the final section of this report. Before that, we examine more closely in the next chapter how the findings reported in previous sections are reflected in existing policy interventions in countries emerging from armed conflict, and how these programmes have supported (or not) the role of women in local processes of economic recovery, stability and peace.

## 4. REVIEW OF POLICY INTERVENTION IMPACT

The UN Security Council has historically been concerned with the roles of women in conflict, peacebuilding and security, and has consequently adopted several declarations and resolutions. Most noteworthy are the UNSCR 1325 Resolution, as discussed previously, and subsequent numerous additions including 1820, 1888, 1889 and 1960.<sup>36</sup> As a consequence of these policy advances, there has been an increased level of international awareness and an expansion in the opportunities for external organisations to invest in the roles of women in economic recovery and peacebuilding processes. Many INGOs, NGOs and CSOs are currently involved in advocacy and empowerment projects to increase women's involvement in peacebuilding and post-conflict recovery processes. These initiatives commonly have a human-rights approach, and seek to underline the particularly damaging effects of conflict for women.<sup>37</sup> Despite these efforts, there is limited rigorous assessment of the impact of these programmes. Anderlini et al. (2010), in a cross-country study on the impact of UNSCR 1325 over the past ten years, found that many actors in the peacebuilding community are still unaware of UNSCR 1325, that governments and mediators do not routinely include women in peacebuilding operations, and that donors often do not follow their own gender-related guidelines.

We discuss below existing evidence on the integration of women in economic recovery and peacebuilding interventions in post-conflict countries. This discussion is based on a desk review carried out by the research team. In order to conduct this review, we mapped a series of conflict and post-conflict programmes implemented by UN agencies, the World Bank and major international NGOs aimed at supporting women's roles and activities following violent conflict. We have considered also programmes with different objectives but with visible impact on women's roles and activities (see Appendix 3 for a list of programmes identified). The objective of this mapping exercise was to list relevant interventions in conflict-affected countries that may have had significant impacts (directly or indirectly) on women's roles, activities, behaviour and decisions. In addition to the desk review, we conducted semi-structured interviews with international NGOs, UN bodies, relevant academics, and state actors (see Appendix 2 for full list of interviewees).

### 4.1. Impact of women's participation in economic recovery programmes

The post-conflict period offers good opportunities to build on newly increased levels of empowerment and income generation potential that women experience during conflict. However, immediately after the conflict, interventions focus on immediate needs such as the provision of health care, food aid, demobilization, disarmament and reintegration of ex-combatants, the rebuilding of infrastructure and the resettlement of refugees. Some programmes are implemented without enough consideration of gender differences, and many without empirical or qualitative evidence on whether gender issues may be important for their

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<sup>36</sup> UNSCR 1820 was adopted in 2008 to create increased awareness of the issues of sexual violence as a tactic of warfare. UNSCR 1888 was adopted in 2009 to provide a framework within which protection and prevention measures should be implemented. UNSCR 1889 was adopted in 2009 to strengthen and monitor the implementation of UNSCR 1325. Finally, UNSCR 1960, adopted in 2011 to strengthen response to continued use of violence against women as tactic of warfare.

<sup>37</sup> The major NGOs involved in this work include International Alert, Action Aid, CARE and World Vision. Many other organisations have implemented, or are implementing, projects and approaches specifically addressing gender issues, with the main goal of promoting and enhancing the effective participation and consideration of gender (including also men) across all activities of peace and post-conflict processes. Numerous women's peace initiative networks have been created globally, regionally and nationally, to share information and provide support. These include *Peacewomen*, *Women Waging Peace*, *Women Action*, *No Women No Peace*, *WIPSEN*, *WILPF*, *LANSAs Women's Network*, among many others.

implementation. Most programmes are also implemented without provisions for future evaluation (Jezequl and Perreant 2011, Cahn 2006). We review below three widely implemented initiatives aimed at supporting economic recovery in post-conflict contexts: employment programmes, microfinance initiatives and community-driven development projects.

#### **4.1.1. *Employment programmes***

We found two studies that report on the gender impact of employment programmes in post-conflict contexts. In her review and evaluation of employment promotion and skills-training programmes in Mozambique, Guatemala, Lebanon and Bosnia, Date-Bah (2003) encountered a variety of challenges in the design and implementation of the programmes. In Guatemala and Bosnia, many training activities for women were extremely gender-stereotyped (hairdressing, sewing, knitting and hairdressing) and narrow, resulting in the oversupply of certain products and services and in making the businesses uncompetitive. Managerial skills such as accounting, marketing, pricing and production techniques were not developed. Women's participation in employment-intensive projects such as the Feeder Road Program in Mozambique was hindered by inadequate recruitment mechanisms, lack of guidelines on recruiting women, and inadequate channels for the information to reach women. Further constraints included the lack of health care provision, and of access to food supplies and to child-care facilities. The development of women as micro-entrepreneurs through the provision of credit, technical assistance and management training was hindered by low repayment rates (due to low household incomes and intra-household conflict regarding control over income), insufficient benefits, lack of time for other activities, and high levels of education required as one eligibility criteria for entering the programmes.

More positive results were reported in an analysis of 15 evaluations of ILO technical cooperation programmes and projects (at least partially) aimed at improving women's entrepreneurship since 2001 (ILO 2007). This report found that all the projects "created decent work and better livelihoods for women and their communities". Increased access to skills training, finance, services, and better voice and representation for women entrepreneurs, have resulted in employment creation. The report shows some lessons learned from the evaluations, such as the importance of preparatory studies, the use of project design workshops, the involvement of government bodies, and the provision of adequate outreach strategies to women. However, the report also shows some important limitations of the programmes: only five evaluations reported upon impact, and few evaluations measured impact outcomes. This is a challenge that we report over and over again throughout this section: in the rare occasions when impact evaluation is performed, indicators are provided on processes (number of women hired, for instance) but hardly ever on outcomes (for instance, improvement of women's welfare levels).

Employment generation programmes may in principle yield positive effects for women and enhance their contribution to household welfare and the economic recovery of local communities. The evidence discussed in chapter 2, and confirmed through comparative empirical analysis in chapter 3, showed that one of the strongest effects of violent conflict on women's roles is the increase in female labour market participation. This trend could in principle be supported through well-designed employment generation programmes. We have been unable to find any evidence indicating that existing employment generation programmes are able to support the continuing involvement of women in labour markets during the post-conflict period. This may be due to an almost complete lack of evaluation of these programmes, but also to the fact that the design of most programmes is done based on limited empirical evidence and lack of understanding of the differentiated ways in which conflict affects women and men separately,

and how the norms that rule society and the economy during the conflict may change substantially in the post-conflict period.

#### **4.1.2. Microfinance**

Microfinance initiatives have become popular in post-conflict contexts as a tool not just for economic recovery, but also for women's empowerment. Microcredit is the most common form of microfinance, consisting of short-term, small-scale loans provided generally by NGOs, credit unions, savings and loan cooperatives, government or commercial banks, or non-bank financial institutions. Clients are usually self-employed, low-income entrepreneurs, such as small farmers, traders, street vendors or small-scale producers. In a synthesis study of instruments and policy interventions to increase gender equality and to foster economic development through increased empowerment of women, CEBR (2008) has found considerable evidence that supply-side interventions in the area of microfinance can lead to the empowerment of women, with varying degrees of effectiveness depending on the design of the programme. However, given the lack of thorough analysis and rigorous evaluation, it is difficult to identify the specific factors which may make microfinance programmes successful. Most microfinance institutions are only able to provide anecdotal evidence of empowerment, rendering a mixed picture of successes and limitations.

The role of microfinance in a post-conflict environment is one of a “recovery tool at the household and community level, in the transition to the broad-based economic recovery that creates large-scale employment and improvements in income” (UNDP 2008: 86). Microfinance programmes in conflict-affected contexts aim to meet the demand for secure financial services, and to support microenterprises which survive or are created during the conflict. It particularly, microfinance institutions (MFI) provide credit to individuals that have no access to mainstream financial institutions, with many MFI specifically targeting women as they are amongst the poorest population. Yet, even though “(t)here is hardly a country with an experience of conflict over the past 20 years that has not experimented with microfinance [...] there is no specific data source to track the size, profile and impact of post-conflict microfinance” (UNDP 2008: 85).

We have found some (very limited) evidence on the role of microcredit in conflict-affected contexts. In Bosnia and Herzegovina, microcredit has been successful in effectively funding long-lasting productive self-employment activities. However, its impact on job creation and economic growth has been rather limited (UNDP 2008). In Afghanistan, microcredit programmes have led to more women sending their daughters to school, thus empowering the next generation (Woodworth 2006). Approximately 400,000 borrowers were served by microfinance institutions in Cambodia in 2004, covering 25 % of low income households. Most loans were used for agriculture, and more women than men (particularly in the informal sector) benefited from the programmes (Allden 2008). However, even though most beneficiaries in Cambodia are women, the impact of microcredit on empowerment is disputed: women do not appear to have more rights or influence in decision-making (Allden 2008). Similar evidence is found for Timor Leste (Allden 2008: 25). More positive impact has been found in the case of the Nepal's Women's Empowerment Program: 89,000 women (68%) that participate in the programme report feeling more empowered in decision-making regarding family planning, children's marriages, buying and selling properties, and schooling of daughters (Ashe and Parrott 2001).

Overall, rigorous evidence on the impact of microfinance schemes on post-conflict economic recovery, gender equality or peacebuilding remains limited. Their impact on women's empowerment and their contributions to household welfare and community development shows

positive results in some contexts but this has by no means been generalised across post-conflict countries where microfinance programmes have been implemented.

### ***4.1.3. Community-driven development programmes***

Community-driven development (CDD) programmes are increasingly used in post-conflict reconstruction efforts, as they are believed to strengthen social cohesion and build bridging social capital, through empowering local communities on a long-term basis (World Bank 2006). Some of the advantages of these programmes are that CDD initiatives can deliver services more economically than centrally administered projects (e.g. the Kosovo Community Development Fund II project). Furthermore, CDD programmes engage community members to work together, therefore contributing to re-establishing interpersonal and institutional relationships, networks, trust, as well as increasing community participation in governance. These factors can in principle play a vital part in the mitigation of further conflict.

Maintaining gender sensitivity in CDD programs can be challenging and its success is highly dependent on awareness of gender issues, as well as cultural norms and contexts prevalent in the country/region. The literature provides some evidence for the positive impact of CDD programmes on gender outcomes. For instance, when women were engaged in the selection of community development projects in Timor Leste, the demand for water projects rose. As a result, 29 to 34% of all funding was then spent on improving clean water access (Ostergaard 2003 in Bouta et al. 2005). The introduction of quotas for women's involvement within CDD programming has also been done with some level of success. In Timor Leste, for example, formal procedures such as voting for both one man and one woman in local council elections was considered effective and well-received, while in Rwanda, women and youths received their own slots in community development committees (Cliffe et al. 2003, World Bank 2006). In contrast, in Afghanistan, women in both women-only and in mixed-gender councils "lack legitimacy, meaningful participation and access to pertinent information in relation to male CDCs" (Kakar 2005: 1). Accordingly, although the Afghanistan National Solidarity Program (NSP) has made efforts to include gender in its programme, women's input on projects and the usage of block grants for income-generating activities for women remains rather low (World Bank 2006, Kakar 2005). In their interim evaluation of the NSP, Beath et al. (2010) found that the programme appears to slightly increase female economic engagement, but it does not affect women's roles in household decision-making. The NSP was found, however, to lead to "a substantial increase in the provision of services for women by village authorities" (Beath et al. 2010: 21). In addition, Beath et al. (2010: 29) find that "female villagers are more likely to report the engagement of *male* village assemblies in activities that benefit women" (own emphasis added). These are important results in terms of women's empowerment in conflict-affected contexts.

Not all results are as positive. The Third Kecamatan Development Project (KDP) in Indonesia faced a different challenge in including women in their programmes. The KDP supports community planning through block grants to sub-districts. However, the decision-making process depends on a public review of proposals for these grants. Although the programme has put in place a separate planning stream for women, and decision-making rules that require women to be present at meetings, women and the poor are still less likely to be involved than wealthier and more educated groups (World Bank 2006). Low levels of education and literacy, lack of leadership experience and cultural norms tend to prevent women from effectively participating and contributing to the projects (this result was also found in some areas of Afghanistan; see Kakar 2005). Other obstacles that prevent women from successfully participating in community development programmes include difficulties in expressing their



opinion in front of a larger audience, and practical considerations, such as housework load and child care.<sup>38</sup>

The evidence above, even if limited, indicates the significant potential that CDD programmes may have in improving women's status in post-conflict settings through their greater involvement in local decision-making processes. Examples are, however, quite selective. Further gender monitoring, and thorough evaluation of CDD projects being implemented, would yield important insights into what would help women to make a difference to more sustainable processes of peacebuilding and economic recovery in their communities.

## **4.2. Impact of women's participation in peacebuilding programmes**

### ***4.2.1. Women's participation in peace processes***

In chapter 2, we reviewed a fairly large literature that highlighted the importance of women in peace processes. Despite the greater engagement of women in social and political arenas during the conflict, women rarely feature in peace processes. Ahern (2011) discusses how, since 1992, women have constituted less than 8% of negotiating delegations in UN mediated peace processes. In a study of 585 peace agreements between 1990 and 2010, only 16% contain references to women (Bell and O'Rourke 2010). Dietrich Ortega (2009) has found that amongst all signatures in peace negotiations in Colombia, 280 belonged to men and only a mere 15 belonged to women (one belonged to a female combatant). We have found limited information on efforts to integrate women in peace processes. We have found only one study (on Liberia) that reports some positive results that could be replicated elsewhere. Mvukiyehe and Samii (2010) report evidence suggesting that in Liberia the UNMIL's (UN peacekeeping mission) investment in electoral assistance may have helped empower citizens and raise awareness about women's rights within communities that experienced direct contact with UNMIL operations. UNMIL's mandate includes assisting with democratic electoral processes. They find that the odds of a woman participating in the 2005 electoral campaign in UN deployed communities were about double those of women in more distant communities. Women also reported higher involvement with electoral meetings and rallies in UN deployed communities. This shows that women become more involved within electoral processes when they and their communities are directly involved in peace-keeping programmes.

### ***4.2.2. Demobilisation, disarmament and reintegration programmes***

Women are not just passive victims of violent conflict. Many are active agents that at times participate in the perpetration of violence. Women were active combatants in regular armed forces and guerrilla groups in Zimbabwe, Sri Lanka, Eritrea and El Salvador and Northern Uganda (de Watterville 2002, Moser 2001, Annan et al. 2009). Annan et al. (2009) estimate, based on a unique representative survey of Ugandan child combatants, that around 20,000 to 25,000 young females were abducted by the LRA. Of these, 16% reported taking up combat roles in the LRA. In Sri Lanka, 15 to 33% of total fighters in the LTTE are estimated to have been women (Alison 2003). Moser (2001) reports that 30% of all demobilised soldiers in El Salvador were women, and that 60% of the FMLN support base was female. According to Dietrich Ortega (2009), at the time of the demobilisation process of guerrilla groups in Colombia, 15-30% of all

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<sup>38</sup> Measures that could facilitate and ensure female inclusion include involving men to support women, gender training, use of local gender facilitators, prepare the timing of meetings in accordance to women's needs and constraints, provision of transportation for women to attend meetings, provision of help with childcare, holding separate meetings to prepare women to present to a wider community and training of women in leadership to give them more confidence (World Bank 2006, Bouta et al. 2005, Sorensen 1998, BICC 2002).

demobilised combatants were women (6% in the case of paramilitary groups). Estimates show that around 40% of remaining combatants may be women.

Despite these facts, women and girls (whether voluntary participants or involuntary through abduction or threat of violence) are often overlooked in DDR programs, and consequently do not receive any resettlement allowances or take part in training programmes that help ex-combatants access livelihoods and, subsequently, achieve further economic empowerment for themselves and their communities (Cahn 2006, McKay 2004, UNICEF 2005, Annan et al. 2009, Sorensen 1998). For instance, Annan et al. (2008) find that 66% of all formerly abducted young women have not applied for formal amnesty or reintegration support packages. Save the Children (2005) report that while 12,000 women were involved in rebel groups in Sierra Leone, only 506 went through the DDR process.

DDR programmes aim at restoring security by raising opportunity costs for ex-combatants. Since women are usually not perceived as major security threats, as they predominantly take on supportive or dependent roles within armed groups, they are rarely targeted (Annan et al. 2008). Another reason why so many women who have been members of armed groups are 'overlooked' by DDR programmes is the difficulty in tracking them. For reasons such as traditional gender roles, fear of stigmatization and association with killings and violence, forced children, and sexual violence, "women tend to disappear quickly from the scene when the fighting ends" (Bouta et al. 2005: 18). Furthermore, girls and women, particularly those who have been abducted, try to escape as soon as they get a chance, and have already left when DDR programmes start (McKay and Mazurana 2004). Research indicates that girls and boys that return home without going through reception or rehabilitation centres are less confident, more anxious, more depressed, and more hostile than children who do participate in a programme (McKay and Mazurana 2004), making it highly important to track and include these girls.

We found two notable examples of involving female ex-combatants in reintegration programmes. In Eritrea, the DDR programme was implemented by ACORD. The programme was considered to be 'partially successful' despite initial problems with the lack of mobility of women, women's lack of access to information about the programme, women's lack of money management skills and lack of collateral for micro-loans. According to de Watteville (2002), these problems were overcome with some programmatic changes. Most notably, the programme implementation was decentralised and went 'door to door': ACORD hired a female ex-combatant to reach other female ex-combatants and training in business, money and administrative management was provided to the women (and men). Women with no collateral could secure loans with group liability, and ACORD managed the involvement of local institutions, encouraging them to include female ex-combatants. In Burundi, new criteria were adopted so that women could benefit from the DDR programme. Specifically the programme was designed with a "gender sensitive approach, in the spirit of SCR 1325". Particular features of the DDR programme in Burundi that resulted in improved female integration included the option for women to open a microfinance account at no cost, specific support to women in order to facilitate their reintegration into their communities and specific measures aimed at female ex-combatants implemented by opposing political parties (Rutherford 2004, UNSC Report 2009:11).

These are, however, only two examples among dozens of other DDR programmes being implemented in a number of post-conflict countries. We have been unable to find much supporting evidence of the inclusion of women's interests in DDR programming, including aspects of the programme that may have implications for their economic and social empowerment, such as training courses, the provision of seed funding for small business and

structures for violence management within households and communities. Given the results reported in chapter 3, further attention to the needs of women may strengthen the contribution of DDR programmes to local stability and recovery.

### 4.3. Summary of evidence

The review in this section was based on only a handful of evaluation reports that we have been able to access. From the information contained in these reports, it is clear that policy interventions in conflict-affected contexts should potentially be able to support the role of women in peacebuilding and economic recovery. This will only be possible when policy recommendations and laws are translated into concrete gains for both men and women. Recognition of the importance of women's roles in post-conflict recovery (from caring for orphans and prisoners to adopting new livelihood coping strategies), through the inclusion of gender equality measures and affirmative action in reconstruction programmes and processes is also essential. Rehn and Johnson Sirleaf (2002) discuss how the commitment of international bodies such as the UN, the World Bank and the ICC to gender equality and women's empowerment must be demonstrated through the development of measures, indicators and international laws that ensure equality throughout all peacebuilding processes, from the local level activist organisations through to UN peace-keeping interventions; and through the commitment of funds for these actions and specifically for women's organisations. This report was written in 2002. Now, 10 years later, available reviews of programmes still show limited support for the integration of women in peacebuilding and economic recovery processes.

We reviewed the most relevant quantitative evidence on the impact of the participation of women in peacebuilding and economic recovery programmes and found that, although gender indicators are being built into some programme interventions, there is an almost complete lack of evaluation of the impact of interventions on actual gender-related outcomes, or any empirical understanding of the channels whereby initiatives like employment quotas, training activities for women or micro-credit (and other interventions) may affect women's economic status and their social and economic roles, or the welfare of their families (children in particular) and their communities. Even programmes implemented by major institutions lack consideration of gender-differentiated needs and impacts. We have found, in addition, that despite efforts from the international community and advances in statutory provisions within national and international legislation, women remain largely excluded from formal peace and post-conflict processes. There has been an increase in the inclusion of women within peace processes: a quantitative study carried out in 2010 (Bell and O'Rourke 2010) reported that UNSCR 1325 has been 'moderately' successful in increasing the *inclusion* of women. Similarly to our findings, the authors also report an almost complete absence of evidence of the *impact* of this increase.

## 5. CONCLUSIONS, RECOMMENDATIONS AND FUTURE RESEARCH

The main objective of this report was to provide new empirical evidence, building on existing (limited) knowledge, on the impact of violent conflict on women's roles and activities, and the subsequent effect of these changes on local processes of post-conflict economic recovery and stability. The report consists of three main chapters.

We started (in chapter 2) by reviewing existing evidence on how conflict affects women's roles in households and communities, why and how gender roles change due to conflict, and to what extent these new roles may affect local processes of economic recovery, stability and peacebuilding. We found existing empirical evidence to be of limited use in understanding the significance of shifts in women's activities due to violent conflict for themselves, their families, their communities and the wider economy and society. However, this literature review was very useful in the identification of a set of testable hypotheses about the potential contribution of women to economic recovery, a central element in successful peacebuilding efforts in countries emerging from armed conflict.

These hypotheses formed the framework for the empirical analysis in chapter 3. This analysis provides a first attempt at generating rigorous comparable evidence on (i) the impact of conflict on women's roles and activities within households and local communities, and (ii) the impact of women's new roles on women's own levels of empowerment, household welfare and community-level development outcomes. Using a selected number of datasets, chapter 3 provides detailed analysis at the micro-level using descriptive statistical analysis for six case studies: Bosnia and Herzegovina, Colombia, Kosovo, Nepal, Tajikistan and Timor Leste.

The results we obtained suggest that more comprehensive integration of women in economic recovery processes in post-conflict countries may lead to significant peace dividends. Against all odds, increases in the labour participation of women in conflict-affected areas seem to be associated in some circumstances with increases in overall household and community-level welfare. This finding holds even though women on average take on low status jobs and earn less than men.

Despite these findings, women's contribution to household economic security is overlooked in the post-conflict period: women tend to lose their jobs once the war is over and face pressures to return to traditional roles. In addition, women still face severe vulnerabilities despite showing great levels of resilience during conflict. Notably, increases in labour market participation of women during conflict take place without any visible reduction in other obligations: women join formal and informal employment when male workers join armed forces or are killed, injured or abducted, in addition to their traditional household duties. In addition, they have more children to look after and incapacitated relatives to support. These levels of vulnerability are also rarely taken into account in post-conflict policy programming, as analysed in the final part of this report (chapter 4).

The benefits of women's integration in economic recovery will not be reaped by their households, their communities and the women themselves until their roles are specifically recognised in post-conflict policy programming and until interventions are explicitly implemented to support more meaningful participation of women in labour markets and social and political organisations once the war is over. In chapter 4, we have found that typically women are left out of peacebuilding and economic recovery programmes, and only rarely are programmes designed and evaluated in terms of women's needs and aspirations.

Violent conflicts lead to changes in the roles, activities and aspirations of women that yield many positive benefits in terms of women's empowerment and household and community-level economic recovery – as shown in the comparative empirical analysis in chapter 3. These changes, as well as the many challenges that women in post-conflict contexts face, must be better appreciated in post-conflict programming and interventions. In order to overcome this gap, gender must be mainstreamed throughout policy and programming processes. This can be achieved in many ways, not just through gender-specific interventions, but also through the integration of women into the implementation of health, education and other economic programmes that focus on the individual needs of their beneficiaries, or through the extension of employment and education programmes (and training projects within DDR programmes) to both women and men.

Evidence on the integration of women in such economic recovery programmes is to date extremely limited. This is partially due to the long time it takes to change the social norms, perspectives and institutions that shape the roles of women within their families and communities. Recent evidence in the context of India has shown however that when opportunities are available, cultural norms around gender roles will change. Beaman et al. (2011) in a recent article in *Science* have shown that small increases in female leadership positions across villages in India have led to rises in the aspirations of girls and their parents through a role model effect: the fact that other women were provided with leadership opportunities have caused direct changes to the beliefs of girls and their parents that other women could achieve similar status. Jensen (2010) has argued in addition that the creation of employment opportunities for girls in villages in India causes other girls to enrol and remain in school – with support from their parents – in the expectation that they will also be able to access those better jobs. These two papers show evidence for significant changes in norms and beliefs around gender roles in response to specific interventions that improve the political and economic opportunities of women. Policy support is fundamental in this process, indicating that current post-conflict recovery priorities should more carefully balance spending on male-targeted programmes against the pressing need to better support women's engagement in economic recovery, and to draw on the potentially large yet unexploited benefits of women's involvement in post-conflict reconstruction processes.

This report provides only initial empirical evidence on the relationship between armed conflict, women's roles and subsequent changes in household and community-level economic recovery processes, since existing research was not found sufficient to establish in a rigorous way the significance and wider consequences of shifts in women's activities during violent conflict. This research project has begun to fill this void in evidence. The results obtained must be interpreted with caution due to the simplistic nature of the analytical methods employed. Nonetheless, the empirical analysis points to a number of strong and suggestive trends and patterns, as well as to the potential of making use of existing empirical information to build more rigorous evidence on the impact of women's participation in economic recovery and peacebuilding processes.

There is still considerable scope for further causal analysis in phase II of this study, on the two questions addressed in this report: How does violent conflict change the roles that women take on within their households and communities? And, how do changes in female roles during the conflict affect their own status after the conflict, and the capacity of their households and communities to recover from the conflict? More sophisticated analysis may also be able to address more complex questions, such as: If access to employment (or recovery of livelihoods) during the post-conflict period is understood as a crucial peace dividend, are there differences between the 'pay off' of investing in men's economic security post-conflict versus women's?

More sophisticated analysis of these questions would contribute significantly to a better understanding of what interventions the international community and local governments need to encourage in order to better support community stability and women's engagement in local peacebuilding and economic recovery processes. More advanced analysis would also enable an assessment of the relative productivity, in terms of building sustainable peace, of existing policy priorities to invest in male-related programmes at the expense of equivalent or comparable investment in employment and livelihood security for women.

In addition to more rigorous results, more sophisticated empirical analysis may also be able to identify the more complex mechanisms shaping the relationship between violent conflict, gender roles and post-conflict economic recovery. This analysis may in turn support better targeting of interventions to the specific needs of individuals and groups during the post-conflict period. Recent theoretical studies on violent conflict have argued that the relationship between violent conflict, economic recovery and the duration of peace is mediated through very important institutional changes caused by the conflict itself (see Justino 2012). Emergent empirical work on the impact of violent conflict on individuals and households has put forward two important institutional mechanisms that may substantially influence the relationship between violence and welfare outcomes amongst individuals, households and communities. The first is the level of trust and cooperation (see, for instance, Voors et al. 2010). The second is the level of social and political participation of those affected by violence (see, for instance, Bellows and Miguel 2006). Increased levels of trust and participation have been shown to positively affect how communities recover from violent conflict, as well as the likelihood of sustainable peace. This is a new area of research. So far very few attempts have been made to investigate whether men and women respond differently to these important institutional changes. However, empirical evidence has shown that men and women respond and adapt to violence in very different ways.<sup>39</sup> This evidence provides a strong basis to assume that institutional changes caused by violent conflict will have different behavioural effects on women and men. This may in turn affect how households and communities recover from conflict due to the impact of trust and participation on several important variables such as reliance on social networks, the distribution of power amongst different groups and how public goods are accessed locally. These effects are so far unknown. This research was not possible during Phase I of the study due to the unavailability of relevant information in the datasets we were able to access, and the empirical complexities associated with the analysis. These factors are, however, crucial to better understanding the complex impact of women's roles in economic recovery and peacebuilding processes. We expect to be able to address these important relationships in phase II of the study, through the access to specialised datasets and more sophisticated analytical techniques.

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<sup>39</sup> See analysis in chapter 3. See also HiCN Working papers 100-106 ([www.hicn.org/papers](http://www.hicn.org/papers)). This collection of papers is part of a joint project between the World Bank and the Households in Conflict Network on the gender impact of violent conflicts.

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## APPENDIX 1: LIST OF VARIABLES AND INDICATORS

Hypothesis / Variable	Definition / Estimation	Country*
<b>1. Household Composition Changes</b>		
<i>HH size</i>	Average household size (total number of household members)	TL, TJ, KS, CL, NP, BiH
<i>Composition</i>	Average share of household size according to age groups (0-6, 7-15, 16-65, over 65 years old)	TL, TJ, KS, CL
<i>Average number of children below the age of 5</i>	For all women of reproductive age (15-49 years old)	NP, BiH
<i>Dependency ratio</i>	Average ratio of young and older members (under 16 and over 65 years old) to total number of working age adults (16 to 65 years old)	TL, TJ, KS, CL
<i>Female/male ratio</i>	Ratio of female adults to male adults (16 to 65 years old)	TL, TJ, KS, CL
<i>Other household characteristics</i>		
<i>Access to land</i>	Share of households in total sample with access to own or rented land	TL, TJ, KS
<i>Rural location</i>	Share of households in total sample living in rural areas	TL, TJ, KS, NP, BiH
<b>2. Time Use and Economic Roles</b>		
<i>Time Use</i>		
<i>Domestic tasks (week hrs)</i>	Average hours per week spent in week prior to survey by individuals aged 15 years or over, including: fetching any water, fetching any wood, any work around the house and children care	TL
<i>Productive tasks</i>	Average hours per week spent in employment in week prior to survey, all individuals over 15 years of age	TL
<i>TOTAL (week hrs)</i>	Sum of hours per week spent in domestic and productive tasks	TL
<i>Labour Force Participation</i>		
<i>Employed</i>	Share of working age individuals (over 15 years old) that report being employed in week prior to survey (worked for someone else, on farming, or as own account, plus those that were temporary absent from work)	TL, TJ, KS, CL, NP, BiH
<i>Unemployed</i>	Share of working age individuals (over 15 years old) that were not employed but report having looked for work in week prior to survey (including those waiting for reply or engaged in seasonal work)	TL, TJ, KS, CL
<i>Inactive</i>	Share of working age individuals (over 15 years old) that were not employed and did not look for work in the week prior to survey	TL, TJ, KS, CL
<b>2a. Other Employment Characteristics</b>		
<i>Average hours worked</i>	Average hours worked by individuals employed in week prior to survey, excluding zeros or missing data	TL, TJ, KS, BiH
<i>Average hourly labour income</i>	Average labour income (earnings plus benefits) earn by individuals employed in week prior to survey, excluding zeros or missing data	TL, TJ, KS, BiH
<i>Type of employment</i>	Share of individuals that worked in week prior to survey according to employment status:	TL, TJ, KS, NP
<i>Wage employment</i>	Paid workers in a household farm or non-farm business enterprise, or for someone who is not a member of the household	TL, TJ, KS
<i>Self-employment – agriculture</i>	Employers and own-account workers whose main sector of work is agriculture (including forestry, fishing and hunting)	TL, TJ, KS
<i>Self-employment - not agriculture</i>	Employers and own-account workers whose main sector of work is other than agriculture	TL, TJ, KS
<i>Family worker</i>	Individual employed in a household farm or non-farm business enterprise (usually unpaid)	TL, TJ, KS
<i>Type of earnings</i>	Share of women employed in week prior to survey according to type of payment received: not paid, paid in cash or cash and in-kind, and paid only in-kind	CL, NP
<i>Type of work</i>	Share of women employed in week prior to survey according to person worked for: family, someone else, self-employed	NP

Hypothesis / Variable	Definition / Estimation	Country*
<i>Type of occupation</i>	Share of individuals in employment in week prior to survey in reported main occupation:	TL, TJ, KS, CL
<i>Professional, managerial</i>	Professional and technical expert; managerial, administrative and decision making staff	TL, TJ, KS, CL
<i>Service-related</i>	Individual employed in clerical job, sales or other services	TL, TJ, KS, CL
<i>Farmer</i>	Individual employed in agriculture and husbandry	TL, TJ, KS, CL
<i>Manual worker, others</i>	Individual employed in forestry, fishing, hunting; production worker; transportation operations workers; unskilled worker	TL, TJ, KS, CL
<i>Main sector of activity</i>	Share of individuals that worked in week prior to survey according to main sector of employment	TL, TJ
<i>Access to secondary jobs</i>	Share of individuals that worked in week prior to survey and also had a secondary job	TL, TJ, KS
<b>3. Civic Engagement</b>		
<i>Participation in community groups</i>	Share of households that participated in any community group in the 12 months prior to survey	TL
<b>4. Women Status</b>		
<i>Contribution to labour income</i>	Average share of household income attributed to employed females or males (excluding households with zero labour income or missing data)	TL, TJ, KS
<i>Woman contribution to hb expenditure</i>	Share of currently married women (15-49 years old) that worked and earned cash in year prior to survey, according to categories of contribution to household expenditure: nothing or almost nothing, less than half, half, more than half, everything	CL
<i>Decisions about woman's own earnings</i>	Categories include: woman alone, woman with husband or other member, husband or partner alone	CL, NP
<i>Woman is involved in decision</i>	Share of reproductive age women (15-49 years old) involved in household decision- making processes (either alone or together with partner or other household member)	CL, NP
<b>5. Household Welfare</b>		
<i>Expenditure per capita</i>	Average expenditure per adult equivalent in year prior to survey (according to estimations included in each survey)	TL, TJ, KS, BiH
<i>Wealth index</i>	Index of household socio-economic status constructed as the weighted sum of several indicators related to assets owned and access to services (according to estimations included in each survey)	CL, NP
<i>Poverty incidence</i>	Household is considered poor if its wealth index is in the bottom two quintiles of the distribution	CL
<b>6. Community Welfare</b>		
<i>Average expenditure per capita</i>	Average expenditure per adult equivalent in the year prior to the survey (according to estimations included in each survey) across all households in each community (sampling units)	TL, TJ, KS, BiH
<i>Average wealth index</i>	Average wealth index across all households in each community (sampling units)	CL, NP
<i>Average poverty incidence</i>	Share of households in each community classified as poor according to wealth index quintiles	CL

\* BiH= Bosnia and Herzegovina, CL= Colombia, KS= Kosovo, NP= Nepal, TJ= Tajikistan, TL= Timor-Leste.

## APPENDIX 2: LIST OF INTERVIEWS

<b>Name</b>	<b>Organisation</b>
Fiona Powers	DFID Security and Justice Team
Ndeye Sow	International Alert
Sarah Douglas	UNWomen
Aisha Dodwell	Medicin Sans Frontiers
Simon Lawry White	UN IASC
Kate Bishop	DFID (seconded from ActionAID)
Mary Nzioki	ACORD International
Minna Lyytikainen	International Alert
Rachel Dore Weeks	UNWomen
Judy El-Bashra	Independent consultant (author of ACORD report)
Kate Burns	OCHA Gender Sub-Working Group
Rachel Hastie	Oxfam
Karen Barnes	DFID
Emer Purden	ActionAid
Elisabeth Huybens	World Bank Sector Manager, Social Development Department

### APPENDIX 3: MAP OF EXISTING PROGRAMMES/INTERVENTIONS

#### POST-CONFLICT AND RECONSTRUCTION PROGRAMMES (WORLD BANK, UNDP)

Country	Year	Program	Organization	Link	Observations
Uganda	2005-2009	Multi-Country Demobilization and Reintegration Programme (MDRP)	Amnesty Commission	<a href="http://www.mdrp.org/uganda.htm">http://www.mdrp.org/uganda.htm</a> <a href="http://www.mdrp.org/index.htm">http://www.mdrp.org/index.htm</a>	
Uganda	2002-2004	Project for the Return and Reintegration of Reporters and Dependents	IOM		
Sudan	Phase I: January 2006 - June 2009	Interim Disarmament, Demobilization and Reintegration Programme (IDDRP)	UNDP	<a href="http://www.sd.undp.org/projects/cp4.htm">http://www.sd.undp.org/projects/cp4.htm</a>	
Somalia		- <i>Rule of Law &amp; Security</i> (ROLS) - <i>Governance</i> : Local governance, Somali Institutional Development Project- SIDP and UNDP Somalia Constitution-making Support Project	UNDP	<a href="http://www.so.undp.org/index.php/Rule-of-Law-Security.html">http://www.so.undp.org/index.php/Rule-of-Law-Security.html</a>	
Timor-Leste	2000-2003	Agricultural Rehabilitation Project	World Bank / UN	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P070533">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P070533</a>	
Thailand	2007-2009	Piloting Community Approaches in Conflict Situation in Three Southernmost Provinces in Thailand	IDA / Chulalongkorn Univ. Social Research Inst.	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P110094">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P110094</a>	
Tajikistan	1998-2001	Post Conflict Reconstruction Project	IDA / Prime Minister Office	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P053386">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P053386</a>	

Guinea-Bissau	2006-2012	Multi-sector Infrastructure Rehabilitation Project	IBRD / Government Of Guinea Bissau	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P097975">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P097975</a>
Colombia	2004-2012	Peace and Development Project (1st Phase APL)	Government of the Republic of Colombia	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P051306">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P051306</a>
Angola	1998-2003	Post Conflict Social Reconstruction Project	IDA / Gov of Angola	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P045644">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P045644</a>
Sierra Leone	1998-2003	Economic Rehabilitation and Recovery Credit I&II	IBRD / Gov Sierra Leone	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P074642">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P074642</a>
Sri Lanka	2009-	Financing for the Community Livelihoods in Conflict Affected Areas Project	IBRD / Gov Sri Lanka	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P125855">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P125855</a>
Solomon Islands	2010-2015	Rapid Employment Project	IDA / Gov Solomon Islands	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P114987">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P114987</a>
Pakistan	2011-2014	Khyber-Pakhtoonkhwa Emergency Roads Recovery Project	IBRD / Gov of Pakistan	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P114987">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P114987</a>

				<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P125584">enuPK=228424&amp;Projectid=P125584</a>	
Pakistan	2011-2014	Khyber Pakhtunkhwa and Federally Administered Tribal Areas (FATA) Emergency Recovery Project	IBRD / Gov of Pakistan	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P121394">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P121394</a>	
Kyrgyz Republic	2010-2012	Emergency Recovery Project	IBRD / Ministry of Finance	<a href="http://web.worldbank.org/external/projects/main?Projectid=P123044&amp;theSitePK=40941&amp;piPK=64290415&amp;pagePK=64283627&amp;menuPK=64282134&amp;Type=Overview">http://web.worldbank.org/external/projects/main?Projectid=P123044&amp;theSitePK=40941&amp;piPK=64290415&amp;pagePK=64283627&amp;menuPK=64282134&amp;Type=Overview</a>	
Cote d'Ivoire	2007-2013	Emergency Post-Conflict Assistance Project	IBRD / Prime Minister Office	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P082817">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P082817</a>	
Macedonia, former Yugoslav Republic of	2001-2002	Emergency Economic Recovery Project	IDA / Gov Macedonia	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P076192">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P076192</a>	
Ethiopia	1992-1997	Emergency Recovery and Reconstruction Project (ERRP)	IDA / Gov Ethiopia	<a href="http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P000752">http://web.worldbank.org/external/projects/main?pagePK=64283627&amp;piPK=73230&amp;theSitePK=40941&amp;menuPK=228424&amp;Projectid=P000752</a>	
Uganda		Preventing Violence through Employment Works in Uganda	UNDP	<a href="http://www.beta.undp.org/undp/en/home/ourwork/crisispreventionandrecovery/projects_initiatives/preventing-violence-through-work-in-uganda.html">http://www.beta.undp.org/undp/en/home/ourwork/crisispreventionandrecovery/projects_initiatives/preventing-violence-through-work-in-uganda.html</a>	

### IOM DDR/SSR AND HUMAN SECURITY OPERATIONS

A brief can be found at [http://www.iom.int/jahia/webdav/shared/shared/mainsite/activities/mepmm/op\\_support/epc\\_ddr\\_070912.pdf](http://www.iom.int/jahia/webdav/shared/shared/mainsite/activities/mepmm/op_support/epc_ddr_070912.pdf)

COUNTRY	PERIOD	PROJECT
<b>On-going Projects</b>		
ANGOLA	2004 - on going	- Reintegration of Former Combatants (FC) and Community Revitalization
BOSNIA-HERZEGOVINA	2002 - on going	- Transitional Assistance to FC, Security Sector Reform (SSR)
COLOMBIA	2001 - on going 2004 - on going	- Support To Ex-Combatant Children - Community Oriented Reintegration of Ex-Combatants
CROATIA	2003 - on going	- Reintegration Assistance to Separated Defence Personnel (SSR)
INDONESIA	2003 - on going 2006 - on going	- Reintegration support to demobilized combatants through ICRS. - Direct Health-Psychosocial Assistance.
IRAQ	2007 - on going	- Programme for Human Security and Stabilization in Iraq
KOSOVO (SERBIA)	1999 - on going	- ICRS/Reintegration Fund & Kosovo Protection Corps Training Programme
MONTENEGRO	2007 - on going	- Assessment of Montenegro's Security Sector Reform (SSR)
SERBIA	2006 - on going	- Programme of Assistance to Redundant Military Personnel in Serbia (SSR)
<b>Completed Projects</b>		
MOZAMBIQUE	1992-1996	- Return Assistance to Demobilized Combatants & their dependents; Information Referral Service and Provincial Fund
HAITI	1994-1996	- Haiti Assistance Programme: Demobilization & Reintegration Programme and the Communal Governance Programme
ANGOLA	1994-1996	- Return and Reintegration of Demobilized Soldiers; conflict mitigation and reintegration programme
MALI	1996-1998	- Consolidation of Acquired Practices for Reinsertion credit; PAREM – Assistance Programme for the Reinsertion Combatants in North Mali
GUATEMALA	1996-1998	- Demobilization and Reintegration of URNG Fighters
PHILIPPINESE	1998-1999	- Mobile Information, Referral and Community Assistance Service
EAST TIMOR	1999-2001	- Falintil Reinsertion Assistance Programme
GUINEA BISSAU	2001-2005	- Reintegration of FC of all the conflicts that G.Bissau faced since 1954 – DDR to all the militiamen & part of soldiers of the 1998-1999 conflict
CONGOBRAZAVILLE/ DRC	2000-2002 2005-2006	- Ex-combatant reintegration and small arms collection; repatriation of ex Faz/Fac combatants from Brazza to Kinshasa



CAMBODIA	2000-2002	- General Health Assessment of Demobilized Soldiers
TAJIKISTAN	2002-2004	- Assistance to Demobilized Soldiers, Released Detainees, Unemployed Youth
SIERRA LEONE	2002-2004	- Reintegration of Demobilized Ex-combatants and their families through the Rapid Project Implementation Facility (SLRPIF)
UGANDA	2002-2004	- Integrated project for the return and reintegration of Ugandan Reporters of Concerns to the Amnesty Commission through ICRS
COTE D'IVOIRE	2004-2005	- Provision of Managed Transportation Services to support the DDRR Program in Liberia
AFGHANISTAN	2004-2006	- Afghanistan's New Beginnings Programme (ANBP) Reintegration of ExCombatants in Northern, Central and Eastern regions