



Women Working for Recovery: The Impact of Female Employment on Family and Community Welfare after Conflict

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*Any reference to "UNIFEM" in the document must be understood to refer to "former UNIFEM", one of the four entities merged into the United Nations Entity for Gender Equality and the Empowerment of Women on 21st July, 2010 by United Nations General Assembly Resolution A/RES/64/289.

*Any reference to United Nations "resolution 1325 and subsequent resolutions or 5 WPS resolutions" in the document must be understood to refer to Security Council resolutions on women and peace and security 1325 (2000); 1820 (2008); 1888 (2009); 1889 (2009); and 1960 (2010). As of the reprint of this Sourcebook in 2014, two additional resolutions on women, peace and security have been passed: 2106 (2013) and 2122 (2013). The full texts of these new resolutions are provided as annexes, but have not been included in the text of this reprint.

On the cover: Women fishing in the river near their village – Gbolokai, Liberia - 2007. All inhabitants fled the village during the long brutal civil war and have slowly returned after 2005 to try and rebuild their lives. Credit: Chris Herwia

EXECUTIVE SUMMARY

While it is often asserted that women experience conflict differently from men and face greater burdens during the recovery process, there has been limited systematic research into this question owing to a paucity of data. Available literature on the consequences of armed conflict suggests that the lives and livelihoods of women in these contexts undergo significant adjustments. There are numerous accounts of women taking up new economic roles, joining armed forces, acting as peacemakers and providing essential economic and social support to the reconstruction of communities affected by violent conflict. However, much more needs to be known about the nature and magnitude of the benefits of including women more fully in economic recovery and peacebuilding processes. Policy-making on economic recovery in post-conflict contexts is currently based on limited evidence of conflict-related changes in women's and men's economic roles. Procedures to evaluate policy impact in terms of gender roles and gender equality have been inadequate. This situation has at times resulted in a relative lack of support for women' livelihood recovery and a continued and unexamined emphasis on male employment generation programmes and a priority focus on the economic reintegration of (mostly male) ex-combatants.

The main aim of this paper is to analyze 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. It poses two questions for which there is currently limited evidence available in the academic literature on violent conflict or in economic recovery policy design in post-conflict contexts:

- 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 paper reviews existing knowledge and provides new empirical evidence through six country case studies: Bosnia and Herzegovina, Colombia, Kosovo (under UN Security Council Resolution [UNSCR] 1244), Nepal, Tajikistan and Timor Leste. The purpose of the empirical analysis is to provide a better understanding of:

- how changes in women's roles and activities contribute to processes of economic recovery;
- whether existing interventions support these new roles (if positive) or 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.

This analysis provides 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 limited data and consequently the restrictions on the types of analysis that are possible at this stage. 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 and immediately after conflict. This result is consistent across the six case studies. However, despite increases in labour market participation, women often face substantial obstacles in terms of access to employment, the types of employment available to them, and the levels of income 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.
- » Women's economic vulnerability often increases significantly during conflict, especially in the case of female-headed households. The research finds that the percentage of female-headed households often increases during conflict and that their vulnerability increases because of an increase in dependency rates during the conflict. The increased labour market participation of women whether in female-headed households or not takes place without any visible reduction in other obligations. The vulnerability of women to poverty is exacerbated by the fact that the jobs available to them are typically low-paid, low-skilled jobs in the form of self-employment in informal activities or unpaid family labour.
- » However, and against all odds, increases in the labour force 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 conflict, 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

Increases in the labour force participation of women in conflict-affected areas are in some cases associated with increases in overall household and community welfare.

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.

Programming around gender issues in post-conflict contexts is currently not adequately informed by data on women's vulnerability, livelihood recovery needs, or their actual or potential contributions to family welfare and community recovery.

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 focus on the role of men in the achievement of peace, security and economic stability.

The empirical analysis in this paper suggests very strongly that increases in the labour force participation of women in conflict-affected areas are in some cases associated with increases in overall household and community welfare. 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 AND OBJECTIVES OF THE STUDY

Violent conflict, despite the recent decline in number (Themner and Wallensteen 2011), remains one of the most important challenges facing the world today, particularly due to its persistence and devastating effects on the lives, livelihoods and health of almost 1.5 billion people. The legacy of violence persists in many contexts, and countries recovering from conflict face enormous challenges in terms of recovery and reconstruction.

The lives of women in contexts of armed conflict adjust dramatically in response to changes in their households and their communities, as well as as a direct response to fighting and violence. Women are victims of conflict, but also engage actively in social, political and economic activities during episodes of violent conflict. There is, however, 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 and programming around gender issues in post-conflict contexts is currently not adequately informed by data on women's vulnerability, livelihood recovery needs, or their actual or potential contributions to family welfare and community recovery.

The aim of this paper is to build on existing knowledge to provide new empirical evidence on the impact of violent conflict on women's activities, and the subsequent effect of these changes on local processes of post-conflict economic recovery.

The analysis adopts a micro-level perspective, focusing on individual, household and community-level interactions that result from violent conflict, which necessarily have a gender dimension. The new evidence produced in this paper is based on

primary data collected for representative samples of individuals, households and communities, using survey research designs and statistical methods of analysis. The results are compared with findings from cross-country analysis.

The paper is organised in three main sections. In section 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. This review was used to identify a set of testable hypotheses about the potential contribution of women to economic recovery processes. Section 3 tests these hypotheses and provides detailed empirical analysis at the micro-level, using descriptive statistical analysis, on the relationship between violent conflict, women's roles and post-conflict economic recovery in six case studies: Bosnia and Herzegovina, Colombia, Kosovo (under UNSCR 1244), Nepal, Tajikistan and Timor Leste. In section 4, we discuss this evidence in light of peacebuilding and economic recovery initiatives currently being implemented in post-conflict countries, and provide suggestions for further analysis.

2. LITERATURE REVIEW²

This study addresses two main questions. The first relates to the role of women during conflict: How does violent conflict change women's roles in 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 surprisingly 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.

2.1 Changes in gender roles during and after conflict

2.1.1 Impact of conflict on family and economic 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. Two key findings of this literature are that post-conflict countries are characterised by increases in female-headed households, often widows, and that the effects of violent conflict often force women to adopt new roles, notably as household heads and breadwinners (de Walque 2006, El-Bushra et al. 2002, Kumar 2001, Menon and Rodgers 2011, Schindler 2010, Shemyakina 2009, Zuckerman and Greenberg 2004). 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. Second, we expect to find significant differences in the allocation of time between 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.

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.5 However, 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 (Allden 2008, Kumar 2000, Sorensen 1998, Women for Women 2010). The proportionately higher involvement of women in the informal sector is not an exclusive characteristic of conflict contexts, but a general trend in developing countries. However, it is possible that exposure to violent conflict may further strengthen 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, due to changes in household composition, and as a livelihood coping strategy against harsh economic conditions.

2.1.2 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 of 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. 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 due to 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.

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.

The available literature provides only limited descriptions – but not rigorous empirical evidence – 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, Rehn and Johnson Sirleaf 2002, Sorensen 1998). 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. However, 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 therefore limit their participation in social groups and organisations. We return to this discussion in section 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.

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 section 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 (Calderon et al. 2011, 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). 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 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 (Attanasio and Lechene 2010, Duflo 2003, Duflo and Udry 2004, Gitter and Barham 2008, Hoddinott and Haddad 1991, Rangel 2006, Thomas 1990, 1997, Qian 2008).

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 2006), Mozambique (Bruck 2004), and Colombia (Ibañez and Moya



Women's agricultural cooperative. Liberia, 2009 Credit: Chris Herwig

2006). 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, that is households with similar compositions but differentiating those where women are engaged 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 (under UNSCR 1244), Nepal, Tajikistan and Timor Leste in section 3.

2.2.3 Community economic recovery 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



Yodgorlik Silk Factory in Margilan in the Fergana Valley in Uzbekistan. Maghilan, Uzbekistan, 2004 Credit: Chris Herwig

of markets and increasing productivity in the use of resources. Second, when women take more public social and political roles, this 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 affects 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, Klasen and Lamanna 2009, Knowles et al. 2002, Lagerlöf 2003, Lutz and McGillivray 2009, Petesch 2011, World Bank 2012).

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 (Bhalotra and Clots-Figueras 2011, Beaman et al. 2006, Chattopadhyay and Duflo 2004).

In addition, an important body of evidence based on crosscountry 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 conclusions 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). 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 section 3, and in section 4, where we examine the structure and impact of a range of policy interventions aimed at supporting economic recovery in post-conflict societies.

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.

3. EMPIRICAL ANALYSIS

The objective of this section is to provide a first attempt at addressing the hypotheses discussed in section 2 around the two main research questions that frame this paper: 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?

For 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 have selected six countries - Bosnia and Herzegovina, Colombia, Kosovo (under UNSCR 1244), 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. 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 all hypotheses outlined in section 2. Hypotheses 1 and 2 on the impact of violent conflict on family and economic roles were fully tested across the six case studies. Hypothesis 3 on the impact of violent conflict on the participation of women on social and political organisations was only partially tested in the case of Timor Leste, since information on civic and political participation is very rarely included in existing socio-economic surveys collected in conflict-affected countries.

Hypothesis 4 on the impact of new female roles and activities on women's empowerment was tested 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 of whether increased women's participation in labour markets may be reflected in improved economic status for women within their households.

Existing literature has shown that changes in intra-household distribution of resources, assets or power that favour women are often associated with positive household effects (hypothesis 5). 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. Household welfare is measured in all case studies in terms of consumption expenditure. We have further extended this hypothesis to community-level outcomes (hypothesis 6). 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 paper provides a first attempt at disentangling this important relationship. We have conducted comparative empirical analysis across the case studies, with the exception of Nepal, for which community-level welfare information is not available.

The final hypothesis (hypothesis 7) on the impact of women's civic and political engagement on economic recovery and sustainable peace was only partially tested in the case of Timor Leste, given that information on institutional arrangements in conflict-affected areas is very rarely available.

Even though not all datasets contain information required to test each and every one of the hypotheses outlined in section 2, 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 are included in appendix 1, along with a brief definition of each variable.

3.1 Summary of findings

The results have overall provided 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 many of the social, economic and political gains that women may have achieved during the conflict are eroded in the post-conflict

period. The results of the empirical analysis are summarised in the table below (see table 1).

Table 1: Summary of empirical analysis by hypothesis tested

Hypothesis	Hypothesis held by empirical analysis					
	Bosnia and Herzegovina (1)	Colombia (2)	Kosovo (under UNSCR 1244) (3)	Nepal (4)	Tajikistan (5)	Timor Leste (6)
Hypothesis 1: Violent conflict increases the responsibilities of women within households and changes the gender division of tasks through its impacts on household composition.	Yes	Yes	Yes*	Yes	Yes	Yes*
Hypothesis 2: Violent conflict increases the participation of women in labour markets and in income generating activities, due to changes in household composition, and as a livelihood coping strategy against harsh economic conditions.	Yes	Yes	Yes	Yes	Yes	Yes
Hypothesis 3: Violent conflict increases the participation of women in social and political organisations at the local and national levels.	-	-	-	-	-	Yes*
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.	-	Yes	-	Yes*	No*	Yes
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.	Yes	Yes	No	No	No	Yes
Hypothesis 6: Greater participation of women in labour markets in conflict-affected areas positively affects community welfare.	Yes	Yes	Yes*	-	No	No
Hypothesis 7: Increases in female civic and political engagement in conflict-affected areas positively affects the quality of local institutions, thereby contributing to improved economic recovery and sustainable peace.	-	-	-	-	-	-

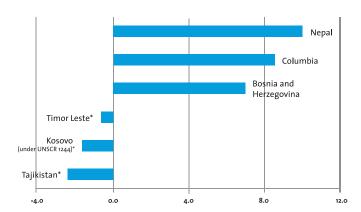
Notes: * = indicates results were mixed, not statistically significant at 10% or lower, or both; - = indicates the hypothesis was not tested (due to lack of information). (1) Based on Bosnia and Herzegovina Living Standards Measurement Survey 2001 and 2004 panel and data on conflict exposure at the municipality-level provided in Swee (2009). Changes reported compare outcomes between individuals and households living in municipalities of high and low conflict intensity. (2) Based on Colombia Demographic and Health Survey (CODHS) 2010 and self-reported data on displacement due to conflict in last 5 years. Changes reported compare outcomes between displaced and non-displaced rural households. (3) Based on Kosovo (SCR 1244) Living Standards Measurement Survey (KLSMS) 2000 and self-reported data on displacement or house damage during conflict. Changes reported compare outcomes between affected and non-affected households. (4) Based on Nepal Demographic and Health Survey 2006 and data on conflict exposure at the district-level provided in Do and Iyer (2010). Changes reported compare outcomes between households living in districts in the highest and lowest quintile of conflict intensity. (5) Based on TLSS 1999 and data on conflict exposure at the regional level exposure provided in Shemyakina (2006, 2011). Changes reported compare outcomes between affected versus non-affected households. (6) Based on Tajikistan Living Standards Survey (TLSS) 2001 and 2007 and self-reported data on displacement or house damage during conflict (for 2001) and district-level exposure to conflict (for 2007) provided in Justino, Leone and Salardi (2011). Changes reported compare outcomes between affected and non-affected households.

3.2 Findings related to changes in gender roles during and after conflict

In terms of the impact of violent conflict on women's economic, social and political roles, the results show strong empirical evidence across the six case studies that violent conflict is associated with larger responsibilities for women through its impact on household composition (hypothesis 1, see table 2 and figures 1 and 2).

Figure 1. The share of female-headed households tends to be higher in conflict

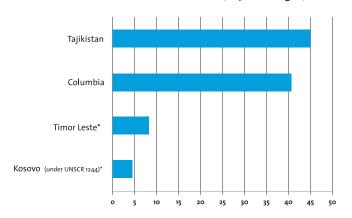
Change in the share of conflict-affected versus non-affected female headed households (in percentage points)



Source: Own calculations based on country households surveys (see table 2). Notes: * = indicates results that are not statistically significant at 10% or lower.

Figure 2. Dependency rates in female-headed households increase in conflict

Changes in dependency rates among conflict-affected versus non-affected female headed households (in percentages)



Source: Own calculations based on country households surveys (see table 2). Notes: * = indicates results that are not statistically significant at 10% or lower.

Table 2: Test of hypothesis 1: Violent conflict increases the responsibilities of women within households and changes the gender division of tasks through its impacts on household composition.

Variables tested (1)	Bosnia and Herzegovina	Colombia	Kosovo (under UNSCR 1244)	Nepal	Tajikistan	Timor Leste (3)
Changes in the share of conflict- affected versus non-affected female-headed households	+7.0 pp	+8.5 pp	-1.7 pp*	10 рр	-2.4 pp*	-o.6 pp*
Changes in dependency rates among conflict-affected versus non-affected female-headed households (2)	-	+41.8%	+4.6%*	+8.9%	+45.1%	+8.4%*
Changes in dependency rates among female- versus male-headed house-holds affected by conflict	-	+40.6%	+0.6%*	-	+15.7%	-4.8%*

Source: Own calculations based on country households surveys. Notes: pp = percentage points, * = indicates results that are not statistically significant at 10% or lower. - = indicates the hypothesis was not tested (due to lack of information)

⁽¹⁾ Conflict-affected households and individuals are those that report being exposed to armed conflict or being displaced or that live in areas exposed to conflict.

⁽²⁾ In the case of Nepal, measured as change in the number of children under 5 years old per women in conflict-affected versus non-affected areas.

⁽³⁾ It was possible to analyze a fourth variable, the change in the number of hours spent by women in domestic and productive tasks. The results are statistically significant and show an increase of eight hours per week for conflict-affected versus non-affected women in female-headed households.

Table 3: Test of Hypothesis 2: Violent conflict increases the participation of women in labour markets and in income generating activities, due to changes in household composition, and as a livelihood coping strategy against harsh economic conditions.

Variables tested (1)	Bosnia and Herzegovina	Colombia	Kosovo (under UNSCR 1244)	Nepal(2)	Tajikistan	Timor Leste
Changes in female labour market participation in conflict-affected versus non-affected areas						
Total	+2.3 pp	-	-	+25 pp	-	-
Rural	+15.4 pp	-	-	+21 pp	-	-
Among female heads of households	-	+12.5 pp	+9 pp	-	+7.1 pp	+16.6 pp
Among other female household members	-	+6.7 pp	+3 pp	-	+5.0 pp	-0.4 pp*
Changes in labour market participation in conflict-affected areas versus non-affected areas among heads of households						
Female	-	+12.5 pp	+9 pp	-	+7.1 pp	+16.6 pp
Male	-	-1.6 рр	+6 pp	-	+o.3pp	+0.2 pp*
Changes in labour market participation in conflict-affected areas versus non-affected areas among other household members (not heads of households)						
Female	-	+6.7 pp	+3 pp	-	+5.0 pp	-0.4 pp*
Male	-	-6.9 pp	-6 pp	-	-6.2 pp	+3.6 pp*

Source: Own calculations based on country households surveys. Notes: pp = percentage points, * = indicates results that are not statistically significant at 10% or lower. - = indicates the hypothesis was not tested (due to lack of information) (1) Conflict-affected households and individuals are those that report being exposed to armed conflict or being displaced or that live in areas exposed to conflict. (2) The analysis of a second variable estimating the share of working women receiving cash further confirms this finding; the analysis found that a lower share (-32 pp) of conflict-affected working women received cash versus non-affected women.

These responsibilities often take the form of increased participation in labour markets, in addition to women's existing roles within the household (hypothesis 2, see table 3 and figure 3). 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, particularly among female heads of households. 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.

Some support is found for the hypothesis that violent conflict may be associated with greater participation of women in social organisations in Timor Leste (hypothesis 3, see figure 4). We were unable to analyze the impact of conflict on women's political roles in the other case studies due to the lack of appropriate data.

Figure 3. Among heads of households, labour market participation increases more for female heads than for male heads

Changes in labour market participation in conflict-affected versus non-affected areas among heads of households (in percentage points)

Source: Own calculations based on country households surveys (see table 3).

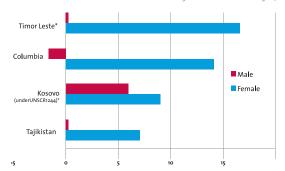
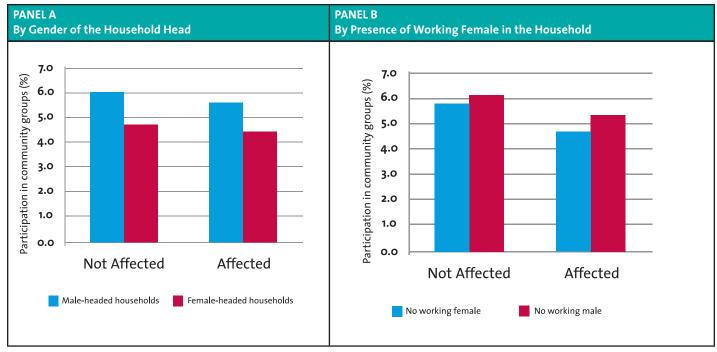


Figure 4. Household participation in community groups in Timor Leste



Source: Own calculations based on TLSS 2007. Note: Regression analysis also showed higher household participation in community groups among conflict-affected households when women are employed (+1.9% to +3.3%, estimated regression coefficients)

3.3 Findings related to the impact of women's new roles on economic recovery

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 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 (hypothesis 4, see table 4). 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 directly to 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.

Table 4: Test of 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.

Variables tested (1)	Bosnia & Herzegovina	Colombia	Kosovo (under UNSCR 1244)	Nepal (3)	Tajikistan	Timor Leste
Changes in women's involvement in household decisions in conflict-affected versus non-affected households (2)						
When women work	-	+4.7 pp	-	+0.062 (estimated regression coefficient)	+8.4 pp*(4)	+17.6 pp(4)
When no woman works	-	+1.9 pp	-	coejjicienty	n.a.	n.a.

Source: Own calculations based on country households surveys. Notes: pp = percentage points. - = indicates the hypothesis was not tested (due to lack of information).

n.a. = not applicable. (1) Conflict-affected households and individuals are those that report being exposed to armed conflict or being displaced or that live in areas exposed to conflict. (2) In Colombia, measured as involvement in household decisions for conflict-affected versus non-affected women, when they work. In Nepal, measured as a positive relation between conflict intensity (deaths per 1000 population) and women's involvement in household decisions. In Timor Leste and Tajikistan, measured as contribution of women to household income. (3) In Nepal, a positive relation was also found between conflict intensity and women's involvement in decisions about how to spend their earned money (+0.071, estimated regression coefficient) (4) Information refers to female headed households only. Estimations for all households indicate that the change in women's contribution to income in conflict-affected versus non-affected households was still positive both in Timor Leste (+5.1pp) and Tajikistan (+0.1 pp*), but lower than when restricted to female-headed households.

Strong support is found 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 (hypothesis 5, see table 5 and figure 5). We found no support for this hypothesis in the cases of Kosovo (under UNSCR 1244), 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 conflict seem to be able to access (slightly) better paid jobs compared to areas not affected by conflict, 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 provide a strong indication of the considerable benefits that women's integration in economic recovery may yield for households affected by violent conflict.

These results provide a strong indication of the considerable benefits that women's integration in economic recovery may yield for households affected by violent conflict.

Figure 5. Women's work tends to be associated with higher household welfare in conflict, particularly when they access less vulnerable jobs

Difference in the changes in welfare in conflict-affected versus non-affected households due to women's work (in percentages and percentage points)

Source: Own calculations based on country households surveys (see table 5).

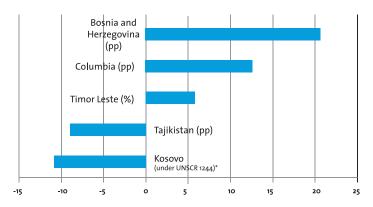


Table 5: Test of Hypothesis 5: Greater participation in labour markets among women affected by conflict is associated with positive household welfare effects, when accompanied with improvements in women's empowerment, and after controlling for other observed individual and household characteristics.

Variables tested (1)	Bosnia and Herzegovina(4)	Colombia	Kosovo (under UNSCR 1244)	Nepal	Tajikistan	Timor Leste
Changes in welfare in conflict-affected versus non-affected households (2)						
When women work (3)	+6.1%	+39.8 pp	-5.8%	-2.3 times	+9.6%	-
When no woman works (3)	-14.7%	+26.3 pp	+6.1%	-1.2 times	+19.0%	
Difference	+20.8 pp	+13.5 pp	-11.9 рр	n.a.	-9.4 pp	+5.6% (estimated regression coefficient)

Source: Own calculations based on country households surveys. Notes: pp = percentage points. n.a. = not applicable.

(1) Conflict-affected households and individuals are those that report being exposed to armed conflict or being displaced or that live in areas exposed to conflict.
(2) Measured as change in per capita consumption in all cases but Colombia and Nepal. In Colombia, the variable is measured as the change in incidence of asset-based poverty; since lower incidence relates to positive changes in welfare, the sign of the estimated change has been reversed from negative to positive. In Nepal, the variable is measured comparing indices of asset-based wealth. (3) In the case of Bosnia and Herzegovina, the estimations refer to change in welfare for medium conflict-affected versus non-affected female-headed households when the head works (or not). (4) In Bosnia and Herzegovina, higher per capita consumption was also recorded for female- versus male-headed households in conflict-affected versus non-affected areas; the change was greater with higher conflict exposure (+1.03%) than with low conflict exposure (+7.5%).

Support was also found for the hypothesis that greater participation of women in labour markets is also associated with positive community-level welfare outcomes (hypothesis 6, see table 6 and figure 6). 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 Herzegovina and Colombia. The Kosovo (under UNSCR 1244) 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 who were affected by the country's civil war.

Figure 6. Women's work also tends to be associated with higher community welfare in conflict, particularly when they access less vulnerable jobs.

Difference in the changes in welfare in conflict-affected versus non-affected communities due to women's work (in percentage points)

Source: Own calculations based on country households surveys (see table 6).

Notes: *= indicates results that are not statistically significant at 10% or lower.

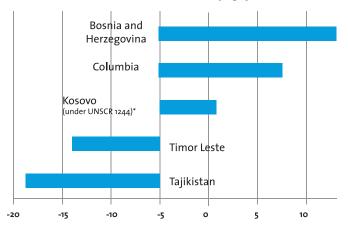


Table 6: Test of Hypothesis 6: Greater participation of women in labour markets in conflict-affected areas positively affects community welfare.

Variables tested (1)	Bosnia and Herzegovina	Colombia	Kosovo (under UNSCR 1244)	Nepal	Tajikistan	Timor Leste
Changes in welfare in conflict-affected versus non-affected communities (2)						
Above average share of female workers	+5.8%	+46.4 pp	+2.6%*	-	+3.4%	+6.3%
Below average share of female workers	-9.9%	+32.5 pp	-4.1%*	-	+21.8%	+15.7%
Difference	+15.7 pp	+13.9 pp	+6.7 pp*	-	-18.4 pp	-9.4 pp

Source: Own calculations based on country households surveys. Notes: pp = percentage points, * = indicates results that are not statistically significant at 10% or lower. - = indicates the hypothesis was not tested (due to lack of information). (1) Conflict-affected households and individuals are those that report being exposed to armed conflict or being displaced or that live in areas exposed to conflict. (2) In all cases but Colombia, measured as change in per capita consumption in communities or municipalities comparing those with share of female workers above and below average. In Colombia, the variable is measured as the change in incidence of asset-based poverty; since lower incidence relates to positive changes in welfare, the sign of the estimated change has been reversed from negative to positive.

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 (hypothesis 3, see Figure 4), which may in turn support better institutional development at the community-level in Timor Leste (hypothesis 7).

3.4 Additional findings

In addition to this analysis, we compared the micro-level results with the results of an aggregated analysis conducted across a larger sample of conflict-affected countries. We made use of datasets compiled by the World Bank and Uppsala Conflict Data Program (UCDP) at the department of Peace and Conflict Research (PRIO) to provide a descriptive statistical analysis using key indicators related to women's status in conflict-affected countries in recent decades, and compared them with the situation of other developing countries not affected by conflict. We compared 74 low, low-middle and upper-middle income countries that had no or one conflict during the years 1980-2010, across a series of development indicators in the World Development Indicators dataset. The results confirm that female labour participation increases during and shortly after the end of the

conflict. Similarly to the results obtained in the case studies, this effect is only partially reflected in increases in female empowerment. It is however more fully reflected on the positive economic recovery in post-conflict countries, a result that mirrors the community-level results discussed previously.

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 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. The use of more sophisticated econometric techniques - which was not possible within the timeline of the study - is, however, required to deal with complex issues of identification, endogeneity, selection bias, and other common issues associated with quantitative statistical analyses. The results discussed in this section nonetheless suggest great potential for future empirical analysis.



4. CONCLUSIONS, RECOMMENDATIONS AND FUTURE RESEARCH

The main objective of this paper 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 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. In addition, they often have more children to look after and incapacitated relatives to support because they house displaced or orphaned relatives. These levels of vulnerability are rarely taken into account in post-conflict policy programming.

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 and 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. A more detailed analysis 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. Rehn and Johnson Sirleaf (2002) discuss how the commitment of international bodies such as the UN, the World Bank and the International Criminal Court 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. Now, ten years after Rehn and Johnson Sirleaf's report, available reviews of programmes still show limited support for the integration of women in peacebuilding and economic recovery processes.

Although gender indicators are being built into some programme interventions, there is an almost complete lack of evaluation of the impact of interventions in post-conflict countries on

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.

actual gender-related outcomes. There is also limited empirical understanding of the means by which 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.

The changes in the roles, activities and aspirations of women triggered by armed conflict can yield positive benefits in terms of women's empowerment and household and community-level economic recovery – as shown in the comparative empirical analysis in section 3. These changes, as well as the many challenges that women face in post-conflict contexts, 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 to 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 economic recovery programmes is currently 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 do 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

Increases in labour market participation of women during conflict take place without any visible reduction in other obligations.

model' effect: the fact that other women were provided with leadership opportunities caused direct changes to the expectations of girls and their parents that they themselves could achieve similar status. Jensen (2010) has shown a similar effect: 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, and 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 paper 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. Although the results obtained by this study must be interpreted with caution due to the simple nature of the analytical methods employed, 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 of the two questions addressed in this paper: 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 peace '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 investing in malerelated 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 focusing of interventions on 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 conflict 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 conflict (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. 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 conflict in very different ways.10 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, but are, however, crucial to better understanding the complex impact of women's roles in economic recovery and peacebuilding processes.

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 peace 'pay off' of investing in men's economic security post-conflict versus women's?

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APPENDIX 1: LIST OF VARIABLES AND INDICATORS

Hypothesis / Variable	Definition / Estimation	Country*
1. Household Composition Ch	anges	
HH size	Average household size (total number of household members)	TL, TJ, KS, CL, NP, BiH
Composition	Average share of household size according to age groups (o-6, 7-15, 16-65, over 65 years old)	TL, TJ, KS, CL
Average number of children below the age of 5	For all women of reproductive age (15-49 years old)	NP, BiH
Dependency ratio	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
Female/male ratio	Ratio of female adults to male adults (16 to 65 years old)	TL, TJ, KS, CL
Other household characteristics		
Access to land	Share of households in total sample with access to own or rented land	TL, TJ, KS
Rural location	Share of households in total sample living in rural areas	TL, TJ, KS, NP, BiH
2. Time Use and Economic Ro	les	
Time Use		
Domestic tasks (week hrs)	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
Productive tasks	Average hours per week spent in employment in week prior to survey, all individuals over 15 years of age	TL
TOTAL (week hrs)	Sum of hours per week spent in domestic and productive tasks	TL
Labour Force Participation		
Employed	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 temporarily absent from work)	TL, TJ, KS, CL, NP, BiH
Unemployed	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
Inactive	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
2a. Other Employment Chara	cteristics	
Average hours worked	Average hours worked by individuals employed in week prior to survey, excluding zeros or missing data	TL, TJ, KS, BiH
Average hourly labour income	Average labour income (earnings plus benefits) earned by individuals employed in week prior to survey, excluding zeros or missing data	TL, TJ, KS, BiH
Type of employment	Share of individuals that worked in week prior to survey according to employment status	TL, TJ, KS, NP

Hypothesis / Variable	Definition / Estimation	Country*
Wage employment	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
Self-employment – agriculture	Employers and own-account workers whose main sector of work is agriculture (including forestry, fishing and hunting)	TL, TJ, KS
Self-employment - not agriculture	Employers and own-account workers whose main sector of work is other than agriculture	TL, TJ, KS
Family worker	Individual employed in a household farm or non-farm business enterprise (usually unpaid)	TL, TJ, KS
Type of earnings	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
Type of work	Share of women employed in week prior to survey according to person worked for: family, someone else, self-employed	NP
Type of occupation	Share of individuals in employment in week prior to survey in reported main occupation	TL, TJ, KS, CL
Professional, managerial	Professional and technical expert; managerial, administrative and decision-making staff	TL, TJ, KS, CL
Service-related	Individual employed in clerical job, sales or other services	TL, TJ, KS, CL
Farmer	Individual employed in agriculture and husbandry	TL, TJ, KS, CL
Manual worker, others	Individual employed in forestry, fishing, hunting; production worker; transportation operations workers; unskilled worker	TL, TJ, KS, CL
Main sector of activity	Share of individuals that worked in week prior to survey according to main sector of employment	TL, TJ
Access to secondary jobs	Share of individuals that worked in week prior to survey and also had a secondary job	TL, TJ, KS
3. Civic Engagement		
Participation in community groups	Share of households that participated in any community group in the 12 months prior to survey	TL
4. Women's Status		
Contribution to labour income	Average share of household income attributed to employed females or males (excluding households with zero labour income or missing data)	TL, TJ, KS

Hypothesis / Variable	Definition / Estimation	Country*
Woman contribution to hh expenditure	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
Decisions about woman's own earnings	Categories include: woman alone, woman with husband or other member, husband or partner alone	CL, NP
Woman is involved in decision	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
5. Household Welfare		
Expenditure per capita	Average expenditure per adult equivalent in year prior to survey (according to estimations included in each survey)	
Wealth index	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)	
Poverty incidence	Household is considered poor if its wealth index is in the bottom two quintiles of the distribution	CL
6. Community Welfare		
Average expenditure per capita		
Average wealth index	Average wealth index across all households in each community (sampling units)	CL, NP
Average poverty incidence	ty incidence Share of households in each community classified as poor according to wealth index quintiles	

^{*} BiH= Bosnia and Herzegovina, CL= Colombia, KS= Kosovo (under UNSCR 1244), NP= Nepal, TJ= Tajikistan, TL= Timor-Leste.

APPENDIX 2: AVERAGES OF INDICATORS OVER THE YEARS 1990 – 2010

	Peaceful							Countries that have experienced conflict between 1980 - 2010		0
Indicator	countries 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 Gross National Income per capita	1172.72	1046.98	1011.12	1120.51	1463.19	1971.97				
Mean Gross Domestic Product per capita	993.95	956.09	991.86	1129.25	1199.35	1421.88				
Mean labour market participation of women	59.95	55.84	53-45	56.51	55.15	54.50				
Mean labour market participation of 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				
Number of country years in each peace/conflict spell	504	352	52	141	154	351				

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

Endnotes:

- 1 The analysis in this paper 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). We concentrate on civil wars given the scarcity of evidence at the micro-level on the impact of other forms of violent conflict.
- 2 A more comprehensive literature review is provided in a longer version of this paper, available upon request.
- 3 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 the Households in Conflict Network (HiCN) www.hicn.org.
- 4 Bouta et al. (2005) found that in Angola, Bosnia and Herzegovina, Kosovo (under UNSCR 1244), Mozambique and Somalia widows represent more than 50% of all adult women. UN (2001) reports that around 60% of all adult women after the war in Mozambique were widowed. These are astonishing figures.
- 5 See review in Justino (2009). For further empirical evidence see Acemoglu et al. (2004), Adam (2008), Akbulut-Yuksel et al. (2011), Allden (2008), Calderon et al. (2011), Date-Bah (2003), El-Bushra and Sahl (2005), Lehrer (2010), Kondylis (2010), Kumar (2000), Menon and Rodgers (2011) and Shemyakina (2011).
- 6 A more extensive discussion of available datasets and the possibilities of

- quantitative analysis on the relationship between violent conflict, gender roles and economic recovery is provided in a longer version of this paper, available upon request. The detailed analysis of all case studies is also presented and discussed in the full version of the report.
- 7 A wider discussion is provided in a longer version of this paper, available upon request. The main results of this analysis are summarised in the table in Appendix 2.
- 8 We consider all conflicts minor conflicts and civil wars as defined by the UCDP/PRIO dataset.
- 9 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'.
- 10 See analysis in section 3. See also HiCN working papers 100-106 (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.



