# Laying a Foundation for Peace? A Quantitative Impact Evaluation of the United Nations Operation in Cote d'Ivoire

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## **Executive Summary**

A survey of the local population of Cote d'Ivoire was undertaken during the summer of 2008 as contracted by the Inspection and Evaluation Division of the Office of Internal Oversight Services of the United Nations as part of an evaluation of the United Nations Mission to Cote d'Ivoire (UNOCI). The survey was undertaken on a sample of 1,459 individuals aged 15 years or older, including 1,206 civilians and 253 ex-combatants, all drawn from 68 localities based on geographical stratification of the country into five regions: north, center, west, south, and the city of Abidjan. The sample was designed to generate results generalizable to the entire resident population, and also to permit analysis of the impact of UNOCI's operations in its mandate areas.<sup>1</sup>

Overall, Ivoirians held positive views about UNOCI and UN peacekeeping more generally. The majority of respondents were in favor of having a third party peacekeeping operation (especially a United Nations-led peacekeeping) rather than leaving the protagonists to struggle on their own. The majority of respondents also rejected either a merely symbolic role or muscular enforcement role. Rather, the majority favored peacekeeping operations tasked with assistance roles, such as providing local security, helping with elections, and organizing DDRRR. These patterns were even more pronounced when questions were asked in a manner that was specific about UNOCI's role in Cote d'Ivoire. Frustrations came from UNOCI not being able to meet these expectations. Generally positive perceptions about UNOCI's role are evidenced by patterns of responses to unprompted questions about the most positive and negative aspects of UNOCI's role in Cote d'Ivoire: far more civilian and ex-combatant respondents were able to identify at least one positive role of ONUCI while the most common response about the negative role of ONUCI was "I don't know." By large margins, most combatants stated that the confidence zone made it more difficult for them to launch attacks (84 % of combatant respondents) and for their enemy to launch attacks (73%). Peacekeeping presence was generally associated with more rapid declines in perceptions that renewed conflict was likely, although the exception was in the difficult region of the war-affected Center/North-west. Finally, UNOCI's presence offered comfort, with 90% of civilians reporting that they would want to turn to UNOCI if their physical security was somehow threatened.

UNOCI's most consistent contributions were *indirect*, including impacts on combatants' and civilians' perceptions as well as indirect welfare benefits. Interviews with combatants reveal that the confidence zone was perceived as an effective barrier to further military clashes between the belligerents. With the exception of some war-affected regions in the Center and Northwest, civilian concerns about the possibility of renewed conflict tended to decline more quickly and more substantially in areas where peacekeepers were deployed. UNOCI's presence (or circumstances related to UNOCI's presence) was consistently associated with less severe economic losses experienced by households.

UNOCI's *direct* impact on conflict de-escalation and violence against civilians was negligible. With respect to the monitoring of cessation of hostilities mandate, UNOCI's initial deployment patterns corresponded only loosely to past conflict events, and predictably, some (about half) of the re-escalation events that took place in 2004-5 occurred within gaps in UNOCI's geographic coverage. However, in accordance with the aims of UNOCI's mandate, areas near the conflict-ravaged Liberian border were not sites of renewed hostilities. Likewise, the direct impact of UNOCI's operations on civilian protection were negligible, mostly because victimization levels had already fallen to very

<sup>&</sup>lt;sup>1</sup>A technical appendix provides details on sampling design, statistical power considerations, and analytical methods.

low levels by the time UNOCI had arrived on the scene (from an average of 39% of the population exposed to victimization events each month in the pre-2004 period to only 6% after 2004).

UNOCI's impacts with respect to other mandated tasks are mixed and suggest areas for improvement. With respect to return of war-displaced households, UNOCI's presence was associated with higher rates of return in confidence zone localities<sup>2</sup>, which reached an extraordinary 44% in 2008, but UNOCI's presence seems to have done little to induce return of the many households displaced from war-affected localities outside the confidence zone; return rates in these localities have never reached more than an abysmal 4% per year. With respect to the electoral assistance mandate, UNOCI's efforts to meet with locals across the country on election issues are strongly associated with heightened confidence in the likely fairness of the forthcoming elections. But problems are apparent in the western confidence zone localities. This area was characterized by (i) high levels of doubt about likely electoral fairness and (ii) high levels of concern about how the slow pace of disarmament will compromise electoral fairness. With respect to the public information mandate, while Radio ONUCI-FM boasts about half of adults in the country as loyal listeners, and the majority of listeners (81%) thought ONUCI-FM news coverage was more objective and detailed compared to other news outlets, we have not been able to discern an impact of these listenership patterns on people's perceptions and attitudes.

We could not fully evaluate UNOCI'S DDRRR mandate as the process (especially the reintegration component) is still in its early stage. While the majority of ex-combatants interviewed<sup>3</sup> stated that they have surrendered their weapons, 40% stated that they have not and only 12% of disarming ex-combatants in our sample surrendered their weapons to UNOCI peacekeepers. Most ex-combatants felt secure inside regrouping sites, and the majority of them had exposure to UNOCI through frequent visits and meetings between UNOCI military officers and military commanders of regrouping sites. However, there is no evidence that how secure ex-combatants felt inside their regrouping sites was related to UNOCI presence.

With respect to exit strategy, UNOCI and complementary agencies can contribute to stabilizing the peace in Cote d'Ivoire by concentrating effort in (i) electoral sensitization, (ii) facilitating progress on DDRRR, and (iii) helping to settle displaced households seeking to return home or resettle. Expanding sensitization programs, combined with progress on DDRRR, will do a lot to lay the groundwork for successful elections. Efforts to raise displace return rates or to minimize the precariousness of their settlement away from home areas, particularly for households from conflict-affected areas outside the confidence zone, could have a tremendous economic and social impact.

Finally, this report should serve as the basis for further evidence-based discussions of policy options. We hope that this will mark the beginning of the regularized use these methods as part of peacekeeping operations and evaluation.

 $<sup>^{2}</sup>$ The confidence zone was formally dismantled in September 2007. Nonetheless, for ease of exposition, we refer throughout the report to the areas that were formerly within the confidence zone as "confidence zone" localities.

<sup>&</sup>lt;sup>3</sup>Note that our excombatant sample was limited to former FAFN.

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## I. Scope and organization of the report

1. This report presents results from a survey of the population of Cote d'Ivoire conducted in the summer of 2008. The survey was part of a comprehensive evaluation of results, accomplishments, and overall performance of the United Nations Operation in Cote d'Ivoire (UNOCI). The evaluation has been commissioned by the Office of Internal Oversight Services (OIOS) of the United Nations. The main objectives of the survey were to: (i) provide a quantitative assessment of UNOCI's activities; and (ii) gauge the perceptions of ordinary civilians as well as former combatants about the effectiveness of UNOCI.

2. The study was organized according to elements from UNOCI's mandate as of August 2008. The mandate contains thirteen activity areas, which are as follows:

- a. Monitoring cessation of hostilities.
- b. Disarmament, demobilization, reintegration, repatriation, and resettlement of combatants (DDRRR).
- c. Disarmament and dismantling of militias.
- d. Assisting with voter identification and registration.
- e. Security sector reform (SSR).
- f. Protection of UN personnel, institutions, and civilians.
- g. Monitoring the arms embargo.
- h. Humanitarian assistance.
- i. Supporting redeployment of state administration.
- j. Support for organizing elections.
- k. Human rights assistance.
- l. Public information.
- m. Law and order.

3. The survey and report touch on many, though not all, of these mandated activity areas. The survey was never intended to address protection of UN personnel and institutions (although civilian protection is addressed), and so that is not covered here. We do not address disarmament and dismantling of militias or SSR. These latter omissions were largely because we could not secure cooperation with relevant national authorities during the survey implementation period. Law and order issues are only examined in terms of civilian perceptions of local lawlessness and associated insecurity. Nearly all of the analyses conducted below are based on the nationally representative survey of civilians in Cote d'Ivoire. Cooperation with FANCI troops could not be secured, and as such, all *combatant* views analyzed below are from a select group of past and present FAFN members (refer to the appendix for details). Voter identification/registration and elections support are discussed together in a section entitled "Electoral assistance." The conclusion focuses on implications for how UNOCI's eventual draw-down might be conducted, as well for prioritization in future peacekeeping operations.

4. A separate appendix to this report contains extensive details on the survey design, implementation, and characteristics of the civilian sample. We note here that the civilian survey was national in scope and drawn as a multi-stage probability sample of 1,206 adults (aged 15-60) currently residing in Cote d'Ivoire. The response rate was 87%. We used detailed data from Cote

d'Ivoire's national statistics office to discover and correct for any coverage problems. Mild weighting adjustments were used to ensure that the sample conformed to the best current estimates about the demographic characteristics of the civilian population. Survey interviews were conducted in local languages by an enumeration team that was extensively trained to minimize error and potential bias in the interviews. We are confident that the civilian sample is of very high quality, and combined with appropriate methods (also discussed in the separate appendix), it allows us to solidly describe the population.

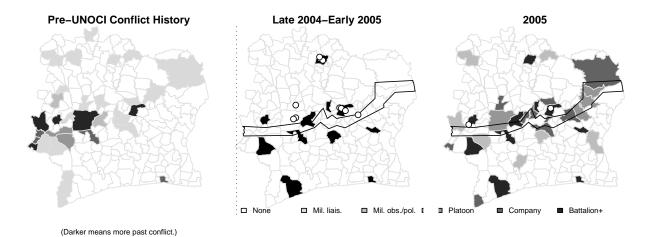


Figure 1: Conflict Events and PKO Deployments

Notes: The leftmost maps is colored according to levels of conflict that had taken place in the locality prior to UNOCI's 2004 deployment. Darker areas experienced more intense conflict. The right two maps are colored according to snapshots of the intensity of intervention forces in late 2004 and then in mid-2005, respectively. The shape outlined in black shows the confidence zone. The dots show sites of renewed major armed conflict events that occurred in the late-2004-early 2005 period and then in mid-late 2005, respectively. The data come from UNDPKO deployment maps and events data collected at the Peace Research Institute of Oslo.

## II. Exposure to UNOCI

5. Before beginning with the evaluation of impacts in mandate areas, a very brief word on the nature of interactions between UNOCI and the civilian population is in order. Here we provide some information on exposure to UNOCI military operations. Throughout the report below, we raise whenever relevant other types of exposure, such as witnessing meetings held on electoral affairs, radio listenership, and so forth. The survey asked about exposure to various types of patrols, and civilians responded that the most common form of exposure by far were vehicular patrols, with some 46% of the population having been exposed to vehicular patrols at least weekly. Exposure to other types of patrols (foot, helicopter), were very rare. With that background information, we now turn to evaluating UNOCI's impact with respect to mandated areas.

## III. Monitoring cessation of hostilities

6. To assess UNOCI's performance in monitoring hostilities, we examine (i) the geographic distribution of UNOCI's deployment relative to conflict events and (ii) perceptions of UNOCI's impact on potential re-escalation. UNOCI's initial deployment patterns corresponded only loosely to past conflict events, and predictably, some (about half) of the re-escalation events that took place in 2004-5 occurred within gaps in UNOCI's geographic coverage. However, in accordance with the aims of UNOCI's mandate, areas near the conflict-ravaged areas on the Liberian border were not sites of renewed hostilities.

7. The data suggest a slight decline in conflict escalation potential once UNOCI deployed. Interviews with combatants reveal that the confidence zone was perceived as an effective barrier to launching military attacks. Finally, with the exception of some areas in the North and West, civilian concerns about the possibility of renewed conflict tended to decline more quickly and more substantially in areas where peacekeepers were deployed. We elaborate below.

#### A. Deployments and major re-escalation

8. Conflict history and deployment patterns are displayed in the maps in Figure 1. As we can see, peacekeeping deployments corresponded rather loosely to past conflict history. A more thorough analysis—excluded for reasons of space—showed that less than half of the dozen or so localities with high levels of past conflict received major deployments (above company level), while 7 localities that had little or no major conflict before 2004 received major detachments. There are probably good reasons for this. But history of conflict in a locality is a good predictor of future fighting in that area—perhaps primarily because of terrain, but also because of underlying social factors. As such, gaps in UNOCI's early deployment pattern were the sites of new escalation in late-2004/early-2005 (particularly around Vavoua, Seguela, and M'bahiakro). However, the conflict ravaged-areas just on the border with Liberia saw no major re-escalation in the period after UNOCI's deployment. In addition, a number of re-escalation episodes occurred in places where UNOCI was deployed in force. These events may be indicative of the limited role that peacekeeping forces, in themselves, play in deterring conflict. In any case, inferring whether peacekeeping deployments affect conflict patterns for better or worse is an exercise fraught with difficulties.

#### **B.** Combatant perceptions

9. In addition to the events data, we used the survey to measure UNOCI's potential impact on combatant behavior. The survey asked the combatants in the sample to describe conflict and ceasefire experiences in the period after UNOCI deployed.<sup>4</sup> Only 4 combatants admitted to having been involved in *attacks* against the government in this period, and 30 claimed having been in units *attacked by* the government. Nonetheless, 55 combatants reported having fought their last battle in 2004 or later, of which 10 reported their last battle in 2005 or later. Incidents during this period were reported in Bouake, Danane, Fengolo, Logouale, Man, Sakassou, and Vavoua. Combatants reported on the extent of losses in the final battle in which they fought. For the 55 final battles described prior to 2004, combatants reported that their company suffered 30 deaths on average. The average falls to 17 deaths for the 30 final battles fought in 2004; it rises to 39 for final battles

<sup>&</sup>lt;sup>4</sup>As detailed above and in the appendix, all combatants in the sample were FAFN combatants. Cooperation with FANCI could not be secured, and therefore views from within those ranks are not incorporated into this report.

fought in 2005, although only 6 battles were reported during this period. Combatant estimates of civilian deaths in these final battles was 32 on average for pre-2004 battles, 21 for the battles in 2004, and 4 on average for the few battles reported in 2005. The duration of such final battles did not differ significantly in the different periods (approximately 3 days for all periods).

10. As a comment on the effectiveness of the confidence zone, 84% of combatants stated that the confidence zone made it more difficult for them to launch attacks (11% stated that it made things easier), and 73% stated that the confidence zone made it more difficult for their enemy to launch attacks (with 21% saying that it made things easier).

Table 1:	Index	of o	civilian	perceptions	of	$\mathbf{the}$	possibility	of	renewed	conflict:	average
values over regions and time periods											

$\operatorname{Region}^{a}$	2002-3	2003-12/2005	12/2005-4/2007	4/2007-present	% Change <sup>b</sup>
1a. No PKO, CNO, war	2.54	1.37	2.54	0.63	-75.00
2a. No PKO, CNO, no war	2.26	1.96	1.25	1.98	-13.00
3a. No PKO, SE, war			No obs. <sup><math>c</math></sup>		
4a. No PKO, SE, no war	2.28	1.58	2.01	2.19	-4.00
5a. No PKO, CZ	2.23	2.67	1.85	2.38	7.00
1b. PKO, CNO, war	3.00	2.38	2.68	1.92	-36.00
2b. PKO, CNO, no war			No obs. <sup><math>c</math></sup>		
3b. PKO, SE, war	2.50	2.14	2.30	2.21	-12.00
4b. PKO, SE, no war	2.84	No data <sup><math>d</math></sup>	1.81	2.25	-21.00
5b. PKO, CZ	3.14	2.08	2.34	2.10	-33.00

Notes: The table reports average values for an index measuring civilians' perceptions that renewed conflict was likely. See the text for details on the index. Larger values indicate stronger beliefs about the possibility of renewed conflict in ones locality. <sup>a</sup>Region containing respondent's prewar sous-prefecture of residence. "No PKO" and "PKO" indicate whether peacekeepers were stationed in the respondent's locality of residence. "CNO, war" is conflict-affected Center/North-west, "CNO, no war" is non-conflict-affected CNO; "SE, war" is conflict-affected South/East, "SE, no war" is non-conflict-affected SE; "CZ" is confidence zone.

<sup>b</sup>Measures the percent change between the first period and the last.

<sup>c</sup>All "SE, war" localities in the sample for which relevant data was available had peacekeepers. The opposite was true for "CNO, no war."

<sup>d</sup>Data was too sparse in this cell for reliable measurement.

### C. Evidence from civilians

11. Finally, civilians were asked to report on events and circumstances associated with the possibility of renewed conflict. Specifically, we asked civilians a series of "yes, no" questions about whether they witnessed or suspected inter-ethnic fighting, presence of armed groups, or recruitment by armed groups in their localities. The survey asked for this information with reference to four time periods: (1) around the time of the signature of the Linas-Marcoussis Accords in 2003, (2) the run-up to the installation of Charles Konan Banny's government in December 2005, the (3) run-up to the installation of Guillaume Soro's government in April 2007, and (4) the period since Soro's government was established.<sup>5</sup> For each respondent, of the "yes" responses were added together to

 $<sup>^{5}</sup>$ To make the survey less exhausting for respondents, we did not ask all respondents about all periods. Rather, all respondents were asked about the first period. Then, each respondent was asked about only one of the latter three periods, with that period being randomly selected. Thus, for each of the latter three periods, we gathered data from approximately 400 of the 1,206 civilian respondents.

create an index measuring perceptions of conflict recurrence likelihood.

12. Table 1 shows average values of these indices broken down by region and over the four periods. Overall, peacekeeping presence is associated with more rapid declines in perceptions that renewed conflict was likely. This was most clearly the case within the confidence zone. There, areas without peacekeeping deployments have actually seen a 7% *increase* from the first period to the last period in reports of activities presaging renewed conflict. The exception to this pattern was in the war-affected Center/North-west region (region 1a.) in the table, for which the non-peacekeeping regions saw a much more dramatic fall in numbers of reports of local conflict related activity (a 75% decrease from the first period to the last period in localities with no peacekeeping presence was associated with increases in civilian confidence in peace in all areas except the difficult region of the war-affected Center/North-west.

## IV. DDRRR

13. The survey asked questions about UNOCI's role in Cote d'Ivoire's DDRRR process, especially with respect to three key elements of the mandate: (i) assistance with the grouping of forces and provision for security of their disarmament, cantonment and demobilization sites; (ii) support of the implementation of the national DDR programme; and (iii) protection of weapon storage facility as well as disposal and destruction of surrendered weapons/ammunitions. It should be noted that the DDRRR process (especially the reintegration component) is in its early phase and thus it is premature to evaluate combatants' experiences with the DDRRR program. What follows are general comments about ex-combatants in our sample as well as their perceptions about ONUCI's role in the disarmament and demobilization. We do comment on how ex-combatants are faring (both economically and socially) and where appropriate, we draw comparisons with the civilian population.

## A. Describing the ex-combatant sample

14. There are 119 demobilized combatants in the sample, 12 of whom are female and the median age for the sample is 29 years old. Most demobilized combatants in our sample seem to be from FAFN's rank-and-file (the highest outgoing rank for most ex-combatants was *caporal* or lower). About half ex-combatants in the sample reported as having demobilized through the regrouping site of Bouake, while another 20% and 13% reported as having demobilized through the regrouping site of Kani and Man respectively. 13% stated that they demobilized through "other" sites or had not exited through a regrouping site. Finally, 67 ex-combatants (60%) stated that they surrendered their weapons, while 40% stated that they had not surrendered their weapons yet. 51 ex-combatants (45%) stated that they surrendered their weapons to FAFN military commanders, while 13 individuals (12%) reported as having surrendered their weapons to UNOCI peacekeepers.

#### B. UNOCI's provision of security during disarmament and demobilization

15. The survey asked two questions to get at ex-combatants' sense of security in regrouping sites. The first question asked whether ex-combatants feared their regrouping site would be attacked by loyalist forces and the second asked whether ex-combatants feared the weapons they had surrendered would be stolen loyalist forces. An overwhelming majority answered "no" to both questions

(82% to the former question and 89% to the later), suggesting that ex-combatants' sense of security in the regrouping site was high.

16. The question then is what (if any) impact did ONUCI have on this perceived high sense of security. We attempted to get at this by looking at basic statistical relationships between these perceptions of security inside regrouping camps and exposure to UNOCI peacekeepers. The survey used three measures of exposure: (i) proximity of regrouping sites to UNOCI positions; (ii) frequency of visits by UNOCI peacekeepers inside regrouping sites; (and (iii) frequency of meetings between UNOCI military officers and military commanders of regrouping sites. The majority of excombatants in our sample (63%) reported that UNOCI did not have positions near their regrouping sites, while 35% stated that UNOCI had peacekeepers stationed near their regrouping site. However, an overwhelming majority stated that UNOCI peacekeepers visited their regrouping sites sometimes or quite often (27% and 56% respectively). Another 11% reported that UNOCI peacekeepers visit their site occasionally, while only 4% reported never having seen UNOCI peacekeepers visit their regrouping sites. The pattern of responses is quite similar with respect to the question about the frequency of meetings between UNOCI military officers and military commanders of regrouping sites. 22% reported sometimes, 63% stated often, 9% reported occasionally and only 3% reported they never saw UNOCI military officers holding meetings with military commanders of their regrouping sites.

17. We do not have a clear idea about how these relatively high levels of exposure to UNOCI might have impacted ex-combatants sense of security inside regrouping camps. Basic correlations (not shown here) between the two proxies for security provision on the one hand and ex-combatants' perceived sense of security on the other hand are very weak to nonexistent. Likewise, there is no association between self-reported measures of proximity of ex-combatants' regrouping sites to ONUCI position and their self-reported sense of security.

#### C. UNOCI's support for reintegration

18. As noted, we are not in the position to fully evaluate this aspect of the ONUCI's mandate, both because the national DDRRR program is still in its early stage and only limited reintegration activities have taken place so far. However, we can still comment on the extent of participation in the national programme, the general economic outlook of ex-combatants in our sample as well as the state of their relations with family members and other residents of their host communities.

19. Ex-combatants in our sample are evenly split between those who are currently participating in the national DDR program (51%) and those who are not participating (46%). About 50% of respondents who stated that they are not participating in the national DDRRR program did not provide a reason for not participating, but half of those who provided reasons cited "not being informed about the programme." The majority of those participating in the national programme (67%) choose farming for reintegration option, followed by 24% who choose "petites affaires" (small commerce). Other reintegration options such as formal schooling/vocational training or construction were hardly chosen (no option was represented by more than 4% in the sample). Nearly everyone among those who are participating in the DDR program stated that they were very satisfied or somewhat satisfied with their chosen reintegration option and (actual numbers are 46% and 48% respectively). Finally, 59% of those participating in the national DDR programme reported that they had met with a counselor before choosing their reintegration option, while 41% reported that they did not meet with a counselor and every one who had met a counselor reported that the advice given was very helpful. While 52% of respondents who did not meet a counselor reported that they would have like to meet a counselor before choosing, 38 percent stated that they would not.

## D. Economic reintegration

20. Generally, ex-combatants in our sample do not appear to have a positive outlook on current economic conditions. 90% stated that their current economic conditions are either terrible (46%) or bad (44%). Only 10% reported that they current economic conditions are good. Figures for the civilian sample are not that different, however: there are slightly less respondents who reported as being good economic conditions (31%) and slightly more respondents who reported as being good economic conditions (23%). However, when asked to compare their current economic conditions to those of civilians and current members of the military, a combined 83% of ex-combatants stated that their current economic conditions are worse or worst than those of civilians in their communities. 14% reported being in similar conditions as their civilian counterparts, while only 2% reported as being in better conditions. The results are somewhat similar when asked to compare their economic conditions to those of current members of the military. A combined 77% of ex-combatants stated that their current economic conditions are worse or worst than those of the current members of the military. A combined 77% of ex-combatants stated that their current economic conditions are worse or worst than those of the current members of the military in their communities. 17% reported being in similar conditions as their military counterparts, while only 3 percent reported as being in better conditions.

21. With respect to employment, the survey actually asked about current occupation (rather than employment per se). Save for 24% of ex-combatants in the sample who currently involved in animal farming (elevage), most demobilized combatants are either without an occupation (43%) or engage in petty jobs (11%). The corresponding figures for civilians are 8% without an occupation and 13% petty jobs.

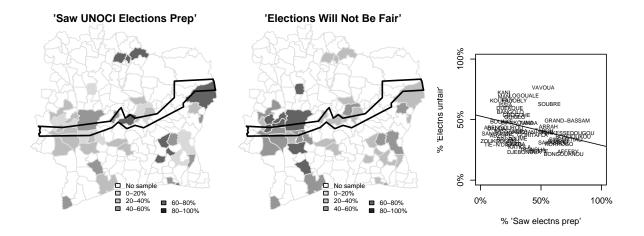
22. It should be noted that before the war, more than 90% of combatants in our sample had some form of occupation (i.e. taxi-drivers represented 6%, students 8%, mechanics 9%, farmers 10%, regular car drivers 13% and small business owners 24%). These prewar and postwar differences in ex-combatants' occupational statuses are probably temporary rather than permanent and perhaps due to the fact that the DDRRR national programme has not been fully operational yet. Either way, there should be swift correction as delays or failure to adjust back to pre-war distributions could result in unmanaged expectations that might seriously threaten the peace process. This is especially so given that the majority of ex-combatants cited employment issues as something that would lead them to pick up the guns again. A combined 53% of ex-combatants who answered the question about what (if anything) would lead them to fight again cited either lack of permanent employment (25%) or discrimination (28%). At the same time, only 1% of ex-combatants cited lack of acceptance in their families or community.

23. Furthermore, DDRRR seems to have created bottom-up pressures from among the rankand-file to seek a cessation of hostilities (and disarming eventually). The survey asked combatants to discuss how they understood the reasons for their side ceasing hostilities. About 90% of combatants favored their commanders' decisions to cease fighting. We asked combatants (unprompted) to share the reasons that their commanders gave for ceasing hostilities. The most common response, volunteered by 77 respondents, was that cessation of hostilities would allow combatants to receive money or employment opportunities via the DDR program. Note however that the 77 who volunteered that response are less than 30% of combatant respondents overall, and many also referred to the need to respect the ceasefire as well as satisfaction with terms of the peace agreement. Nonetheless, it is clear that managing these expectations should be a top policy priority.

## E. Social reintegration

24. On measures of social reintegration such as membership in churches or mosques, participations rates are high for both ex-combatants and civilians (61% and 67% respectively) and respondents in both groups reported that the churches or mosques they attend are mixed rather than exclusive to one category. On other measures, however, there seems to be a stark difference between excombatants and civilians. While the rates of membership in a variety of socio-cultural associations are generally low, these are even lower for ex-combatants represented in our sample. For instance, 19% and 23% of civilians stated that they have membership in cultural groups and sport clubs respectively. The corresponding numbers for ex-combatants are about 0 and 6% respectively. There also seems to be some differences in perceptions about the ease with which ex-combatants can be distinguished from civilians within communities. 50% of ex-combatants reported that it is relatively very easy (36%) or somewhat easy (14%) to distinguish ex-combatants from civilians in their communities, while 48% of ex-combatants reported that it is somewhat difficult (19%) or very difficult (29%) to do so. In contrast, only 27% of civilians reported that it is relatively very easy (21%) or somewhat easy (6%) to distinguish ex-combatants from civilians in their communities, while 66% of civilian respondents reported that it is somewhat difficult (10%) or very difficult (56%) to do so. It is not clear why there is such (unjustified) high-level of self awarness on the part of ex-combatants

#### Figure 2: Penetration of electoral preparation and perceptions of electoral unfairness



Notes: The leftmost map shows the percentage of civilians in each locality that can confirm that UNOCI had organized meetings locally during which elections issues were discussed. The map in the middle shows percentages of civilians believing the forthcoming elections are likely to be unfair. The graph to the right shows the strong relationship between these two factors.

## V. Electoral assistance

25. UNOCI's mandate called for the provision of assistance in voter registration and organization of presidential and legislative elections. The data show that UNOCI's efforts to meet with locals across the country on election issues are strongly associated with heightened confidence in the likely fairness of the forthcoming elections. But problems are apparent in the western confidence zone localities, which were characterized by high levels of doubt about likely electoral fairness combined with high levels of concerned about how the slow pace of disarmament will compromise electoral fairness. The implication is that the current security plans for the election may need some further thought, and progress in disarmament is of utmost importance in order to ensure successful elections. In addition, an enormous amount of work remains in registering voters and otherwise laying the groundwork for the elections; as an indication, less than 2% of civilians are able to confirm whether they have been identified and registered to vote. Finally, support for UNOCI's presence during and after the elections is very regionally-specific, with civilians in the North, West, and confidence zone being welcoming, and civilians in the South and East being less likely to support a sustained UNOCI presence. We elaborate on these findings below.

26. The spread of UN electoral programming is associated with more confidence in the fairness of forthcoming elections. The maps in Figure 2 show, on the left, percentages of civilians across the country who think that forthcoming elections will likely be unfair, and on the right, percentages of civilians across the country who can confirm that UNOCI organized meetings on electoral affairs in their community. The graph to the right shows the strong relationship between these two factors. For example, if the number of people exposed to UNOCI electoral programming increases from 25% to 75% in a locality, the number of people who doubt the likely fairness of upcoming elections is predicted to decrease from about 50% to about 35%, a substantial gain in confidence. Despite high levels of concern in the western confidence zone localities, we note that perceptions of electoral fairness were not clearly associated with local conflict history or perceptions of local lawlessness and insecurity. Those who did recognize UNOCI's electoral assistance role tended to emphasize UNOCI's meetings with local leaders and citizens to raise awareness about the electoral process. This appreciation varied greatly from region to region, as indicated by the left-most map in Figure 2. Less than 10% of people were estimated to be able to confirm that UNOCI was otherwise engaged in electoral preparations—e.g. with assistance in completing voter rolls, registration, or observer training.

27. As the plot on the right in Figure 2 shows, just under half the population (about 42 %) doubts that forthcoming elections would be fair. We asked for people's reasons for their doubts. People's concerns were coded as falling into one of three categories: (i) concerns about dishonesty—that is, general political distrust and a belief that politicians in Cote d'Ivoire were, on the whole, dishonest; (ii) concerns about disorganization—that is, a sense that preparation for the elections was disorganized, being rushed, or otherwise inadequate; (iii) concerns about insecurity—that is, a sense of concern over the fact that disarmament was lagging, armed groups were still active, and the resumption of war seemed a real possibility. Table 2 shows the results, broken down by region, conflict affectedness, and whether peacekeepers were based in an individual's locality. The results clarify the nature of UNOCI's effect on confidence in the electoral process. For the war-affected Center/Northwest, we see an enormous increase in political confidence in areas with peacekeepers; nearly all of this difference is attributable to changes in perceptions about whether insecurity will undermine elections. Similarly, in the non-war-affected South/East, we see large increases in political confidence in areas with peacekeepers, although the reasons for this increase

Region <sup>a</sup>	Fair		Unfair		
		Dishonesty	Disorganization	Insecurity	Other
1a. No PKO, CNO, war	16(5)	17(9)	8 (2)	59(2)	0
2a. No PKO, CNO, no war	35(10)	14(7)	12(2)	30(9)	9(4)
3a. No PKO, SE, war			No obs. <sup><math>c</math></sup>		
4a. No PKO, SE, no war	61(6)	14(3)	13(4)	9(2)	3(1)
5a. No PKO, CZ	72(6)	12(5)	3(3)	9(4)	4(3)
No PKO, total	59(5)	14(3)	11(3)	13(3)	4(1)
1b. PKO, CNO, war	64 (6)	12(2)	6(3)	14(2)	4(2)
2b. PKO, CNO, no war			No obs. <sup><math>c</math></sup>		
3b. PKO, SE, war	58(5)	10(3)	15(4)	10(2)	8(2)
4b. PKO, SE, no war	95 (2)	0	2 (>1)	0	3(2)
5b. PKO, CZ	43 (11)	2(1)	10(6)	39(11)	5(2)
PKO, total	58(4)	9(2)	12(3)	14(2)	7(2)
Nationwide	58(4)	11(2)	12(3)	13(2)	6(2)

Table 2: Will forthcoming elections be fair? If not, why? (%)

Notes: Percents given for each row, with standard errors in parentheses. If no standard error is reported, then no observations were recorded for that cell, in which case standard errors are not available.

 $^{a,b,c}See$  Notes a, b, and c in Table 1.

are attributable to large decreases in all types of concerns. In the non-war-affected Center/West, we have no areas where peacekeepers were deployed, so we cannot make inferences about the effects of peacekeeping; however, we do note that insecurity concerns dominate among those skeptical about elections. All respondents in the war-affected South/East came from areas where peacekeepers were deployed; as such we cannot make inferences about the effects of peacekeepers there either, but we do note that concerns about disorganization predominate among skeptics there. An unusual situation holds for the confidence zone localities. There, peacekeepers' presence is associated with much greater skepticism about elections, with insecurity concerns dominating this difference. This may be attributable to much higher concentrations of former combatants in the areas with peacekeepers, or to other aspects of the war history of these localities.

28. These results indicate that progress in DDR—particularly disarmament of combatants in the confidence zone localities and in the Center/Northwest areas—is of utmost importance in the run-up to elections. Left unaddressed, this is a serious issue, as the current security plan for the upcoming elections would have *factions* providing elections security in territories that they control. If the fact that these very forces have not yet disarmed is the cause of concern about electoral fairness, then it would seem that this is a dangerous strategy. After DDR, a priority area should be in assisting with logistical preparations for the elections. In particular, much could be done in assisting with completion of voter rolls and registration. The survey indicates that as of August, 97-99% of people could not confirm that they had been identified and registered.

29. Finally, the data reveal strong regional trends in attitudes about how long UNOCI should stay after the elections. Civilians in the Center/North-west, and confidence zone tend to believe that UNOCI should stay on in the country well-after the elections; civilians in the South/East show less interest in a prolonged role. The survey also showed that approximately 70% of civilians considered the UNOCI's presence helped to ensure that elections would be more free and transparent; this figure did not vary significantly across regions.

Region	Leave now	Just after elect'n	Long after elect'n
Center/Northwest, war-affected	8	17	74
Center/Northwest, not war-affected	6	10	84
South/East, war-affected	13	29	59
South/East, not war-affected	16	27	57
Confidence zone	12	10	78
Nationwide	13	24	63

#### Table 3: When Should UNOCI Leave? (%)

Notes: Percents given by region. Adjusted  $\chi^2$  yields  $p \approx 0$ .

## VI. Humanitarian assistance

30. UNOCI's mandate calls for supporting humanitarian assistance in the country. On this score, as elaborated below, UNOCI seems to have come up with the *right geographic distribution* of assistance, *but overall levels of assistance were too low* to convince even half of civilians in Cote d'Ivoire that UNOCI has played a major humanitarian assistance role.

31. These conclusions are illustrated by the maps displayed in Figure 3. The maps show estimates of the mean number of people in a locality volunteering a view that UNOCI provided (i) no humanitarian assistance, (ii) indirect humanitarian assistance by working with local leaders, or (iii) assistance to civilians. Indirect assistance—via assistance to leaders—included protection of politicians, meeting with local leaders, or meeting with military leaders stationed locally. Direct assistance to civilians included protection of civilians, provision of humanitarian aid (e.g. distributing water, medicine, food, etc.), or infrastructure projects.

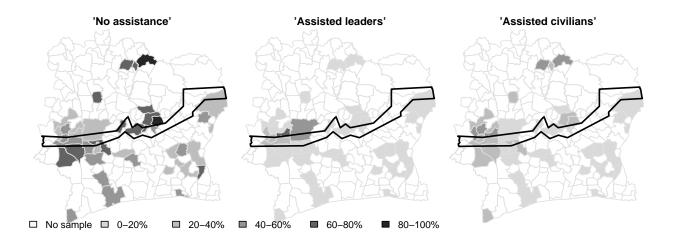
32. A first point to take away from the data and the maps is that the most common response overall was to claim that UNOCI played *no* role locally in humanitarian assistance. Nationwide about 50% of people hold this view, and in parts of the North, over 60% and sometimes over 80% of locals hold this view. About 11% nationwide believe that UNOCI provided indirect assistance via assistance to leaders, and 20% believe that UNOCI provided some form of direct humanitarian assistance.

33. But a second point to take away is that the geographic region where views tend to be most appreciative of UNOCI's humanitarian assistance role are in the confidence zone localities near the Liberian border. These areas were hit hardest by the war, and UNOCI's mandate called for special attention to be paid to these areas. At least in relative terms, UNOCI has done so, with an estimated 30% to 50% of people in these localities holding the perception that UNOCI has been active indirectly or directly in humanitarian assistance.

## VII. Civilian protection and insecurity

## A. Preventing violence and victimization

34. Corresponding to UNOCI's mandate to "protect civilians under imminent threat of physical violence," the survey examined the *direct* impact of UNOCI's deployments on levels of civilian victimization due to violence. We stress "direct" because UNOCI's main contributions to the physical well-being of civilians probably came in the form of *indirect* benefits. That is, to the extent that UNOCI's presence helped to prevent the re-escalation of the conflict, it greatly reduced



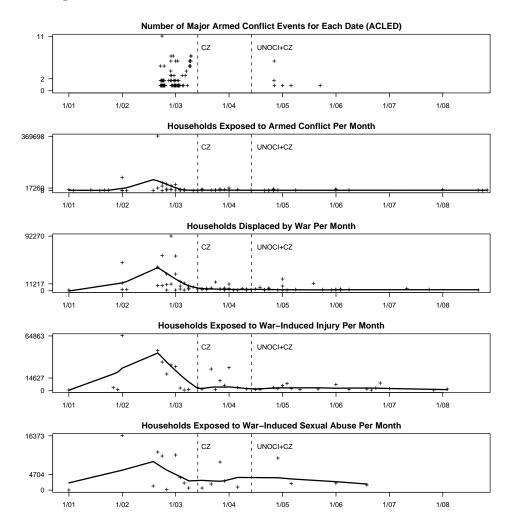
#### Figure 3: Perceptions of UNOCI's humanitarian assistance role

Notes: The black outline on the maps shows the confidence zone, where UNOCI's activities were concentrated. The shading indicates the estimated percentage of people in a locality who would state that UNOCI provided (i) no humanitarian assistance, (ii) assistance to leaders, or (iii) assistance to civilians. The latter two responses are not exclusive—a respondent could indicate that both assistance to leaders and civilians was provided.

the possibility of civilian victimization. As we detail below, the data suggest that the direct impact was negligible, mostly because victimization levels had already fallen to very low levels by the time UNOCI had arrived on the scene (from 39% of the population experiencing victimization events in the pre-2004 period to only 6% in the post-2004 period). But UNOCI's presence nonetheless offered comfort. The survey asked in an unprompted manner to which armed forces civilians would want to turn if their physical security were somehow threatened. Respondents could mention any number or combination of forces. The survey suggests that 90% of civilians would want to turn to UNOCI, 75% to FANCI, 35% to Licorne, and 10% to the FAFN. Thus, even if UNOCI had little to do on this front (relative to wartime), their presence was appreciated in case threats *were* to arise.

35. To clarify the point about a negligible direct impact, we can begin with 36. Figure 4. The figure shows trends in monthly conflict and victimization levels from 2002 to 2008. (Each dot is an estimated number of conflict events or victimization episodes in the corresponding month.) Here, victimization is broken down into having armed conflict take place in one's community of residence ("exposed to armed conflict"), having to move out of one's community of residence because of conflict ("displaced by war"), having oneself or one's family suffer physical injury ("war-induced injury"), or having a member of one's family suffer sexual abuse ("war-induced sexual abuse"). We estimate, roughly, the general extent of victimization. Average monthly victimization levels for the pre-UNOCI (2002-3) period are shown on the left axes of the graphs (the maximum estimated monthly rates are also shown). Reading down the graphs, we see that amidst the fighting in 2002 and 2003, approximately 17,000 households per month on average were exposed to armed conflict, approximately 11,000 households per month experienced a displacement episode, approximately

15,000 families per month had members who experienced war-induced injury, and approximately 5,000 families per month had a member that experienced sexual abuse related to the war. All of these types of victimization peaked in the period of intense fighting in late 2002/early 2003.



#### Figure 4: Trends in Conflict and Victimization Over Time

Notes: The top graph shows armed conflict event counts, and the bottom four graphs show estimates of monthly victimization rates with trend lines (lowess fits). The dashed vertical lines mark starts of the confidence zone and UNOCI deployment. The maximum and average pre-UNOCI levels are on the vertical axes. For readability, the y-axes are scaled to these maxima, rather than to a common scale.

37. The graphs show clearly that UNOCI arrived on the scene after a year-long lull in the fighting and a consequent reduction in victimization rates. The lull commenced upon the establishment of the confidence zone. The data show how far victimization rates had fallen by the time of UNOCI's arrival. Indeed, only 84 civilian respondents (out of 1,206) reported experiencing any of the above types of victimization after UNOCI's arrival. Based on these numbers, we can estimate that about 6% of households or families experienced some type of victimization from 2004 to 2008. The corresponding figure for the period of war from 2002 to 2004 is an astonishing 39%. We cannot know precisely how much UNOCI contributed to these low victimization rates after 2004. But we can examine the data to see if there is any reason to believe that proximity to UNOCI operations was associated with higher or lower rates of victimization. We found that none of our measures of proximity showed a strong relationship to victimization risk.<sup>6</sup>

38. Geographic variation in post-2004 victimization mostly reflects the geography of renewed hostilities in late 2004 and 2005.<sup>7</sup> Victimization rates were more than double for respondents currently or previously living in areas that experienced renewed fighting in 2004-5 (approximately 5-6% in nonconflict localities versus 10-14% in conflict localities).<sup>8</sup> There were no other apparent regional patterns in victimization rates.

39. Demographic variation in post-2004 victimization points to ethnicized violence. Most demographic characteristics had no clear relationship to victimization risk. The exception was that ethnic Mande were almost three times more likely to experience post-2004 victimization relative to ethnic Akan (11% versus 3%).<sup>9</sup>

#### B. Return of war-displaced households

40. An important measure of the restoration of normalcy is the return of war-displaced households to their areas of origin. On this score, UNOCI's measurable impact has been mixed. UNOCI presence was associated with higher rates of return in confidence zone localities, which were up to an extraordinary 44% by 2008, but more detailed information would be required to say for sure that this was the effect of UNOCI. We do see that UNOCI's presence seems to have done little to induce return of the many households displaced from war-affected localities outside the confidence zone.

41. We estimate that approximately 30% of civilian households *currently reside* in places different than their 2002 home locations, although violence-induced changes in locality account for approximately one third of these. Presumably indirect effects of war as well as normal economic considerations (e.g. job seeking) explains much of the other two-thirds of relocations. Thus, about 10% of the population overall is currently "war-displaced." We estimate that about 12% of house-holds were violently displaced but have *since returned* to their pre-war home localities. Thus, among households residing within Cote d'Ivoire today, some 22% experienced a violent displacement episode at some point, and just over half of those have returned to live in their prewar localities. We do not consider refugees still residing outside Cote d'Ivoire in this calculation. As of August 2008, localities hosting the largest shares of war-displaced households include Abidjan (32% of displaced households currently residing there), Tabou (10%), Tie N'Diekro (7%), Oume (6%), Bongouanou (5%), as well as Daloa, Djebounoua, and Sassandra (4% each).<sup>10</sup>

<sup>&</sup>lt;sup>6</sup>We examined (i) proximity to UNOCI forces based on both UNDPKO documentation as well as survey respondents self-reports; (ii) location relative to the confidence zone; and (iii) reports of whether UNOCI engaged in humanitarian assistance in one's locality.

<sup>&</sup>lt;sup>7</sup>This map is excluded since it offers no new insights.

<sup>&</sup>lt;sup>8</sup>This may understate the actual relationship between proximity to conflict and victimization risk, because the survey does not provide fine-grained enough information on respondent locations for us to ascertain whether respondents passed through conflict localities en route to their current residence.

<sup>&</sup>lt;sup>9</sup>Differences between other pairings of ethnic groups were not significant.

<sup>&</sup>lt;sup>10</sup>The extent of displacement came as a surprise to us, and thus the survey did not contain follow-up questions that would allow us to investigate this issue in much detail. We consider this to an area where additional study should be undertaken.

42. Table 4 shows estimates of displaced household return rates. Taking all the data on displaced persons' returns together, UNOCI's presence has generally been associated with slower rates of return.<sup>11</sup> However, this estimate maybe unjustifiably negative, affected as it is by sparsity in the data in some key comparison regions. Rather, it may make more sense to focus in on some key regions. When we do so, we see that UNOCI troop deployments corresponded with a great increase in rates of return for households that were displaced from *confidence zone* localities. By 2008, return rates in confidence zone localities with UNOCI presence reached an estimated 44.4%. It is not clear whether we can attribute this affect to UNOCI troops' presence, since there are too few observations in comparable localities with no peacekeepers with which to make comparisons. But such a high return rate are extraordinary. In non-UNOCI confidence zone localities, many displaced had already returned by 2004; following that, return rates have been low, although sample numbers for the latter are too small for precise estimation. In war-affected Centre/Nordouest and Sud/Est localities, return rates for the large numbers of displaced from those regions have barely risen above a trickle for localities where UNOCI has been deployed—ranging from 0 to only 3.5%. The difference compared to return rates in the confidence zone localities is enormous. Thus, displaced households from the war affected areas *outside* the confidence zone clearly deserve heightened attention.

<sup>&</sup>lt;sup>11</sup>This overall relationship is summarized by the conditional logit regression coefficients shown in Table 4.

			Year				$Statistic^{c}$	Home reg. <sup>b</sup>	$Status^a$
2008	2007	2006	2005	2004	2003	2002		Regr. $coef.^d$	
4	10	10	9	11	81	57	n	CNO,war	No PKO
5676	31302	31302	29484	32035	130852	97869	$\hat{N}$		
0	8564	0	0	2551	14223	690	$\hat{R}$	$\beta = 0^e$	
0	27.4	0	0	8	10.9	0.7	$\hat{r}$		
6	8	9	11	12	9	5	n	CNO,peace	
7991	10348	14083	15120	17536	10868	7980	$\hat{N}$		
763	0	3735	1037	2416	0	0	$\hat{R}$	$\beta \approx 0$	
9.5	0	26.5	6.9	13.8	0	0	$\hat{r}$		
				4	29	20	n	SE,war	
		no obs. $^{f}$		7708	66960	41576	$\hat{N}$		
				0	16876	2937	$\hat{R}$	$\beta = 1.1^{**}$	
				0	25.2	7.1	$\hat{r}$		
1	2	2	2	2	3	2	n	SE,peace	
522	1970	1970	1970	1970	2411	1889	$\hat{N}$		
0	1448	0	0	0	0	0	$\hat{R}$	$\beta =3$	
0	73.5	0	0	0	0	0	$\hat{r}$		
6	6	7	12	37	80	51	n	CZ	
12746	12746	12942	19745	53129	138447	98821	$\hat{N}$		
0	0	196	1330	17924	25197	7796	$\hat{R}$	$\beta = 1.0^{**}$	
0	0	1.5	6.7	33.7	18.2	7.9	$\hat{r}$		
61	59	60	62	63			n	CNO,war	РКО
110293	94956	92928	96389	91889		no obs. $^{f}$	$\hat{N}$	,	
3781	1726	489	3462	1796			$\hat{R}$	$\beta = -1.1^{**}$	
2	1.3	1.1	2.5	3.4			$\hat{r}$	<i>]</i> ≈	
3	1	1	1	1			n	CNO,peace	
2706	348	348	348	348		no obs. $^{f}$	$\hat{N}$		
0	0	0	0	0			$\hat{R}$	$\beta = .^{g}$	
0	0	0	0	0			$\hat{r}$	1-	
23	24	25	26	21			n	SE,war	
50065	50628	51816	53724	44827		no obs. $^{f}$	$\hat{N}$		
496	563	1188	1908	0			$\hat{R}$	$\beta = -1.3^*$	
1	1.1	2.3	3.6	0			$\hat{r}$	1	
2	2	2	2	2			n	SE,peace	
615	615	615	615	615		no obs. $^{f}$	$\hat{N}$		
0	0	0	0	0			$\hat{R}$	$\beta = .^{g}$	
0	Õ	Õ	0	Õ			$\hat{r}$		
24	28	37	36	30			n	CZ	
51818	54790	71089	69468	64003		no $obs.^f$	$\hat{N}$		
23033	2972	16299	5728	11201			$\hat{R}$	$\beta = .7^*$	
		10-00	00			1		/ ··	

Table 4: Return of war-displaced households to pre-war home localities

Notes: The number of displaced households in the sample for which full information was recorded was 234. <sup>a</sup> Categorizes households based on whether peacekeepers are stationed in prewar sous-prefecture of residence for given year. <sup>b</sup> Region containing household's prewar sous-prefecture of residence: "CNO, war" is conflict-affected Center/North-west, "CNO, peace" is non-conflict-affected CNO; "SE, war" is conflict-affected South/East, "SE, peace" is non-conflict-affected SE; "CZ" is confidence zone. <sup>c</sup> Statistics: n is number of sample households that were displaced at the start of the year. Based on n and the sample weights,  $\hat{N}$  estimates the number of households in the population displaced at the start of the year.  $\hat{R}$  estimates how many out of  $\hat{N}$  returned home that year.  $\hat{r}$  is the return rate, expressed as a percentage (i.e.  $100*\frac{\hat{R}}{N}$ ). Estimates are based on sample weights. <sup>d</sup> Coefficient from a conditional logit regression. \*\* indicates p < .01, \* indicates p < .1. <sup>e</sup> Reference category in regression. <sup>f</sup> Peacekeepers were stationed in all sampled "SE, war" sous-prefectures, and peacekeepers were not deployed prior to 2004. <sup>g</sup> Insufficient observations to identify regression coefficient.

## C. Limiting household economic losses

43. Reducing household-level economic losses comes under UNOCI's humanitarian assistance mandate to facilitate the free flow of people and goods. UNOCI's presence (or circumstances related to UNOCI's presence) were associated with *less severe economic losses* experienced by households. The data suggest an important link between peacekeeping and economic well-being may come via facilitating the return of displaced households to their home localities.

44. Measures of pre-war and current household possessions were used to construct pre- and post-war household economic welfare indices as well as a measure of economic change. The indices combine measures of possessions, domicile quality, income, and amount of food consumed regularly. The result is a single number that measures economic well-being.<sup>12</sup> For the economic change index, households achieve a negative score when their current situation is worse than the pre-war situation; positive scores reflect improvements relative to the pre-war status quo.

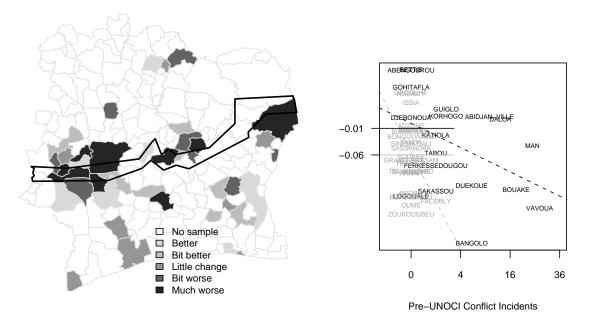
45. As the map in Figure 5 displays, the areas that have been the hardest hit economically include those near the Liberian border where fighting was intense, as well as other localities within and along the confidence zone. The graph to the right of the map in Figure 5 shows just how much conflict history is associated with economic hardship. The graph indicates that after conflict history is taken into account, peacekeeping deployments were associated with less severe economic losses. The graph shows two ways to view this fact. The most generous interpretation is given by the diagonal dashed lines, which show the estimated regression lines for peacekeeping and non-peacekeeping localities. By this measure, peacekeeping was associated with a large and significant reduction in the severity of economic losses. Despite the good fit to the data for peacekeeping localities, note that the regression comparison forces us to extrapolate far beyond the data for the none-peacekeeping localities. A very conservative estimate is given by the space between the short horizontal lines to the left of the graph. These lines indicate average economic loss levels in peacekeeping and non-peacekeeping localities. While peacekeeping localities score better by this measure, the difference is not significant. We believe that the truth lies somewhere between these two estimates.

46. A factor that shows signs of linking peacekeeping to economic welfare is the positive relationship between peacekeepers and resettlement of formerly displaced households. We have already seen that in the confidence zone localities, peacekeeping presence was associated with heightened return rates. Contributions to such resettlement help to reduce the severity of economic loss. When we divide the economic change scores into "worst-off," "middle," and "best-off" categories, we find that 42% of displaced households are in the "worst-off" category, as compared to only 19% of settled households.<sup>13</sup> Other factors, such as reports of humanitarian assistance or regular patrols had no consistent relationship with economic outcomes.

 $<sup>^{12}</sup>$ The indices do not translate directly into tangible economic quantities. Nonetheless, we feel that the index provides a better measure than monetary income. First, as a developing country with a large rural base, many needs are met through goods being handed down or exchanged without money. We estimate that some 20-25% of the population obtains most of their food from sources other than markets (e.g. by growing or catching food by themselves). Second, income streams are often irregular in economies such as this. Thus, responses to questions about "monthly income" can be misleading. Rotated factor scores on the items listed above were used to produce the indices.

 $<sup>^{13}</sup>$ The middle category consists of those with economic change scores roughly equivalent to no change in economic well-being. An estimated 51% of the population fall in this category. Those below and above this score were assigned "worst off" and "best off," respectively.

Figure 5: Household economic change, by locality and over conflict incidence levels



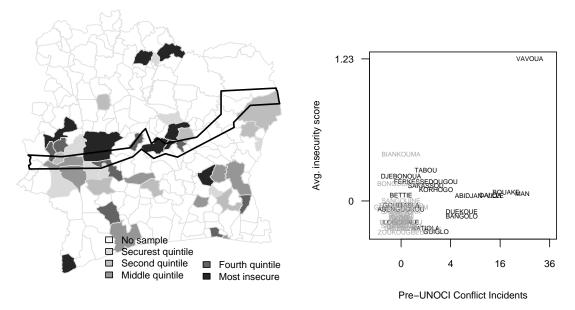
Notes: The map on the left gives average household economic change for each locality in the sample. In the graph to the right, localities' average change in economic welfare is graphed over past conflict history. Black names and lines correspond to areas with peacekeepers, gray corresponds to areas where they were not. The dashed lines show regression fits; the short solid lines show average changes in economic welfare for peacekeeping and non-peacekeeping cases that overlap on the conflict incidents dimension.

## D. Lawlessness and local insecurity

47. Figure 6 shows regional variation in general feelings of insecurity attributable to lawlessness. The shading on the map and the values plotted along the vertical axis are from an index that combines information on respondents' experiences and fears of theft, assault, or other personal violations in their locality. There is no clear relationship between this type of insecurity and either conflict history or peacekeeping deployments.

48. The survey also studied perceptions about security specific to the confidence zone. Overwhelming majorities of civilians understand, unprompted, that the objective of the confidence zone has been to prevent military clashes between the armed forces and to provide protection to the civilian population (98% and 91%, respectively). Nonetheless, most respondents nationwide (52%) disagree with the idea that civilians within the confidence zone are more secure than those outside. As reasons for this, civilian respondents emphasized primarily and in equal measure (i) "chaos" and a lack of law and order (57% among those who said confidence zone residents were less secure), and (ii) the likelihood that confidence zone residents will be victims if the war were to resume (59%). 38% of those who thought confidence zone residents were less secure emphasized a lack of confidence in the "impartial forces" guarding the zone; and after further probing, the primary reasons for this lack of confidence were a sense that the impartial forces had not "mastered the terrain."

Figure 6: Average insecurity scores, by locality and over conflict incidence levels



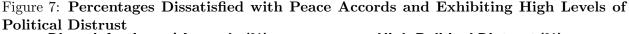
Notes: The map on the left gives average individual insecurity scores for each locality in the sample. In the graph to the right, localities' average insecurity scope is graphed over past conflict history. Black names and lines correspond to areas with peacekeepers, gray corresponds to areas where they were not.

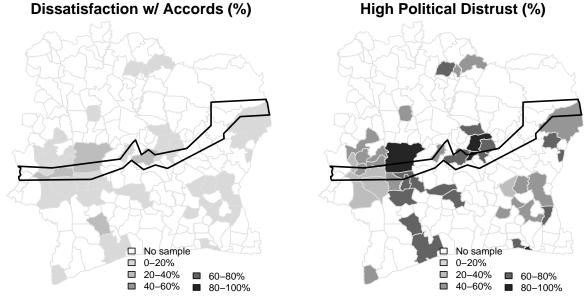
## VIII. Re-establishing political order

49. In line with UNOCI's mandate to facilitate the redeployment of state administration, we study civilian attitudes toward the political settlement, as well as the restoration of local authority. Overall, levels of dissatisfaction with the Ouagadougou Accords were quite low—no community had more than 35% of civilians stating that they were dissatisfied. We also find that perceptions of electoral unfairness and dissatisfaction with the Accords are not fully explained by a general skepticism about politics. In asking about the content of the Accords, civilians across the nation tend to stress reconciliation primarily, with some regional variation arising in levels of attention to disarmament, nationality issues, and the primary beneficiaries of the political settlement. Finally, a study of the restoration of local authorities finds that authorities tended to be restored more quickly in areas that suffered from higher conflict intensity, and that once this is taken into account, there was no significant difference in the timing of restoration between communities with and without peacekeepers. We detail these findings below.

## A. Political trust and satisfaction with political settlement

50. Figure 7 maps levels of dissatisfaction with the Ouagadougou Accords as well as and levels of political distrust. Nationally, only 16% of civilians state that they were dissatisfied with the Accords, and no community registered a dissatisfaction percentage above 35%. Our political distrust measure combines responses to questions about whether respondents believe that politicians are concerned with citizens' welfare, have an interest in helping people like the respondent, and whether civilians should generally be patient with respect to government action. For each locality,





Notes: The map on the left shows the percentages of civilians in localities that stated that they were not satisfied with the terms of the Ouagadougou Peace Accords. The map on the right shows percentages of civilians in localities with high "political distrust" scores. The distrust scores are created by combining responses to a set of questions on attitudes toward government.

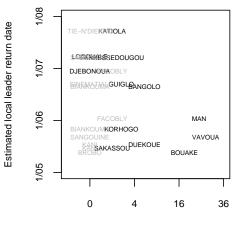
the map shows the percentage of civilians who have political distrust scores above the national average. Interestingly, community political distrust levels are not strongly correlated with the electoral unfairness measure displayed in Figure 2 or the measure of dissatisfaction with the Accords; thus, the concerns about electoral fairness are based on something other than a general skepticism toward politics.

51. Awareness about the various accords that led up to Ouagadougou varied considerably. When asked to cite the names of the various accords, about 30% cited the Lome accords, 55% cited the Linas-Marcoussis Accords, 46% cited the Accra accords, 23% cited the Pretoria accords, and 80% cited the Ouagadougou accords. Civilians usually tuned in directly to news outlets such as radio, television, or papers for information on the peace process (about 75% claimed to do so), rather than relying on family, friends, or political leaders (about 11%, the rest "did not know"). When asked to list what they considered to be essential points of the Ouagadougou Accords, the main things listed were reconciliation (54% included this in their list), mentioned disarmament and reform of the army (30%), power-sharing (21%), and nationality issues and the elections (20%). Among those listing more than one choice, reconciliation was picked most often as the most important element (40% nationwide)—this was consistent across all regions; however the second most common picks varied from region to region, with civilians from all war-affected areas (including the confidence zone) in the country emphasizing disarmament and army reform (25-30%), civilians in the non-war-affected Center and Northwest emphasizing nationality and elections (23% in both), and civilians in the non-war-affected South and East emphasizing power-sharing (24%).

52. When asked about who benefitted the most from the negotiations, the most common

response across all regions was "all Ivoirians" (40% nationwide), but second highest choices varied by region, with civilians from the non-war-affected South, East, Center, and Northwest as well as the confidence zone tending to state "the rebels" (20-25%), and civilians from the war-affected Center, Northwest, South, and East tending to state that there was parity (24-35%). Overall, support for power-sharing was high, with overwhelming majorities in all regions agreeing that power-sharing offers a better chance out of the crisis than rule dominated by one side or the other (percent agreeing ranged from 71% in the non-war-affected South and East to 85% in the non-war-affected Center and Northwest, with other regions falling in between.

## Figure 8: Timing of Return of Local Leaders to Communities that Experienced Leadership Flight During the War



Pre-UNOCI Conflict Incidents

Notes: The graph shows estimated return dates of leaders to communities that had experienced leadership flight, plotted over conflict history. Names of localities with peacekeepers are in black, while those without peacekeepers are in gray. Estimates suggest that localities with more intense past conflict had leaders return much sooner than those with less intense conflict.

## B. Restoration of local authorities

53. The survey also measured the restoration of local political order in terms of questions on the flight and dates of re-establishment of local political authorities.<sup>14</sup> Nineteen out of the 42 localities (45%) covered by the survey experienced leadership flight, with all such flight happening prior to UNOCI's arrival. Among these 19 localities, peacekeeping deployments were assigned to 12. Figure X graphs the estimated return date of local leaders over conflict history, with UNOCI-covered localities in black, and non-UNOCI-covered localities in gray. We note that there is a

 $<sup>^{14}</sup>$ This information was gathered from the surveys. Sometimes respondents gave different answers about whether local leaders fled and, if they fled, when they returned. Disagreement on whether leaders fled never produced a split more even than 30% one way and 70% the other, thus we simply took the more common response on this question. For return dates, responses tended to be clustered around common dates, and so we simply took the average of the dates reported.

strong relationship between conflict history and return date. Localities with histories of more intense fighting actually had leaders return quite a bit *sooner* than those with less intense past conflict. Once this is taken into account, there is no significant difference in the return dates for localities with peacekeepers compared to those without.

## IX. Human rights

54. In accordance with UNOCI's mandate to assist in the field of human rights, we studied both perceptions of UNOCI's treatment of civilians as well as civilians own attitudes toward reconciliation and ending impunity. We find that civilians tended to agree with the characterization of UNOCI as "impartial" and "always respectful," although civilians in the Center, Northwest, and confidence zone expressed significantly more warmth than civilians in the South and East. With respect to civilians' attitudes toward reconciliation and impunity, civilians across the country expressed high levels of forgiveness, with majorities always preferring options to "forgive and forget" over punishment. We provide details in this section.

#### Table 5: Perceptions of UNOCI's Impartiality and Respectfulness Toward Civilians (%)

Region	UNO	CI impartial?	UNOCI respectful?			
	No	Yes	Never	Rarely	Sometime	Always
Center/Northwest, war-affected	9	91	3	< 1	11	85
Center/Northwest, not war-affected	10	90	6	< 1	4	90
South/East, war-affected	22	78	3	2	21	74
South/East, not war-affected	32	68	4	5	24	67
Confidence zone	10	90	1	5	6	88
Nationwide	21	79	3	3	18	76

Notes: Percents given by region. Adjusted  $\chi^2$  yields  $p \approx 0$  for the impartiality panel and p = .03 for the treatment panel.

55. Table 5 shows responses to questions about UNOCI's impartiality and general treatment of civilians. Overall, 79% of the public thought UNOCI to be impartial, though there were significant differences over the conflict regions. Civilians in the South and East regions were significantly less positive in their perceptions about the nature of UNOCI's interactions with civilians. Results were similar for a question on whether UNOCI tended to treat civilians with dignity (76% stated "always"). For the combatants sampled, 85% agreed that UNOCI acted in an impartial manner.

56. In general, civilians across the country expressed a sense of forgiveness, both toward combatants who perpetrated of abuses during the war as well as toward those who may have been responsible for inequities or abuses before the war. Table 6 shows responses to a question asking whether the respondent agreed that combatants who perpetrated abuses should (i) not be welcomed back to their communities under any circumstance and be punished, (ii) be welcomed back and have the past forgotten, or (iii) should be welcomed back only if the perpetrators ask to be forgiven. For all regions, (ii) unconditional forgiveness is the most common response. Remarkably, the unconditional forgiveness is significantly higher for all of the war-affected regions. When asked about the need to redress human rights abuses from *before* the war, a similar sense of forgiveness was expressed: 78% nationwide expressed a preference to "forgive and forget" over efforts to "expose the truth." This did not vary significantly across regions. 

 Table 6: Perceptions on Appropriate Treatment of Combatants that Perpetrated Human Rights Abuses (%)

Region	Unconditionally punish	Unconditionally forgive	Conditionally forgive
Center/Northwest, war-affected	11	64	25
Center/Northwest, not war-affected	15	47	38
South/East, war-affected	4	50	46
South/East, not war-affected	16	47	37
Confidence zone	18	60	22
Nationwide	10	52	38

Notes: Percents given by region. Adjusted  $\chi^2$  yields  $p \approx 0$ .

## X. Public information

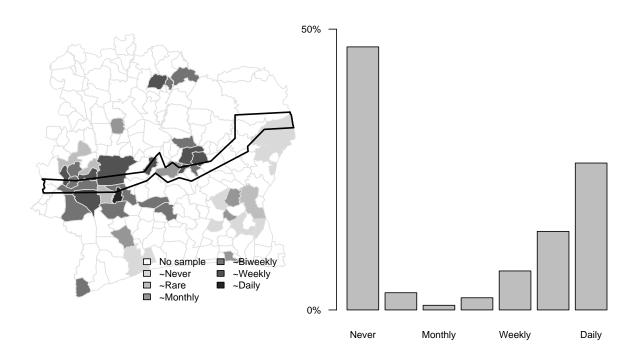
57. In relation to UNOCI's public information mandate, we studied patterns of listenership for ONUCI-FM, broadcasting throughout the country. About half of adults in the country are listeners of UNOCI radio. Very low levels of listenership were recorded in and around Abidjan. Figure 9 displays these results. The regional patterns are quite strong, with the most loyal listeners in the confidence zone localities and the North. The patterns may be attributable to the richer media environment in Abidjan in comparison to other parts of the country, as well as differences in exposure to conflict in the North and East as compared to the South and West. Among those who did listen, daily listenership was the norm. The majority of listeners (about 57 %) frequently tuned in for news, followed by 24 % who tuned in mostly for sports-related or cultural programs. About 10 % were most interested in the peace and reconciliation programs. The fewest people ranked as their main reason for listening programs related to security issues, human rights and elections (none surpassed 3 %). 81 % of listeners thought ONUCI-FM news coverage was more objective compared to other news outlets, while only 11 % thought it was less objective. Likewise, 82 % of listeners thought ONUCI-FM news coverage was more objective, while only 10 % thought it was less detailed.

## XI. General perceptions on UNOCI's role and United Nations peacekeeping

58. We now turn to perceptions of the effectiveness of the peacekeeping intervention. In general, civilians in Cote d'Ivoire appreciate well the role of peacekeeping forces, and UN peacekeeping forces in particular, in helping to end wars. The same holds for the combatants in the sample, although it should be emphasized that this was a subsample of FAFN combatants only. Civilian attitudes toward the appropriate role for a peacekeeping operation varies significantly across the country. One would imagine that the same would hold for combatants across different forces, but this was not something that the survey allows us to study.

59. In a "vignetting" exercise in the survey, the survey asked respondents to consider a hypothetical war in a foreign country—in this case, the vignette was based on Burundi. Each respondent was randomly presented with a different version of events. The versions differed in the degree to which government and rebel forces were characterized as compromise-seeking rather than hard-line.

#### Figure 9: UNOCI Radio Listenership Levels



Notes: On the map to the left, the darkness of the grey in an area indicates how regular was UNOCI radio listernership on average. The white areas on the map are areas with no data. The graph on the right shows levels of listenership as a percent of the population. Thus, about 50% of the population never listened, whereas the rest were spread out over the other six categories.

Respondents were then asked what means would be most fruitful in bringing about a resolution. They could choose between having the protagonists surmount the challenges themselves, having a third party intervene with a peacekeeping operation, or having some intermediate approach. The most common response among civilians was third party intervention: 48% of the weighted sample choose that option, compared to 37% and 15% for the first and third options, respectively. Combatants in the sample more adamantly supported intervention (66%). For both civilians and combatants, response rates did not vary significantly over the different versions of the vignette.

60. We asked a follow up question about the role of peacekeepers in such a peace process. Should their role be (i) mostly a symbolic one with observation being the primary task, (ii) one of more general assistance and support in programs such providing security to select targets and organizing DDR, or (iii) more decisive, perhaps using force to sanction those who violate ceasefires and deterring protagonists from further aggression? Here, 61% responded that (ii) assistance was most appropriate; the first and third choices were supported by 10% and 29% respectively. These responses differed at the .10 level over a "conflict region" breakdown that separates respondents by whether they are in the FAFN-controlled (i.e. Center/northwest) or government-controlled (i.e. South/east) region, and by whether their current area of residence was conflict-affected. When the same question was asked in a manner that was more specific about UNOCI's role in Cote d'Ivoire,

the preference for a "assistance" role was more pronounced. Indeed, support for a forceful role by peacekeepers fell dramatically for respondents in the South/east regions (from between 33 to 36% for the war-affected and unaffected subregions, respectively, to 6% to 13%). Table 7 presents these results, highlighting the variation in force-oriented dispositions. Among combatants, the support for an assistance role was more pronounced, with about 75% stating as such in both formulations of the question. Approximately 10% believed that a forceful role was appropriate.

Region	PKO Ro	ole (%)	
General peacekeeping question	Symbol/Observe	Assist	Force
Center/Northwest, war-affected	16	51	32
Center/Northwest, not war-affected	13	73	13
South/East, war-affected	6	61	33
South/East, not war-affected	11	52	36
Confidence zone	10	76	14
Nationwide	10	60	30
UNOCI-specific question	Symbol/Observe	Assist	Force
Center/Northwest, war-affected	26	53	21
Center/Northwest, not war-affected	11	77	13
South/East, war-affected	13	81	6
South/East, not war-affected	25	62	13
Confidence zone	13	81	6
Nationwide	18	72	10

Table 7: What is the appropriate role for peacekeepers, in general and specifically UNOCI? (%)

Notes: Adjusted  $\chi^2$  yields  $p \approx 0.08$  for the top panel and  $p \approx 0$  for the bottom panel.

61. These results are consistent with discussions during the focus groups. Many focus group members reported having been hopeful about the prospect of security and peace when they started seeing UNOCI troops in their localities. They expected these troops to play a more proactive role. This was the case of a group of Bete villagers, from south of the city of Man, who had been forced to flee their homes and only came back after the establishment of the Confidence Zone. However, they became increasingly frustrated as UNOCI did not meet their expectations. For instance, these villagers reported having been frustrated by UNOCI's slowness in responding to reports of attacks by armed elements. As one resident confided, "UNOCI troops are too slow to respond. In fact, they only show up after the fact."

62. The survey asked in an unprompted manner about the most positive and negative aspects of UNOCI's role in Cote d'Ivoire. For positive role, "preventing belligerents from relaunching war" was the overwhelming response (58%, compared to 15% for development/humanitarian assistance, the next highest response). These responses did not vary significantly over regions. Results followed the same basic pattern or combatants—67% stated "preventing belligerents from relaunching war," followed by 17% for development/humanitarian assistance. Civilian perceptions on UNOCI's most negative role emphasized "prostitution" for some, but just as often civilians stated "nothing" or "don't know.". Table 8 shows that civilians' responses on these negative aspects did vary significantly over conflict regions. For combatants, the most common response was "nothing" (31%), followed by "prostitution" (18%), and "don't know" (17%).

63. A set of questions examined perceptions toward UNOCI and UN peacekeeping relative to interventions by great powers (GPs) or regional organizations (ROs; ECOWAS in this case)

Table 8: Perceptions of Negative Aspects of UNOCI's Presence, by Conflict Region (%)

Region	Prostn	Create divisions	Blocked loyalists	Blocked rebels	Prices rose	Nothing	Don't know	Other
Center/Northwest, war-affected	15	4	3	5	1	22	29	22
Center/Northwest, not war-affected	8	< 1	1	3	< 1	37	41	11
South/East, war-affected	28	5	12	< 1	16	8	16	15
South/East, not war-affected	20	7	13	< 1	3	7	31	19
Confidence zone	18	4	2	< 1	2	25	27	23
Nationwide	23	5	10	< 1	9	12	23	18

Notes: Adjusted  $\chi^2$  yields  $p \approx 0$ .

and also relative to national forces. Overall civilian attitudes are generally in favor of UN-led intervention. UN-only peacekeeping is actually preferable in general among civilians (48%); second is combined UN-RO-GP missions (44%). The combatants in the sample were more prone to state that a combination force was preferable (47%) to a UN-only force (23%). Civilians do not think that UN peacekeeping effectiveness necessarily depends on partnering with GPs (58%); 39% state that partnering with GPs is necessary, and the rest have no opinion. However, partnership with Licorne did make UNOCI more effective in the minds of most civilians (55%); 28% said it made no difference, and 17% stated that UNOCI was actually rendered less effective. Combatants were slightly more likely to state that partnership with a GP is essential (46%) and that partnership with Licorne enhanced effectiveness (66%).

## XII. Conclusions

64. We offer brief conclusions related to things that still need to be achieved in the mandate, exit strategy, and recommendations for futher investments. A priority area is in disarmament and demobilization. The slow pace toward DDRRR has a number of serious consequences. It sustains the need for UNOCI to keep up with military monitoring. Based on opinions expressed by civilians, we doubt that this situation can exist and still allow *elections* to be carried off in a manner that most would consider free and fair. The problem is especially acute in the western part of the confidence zone. This also brings into serious question the security plan that has been mooted for the elections, which would have factions cover security needs in areas that they control. Finally, the slow pace of DDRRR taxes the patience of combatants who were told that the reason for ceasing hostilities was that an offer of entry into a reintegration program was on the table. A crisis of unmet expectations did not seem so far off as of August 2008. Helping to speed the roll out process of the DDRRR program is of enormous importance.

65. Second, we are led to believe that UNOCI and complementary agencies can have a very strong impact via (i) electoral sensitization and (ii) assistance to displaced households seeking to return home or resettle. Many areas in the country do not seem to have been targetted for sensitization. Successful elections are essential for the sustainment of peace. However, civilians express a feeling of things being rushed. The evidence suggests that expanding sensitization programs, combined with progress on disarmament and demobilization, will do a lot to help lay the groundwork for successful elections.

66. With respect to resettling displaced household, we note that rates of return to conflictaffected areas *outside* the confidence zone have remained extraordinarily low. This is in contrast to recent rates of return *within* the confidence zone. Sustained displacement has strong, negative consequences for the economic well-being of the displaced households themselves, not to mention the economy more generally. A fruitful endeavor would be to raise return rates or to minimize the precariousness of settlement away from home areas.

67. In general, Ivoirians hold positive views about UNOCI and UN peacekeeping more generally. The majority wanted to have a peacekeeping rather than not, and large majorities saw UNOCI as a shield against potential victimization (though actual instances of such victimization were rare). Frustrations came from wanting UNOCI to play a more active *assistance* and *support* role rather than an observer role or a muscular role. To these extent that these opinions would be shared by others outside Cote d'Ivoire, the implication is that assistance and support operations—protection and assistance for displacee return, DDRRR, and electoral preparation—should receive priority in the design of future missions.

68. Finally, we note that this study is unprecedented in the scale, ambition, and rigor with which scientific methods have been used evaluate the impact of peacekeeping operations on *ordinary citizens* in the target country. We have attempted to use the study to derive specific, actionable results based on rigorous inferential strategies. This report should serve as the basis for further *evidence-based* discussions of policy options. We also hope that this will mark the beginning of the regularized use these methods as part of peacekeeping operations and evaluation.