Quantitative Impact Evaluation of the United Nations Mission in Liberia: Final Report

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Contents

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I.   Executive summary

1. This report contains a quantitative impact evaluation of the United Nations Mission in Liberia (UNMIL), commissioned by the United Nations Office of Internal Oversight Services (UNOIOS). The study is based on surveys and ancillary data collection in Liberia in December 2008-January 2009 and December 2009-January 2010 and focuses on mandated elements that can have security, economic, social and political effects at the micro-level. The objectives of the study are to assess measurable local impacts of UNMIL's deployments and to gauge the success of mandated activities conducted under the auspices of UNMIL's substantive sections. Overall, the study suggests that UNMIL made important contribution to peace and to economic recovery and political rehabilitation. But there are some areas in which UNMIL's impacts are at best mixed.

2. With regards to specific mandated elements, the study finds little evidence to suggest that UNMIL had direct local impacts on conflict de-escalation and security at the local level. UNMIL assumed control of the peacekeeping operation as of 1 October 2003, two months after the end of major fighting and no subsequent major battle events have been recorded. This suggests UNMIL had little active role to play in dealing with major aggression by armed groups, although it remains possible that UNMIL's presence was a blanket deterrent for the entire country against any such aggression.

3. However, survey results suggest that UNMIL enjoys high legitimacy as a security provider among Liberians represented in our sample. The overwhelming majority of respondents in the household sample credited UNMIL with helping to end the war. They also stated that they have confidence in UNMIL's ability to prevent armed groups from resuming hostilities and to protect civilians. Similar to their civilian counterparts, a large majority of ex-combatants stated that they were confident that UNMIL was capable of both preventing fighting among armed groups and protecting civilians. Nearly all ex-combatant respondents stated that UNMIL made it more difficult for them and "their enemies" to launch attacks and nearly all stated that third party peacekeeping was crucial to their decision to disarm. The evidence on UNMIL's impacts on civilian protection is mixed. On the one hand, the study finds that the rate of out-migration from communities distant from UNMIL deployments was about 1.5 times the rate in deployment communities. The estimated rate of resettlement was about 4 times higher in deployment communities than in distant communities, and the rate of in-migration was about two times higher in deployment communities than in distant communities. These higher rates of settlement into deployment communities may be due to direct facilitation of settlement by UNMIL, the economic attractiveness of such communities due to market stimulation associated with deployments, or due to perceptions that deployment areas would be more secure. On the other hand, the study does not find evidence to suggest that UNMIL reduced crime victimization events such as robberies or physical attacks. In fact, the study finds a positive association between deployment proximity and self-reported crime victimization, but this effect is concentrated among recently settled households. What needs to be determined is whether these robberies of attacks prompted the resettlement or whether they happened after resettlement—something the data are too coarse to distinguish.

4. The legitimacy that UNMIL enjoyed as a security provider does not seem to carry over in the humanitarian realm. For the most part, respondents did not tend to see peacekeepers as having much of a humanitarian assistance role. Such responses did not vary significantly across deployment, proximate, and distant communities.

5. With respect to economic revitalization at the local level, the findings are mixed. On income, we see that deployments are associated with a substantial increase in the percentage of respondent households earning over the LRD 4500 mark (just under the $2 per day poverty benchmark), although we also see a slight increase in the number of respondents reporting that their households earn nothing. The study also finds differences in the results for occupations: Deployment communities are associated with higher proportions of respondents engaged in unskilled labor and in commerce, as well as lower engagement in agriculture. Certain forms of consumption (namely investments in home improvements) occur at a higher rate in deployment communities. The signs point toward deployments as stimulants to local labor and commercial markets, although the distribution of benefits from such stimulation is not evenly spread. The evidence here does not show that UNMIL's quick impact projects significantly transformed local economies in a manner that benefits recipient communities. In fact, the no-project communities fare better on almost every score.

6. The available data allow for some assessment of UNMIL's contribution to political rehabilitation at the local level. There is some evidence suggesting that UNMIL's investment

in electoral assistance may have helped empower citizens and raise awareness about women's rights. More specifically, nearly all respondents in our household sample indicated that UNMIL was somehow involved in electoral processes where they lived and a large majority of respondents stated that they thought the 2005 elections were free and fair. We also note that while self-reported voter turnout was high among respondents in the household sample (89%), there were no significant differences between distant, proximate, and deployment communities in such reports. However, the self-reported rate of participation in meetings or rallies was considerably higher among women in deployment communities. We also note that ex-combatants reported slightly higher levels of political engagement than their non-combatant counterparts in deployment communities, but their participation in meeting or rallies for the 2005 elections was slightly lower in these communities.

7. With respect to human rights promotion, the study suggests impacts associated with perspectives on gender, but there is little to suggest that deployment areas were hubs of activity that had any significant impact on inter-ethnic cohesion or perspectives on transitional justice.

8. Finally, there is evidence to suggest that deployment proximity is associated with less vibrant community life. Respondents from deployment communities tended to be less engaged in activities such as cultural celebrations, community projects, political rallies or security meetings-all of which underlie vibrant community life. This disturbing finding is also evidenced in the combatant sample: ex-combatants' participation in local cooperatives and associations is higher in distant communities than in proximate and deployment communities. This result may indicate consequences of economic and resettlement impacts of deployments in the localities.

9. With respect to exit strategy, UNMIL and the broader humanitarian community can contribute to consolidating the peace in Liberia by (i) supporting the reintegration of newly resettled households; (ii) supporting efforts to foster social and community cohesion, especially among the newly resettled households; and (ii) providing electoral assistance to sustain political interest on the part of the citizens. These efforts, combined with the government's own initiatives in these areas could provide a more solid foundation for a self-sustaining peace.

II.   Scope and organization of the study

10. This report contains a quantitative impact evaluation of the United Nations Mission in Liberia (UNMIL), commissioned by the United Nations Office of Internal Oversight Services (UNOIOS). It is based on surveying and ancillary data collection in Liberia in December 2008-January 2009 and December 2009-January 2010.[1] The objectives of this report are to assess measurable aspects of UNMIL's contribution to consolidating peace in Liberia thus far, and also to suggest areas for heightened attention in future programming.

11. In style and content, this study is modeled on a previous quantitative impact evaluation of the UN Operation in Cote d'Ivoire (UNOCI).[2] However, a key difference should be noted: the survey in Liberia was designed to exclusively measure *impacts* of UNMIL. The study was not designed to characterize the Liberian population *generally*. The sample is not a representative sample of the Liberian population, but rather one that intentionally included only communities that either (i) received UNMIL deployments or (ii) did not receive deployments, but *resembled* recipient communities in terms of socio-economic conditions and geography, thus providing a comparison group for recipient communities. The results in this report should not be mistaken as providing a characterization of the Liberian population generally.

12. The core hypothesis that this evaluation tests is that peacekeeping deployments have *local impacts, laying the seeds of social, economic, and political transformation that can lead to sustainable peace.* These effects are hypothesized to trickle out into society, creating expanding islands of stability, democratic institutionalization, and economic rehabilitation. Rigorous cross-national studies have demonstrated that peacekeeping operations are associated with more durable peace at the macro-level.[3] The *local impacts* hypothesis is one of many possible explanations for this pattern. In addition to testing this hypothesis, the evaluation allows us to gauge the success of local-level activities that take place under the auspices of the peacekeeping operation. These include quick-impact projects and sensitization activities. As independent evaluators, we are quite prepared to reject the local impacts hypothesis. Indeed, it may be that there are no discernible local impacts, and that all impacts are measurable only at the macro-level. There may be perverse local impacts, whereby

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[1] The Folke Bernadotte Academy, Sweden, sponsored the first round of surveying; ancillary data collection in 2009-2010 was conducted under the auspices of UNOIOS.

[2] Eric Mvukiyehe and Cyrus Samii, *Laying a Foundation for Peace? A quantitative impact evaluation of the United Nations Operation in Cote d'Ivoire*, 19 December 2008.

[3] This association has been demonstrated in three published studies: Doyle, MW and N Sambanis, 2006, *Making war and building peace: United Nations peace operations*, Princeton University Press; Fortna, VP, 2008, *Does peacekeeping work?: Shaping belligerents choices after civil war*, Princeton University Press; and Gilligan, MJ and EJ Sergenti, 2008, "Do UN interventions cause peace? Using matching to improve causal inference," *Quarterly Journal of Political Science*, 3:89-122.

peacekeeping deployments are locally detrimental. Whatever the case may be, the results should be useful in designing future programs to maximize positive impact.

13. The impact evaluation is organized according to elements from the United Nations Mission in Liberia (UNMIL) mandate. UNMIL received its mandate from the UN Security Council under Chapter VII in resolution 1509 of 19 September 2003. The United Nations Department of Peace-keeping Operations describes the terms of UNMIL's mandate as follows:

a. to observe and monitor the implementation of the ceasefire agreement and investigate violations of the ceasefire;

b. to establish and maintain continuous liaison with the field headquarters of all the parties military forces;

c. to assist in the development of cantonment sites and to provide security at these sites;

d. to observe and monitor disengagement and cantonment of military forces of all the parties;

e. to support the work of the Joint Monitoring Committee (JMC);

f. to develop, as soon as possible, preferably within 30 days of the adoption of this resolution, in cooperation with the JMC, relevant international financial institutions, international development organizations, and donor nations, an action plan for the overall implementation of a disarmament, demobilization, reintegration, and repatriation (DDRR) programme for all armed parties; with particular attention to the special needs of child combatants and women; and addressing the inclusion of non-Liberian combatants;

g. to carry out voluntary disarmament and to collect and destroy weapons and ammunition as part of an organized DDRR programme;

h. to liaise with the JMC and to advise on the implementation of its functions under the Comprehensive Peace Agreement and the ceasefire agreement;

i. to provide security at key government installations, in particular ports, airports, and other vital infrastructure;

j. to protect United Nations personnel, facilities, installations and equipment, ensure the security and freedom of movement of its personnel and, without prejudice to the efforts of the government, to protect civilians under imminent threat of physical violence, within its capabilities;

k. to facilitate the provision of humanitarian assistance, including by helping to establish the necessary security conditions;

l. to contribute towards international efforts to protect and promote human rights in Liberia, with particular attention to vulnerable groups including refugees, returning refugees and internally displaced persons, women, children, and demobilized child soldiers, within UNMILs capabilities and under acceptable security conditions, in close cooperation with other United Nations agencies, related organizations, governmental organizations, and non-governmental organizations;

m. to ensure an adequate human rights presence, capacity and expertise within UNMIL to carry out human rights promotion, protection, and monitoring activities;

n. to assist the transitional government of Liberia in monitoring and restructuring the police force of Liberia, consistent with democratic policing, to develop a police training programme, and to otherwise assist in the training of police, in cooperation with the Economic Community of West African States (ECOWAS), international organizations, and interested States;

o. to assist the transitional government in the formation of a new and restructured Liberian military in cooperation with ECOWAS, international organizations and interested States;

p. to assist the transitional Government, in conjunction with ECOWAS and other international partners, in reestablishment of national authority throughout the country, including the establishment of a functioning administrative structure at both the national and local levels;

q. to assist the transitional government in conjunction with ECOWAS and other international partners in developing a strategy to consolidate governmental institutions, including a national legal framework and judicial and correctional institutions;

r. to assist the transitional government in restoring proper administration of natural resources;

s. to assist the transitional government, in conjunction with ECOWAS and other international partners, in preparing for national elections scheduled for no later than the end of 2005.

14. The impact evaluation covers items a,c-h,k-m,p,q, and s. We do not cover UNMIL's assistance in establishing the ceasefire implementation mechanisms and facilities (b); disposal of weapons and ammunition (part of g); security for government or UN installations or personnel (i,j); police or army reform (n,o); nor natural resource management (r).

15. The impact evaluation is organized as follows. We begin with introductory discussions of the data, exposure to UNMIL's activities, and perceptions among survey respondents about UNMIL. We then present results on mandate elements, grouped into the following themes: (1) monitoring cessation of hostilities (mandate element a); (2) disarmament, demobilization, reintegration and rehabilitation (c-h); (3) civilian protection and human security (k); (4) humanitarian assistance (k); (5) economic revitalization (k); (6) social recovery (k); (7) re-establishment of political order (p,q); (8) electoral assistance (s); (9) human rights promotion (l,m); and (10) public information (no specific mandate element).

III. Description of the data

16. Table 1 shows the demographic breakdown of the sample. Geographic locations of respondents are also shown below in Figure 1. A separate technical appendix contains details on the survey design. Respondents were selected according to a cluster-matched sampling design. A community here refers to a "clan", which in Liberia refers to a geographic area

Table 1: **Demographics of the Sample**

		Household sample	Percent	Excombatant sample	Percent
1. Gender	a. Men	567	56%	251	91%
	b. Women	453	44%	24	9%
2. Age	a. 15-25	236	23%	70	25%
	b. 26-35	349	34%	146	53%
	c. 36-50	309	30%	56	21%
	d. 51+	126	12%	3	1%
3. Education	a. No formal school	358	35%	68	25%
	b. Incomplete primary	155	15%	54	20%
	c. Complete primary	208	20%	85	31%
	d. More than primary	299	29%	68	25%
4. Household income	a. No income reported	245	24%	48	18%
	b. 1-4500LRD/month	521	51%	147	54%
	c. +4500LRD/month	254	25%	79	29%
5. Deployment status	a. Distant	355	35%	27	10%
	b. Proximate	341	33%	130	47%
	c. Deployment	324	32%	118	43%

that contains a cluster of villages that are linked on the basis of traditional ties.[4] On average, a clan contains about 700-1000 households (the average size for a household is between 5 and 6 people). In Monrovia, there are no clans, but rather administrative blocks that the Liberia Institute of Statistics and Geo-Information Services (LISIGS) has demarcated and that have approximately the same population as clans. LISGIS lists 673 clans and 165 administrative blocks, and these 838 units cover the entirety of Liberia's territory.

17. The sample included 12 communities that hosted UNMIL deployments. These were sampled from among the 46 communities in total that hosted deployments.[5] Data on pre-deployment socio-economic conditions and geography were used to find 12 matching communities that did not host deployments, but were proximate to communities that did, and another 12 that neither hosted deployments nor were proximate to any that did. We call these three types of communities *deployment*, *proximate*, and *distant* communities, respectively. This approach was designed to maximize our ability to make inferences about the impact of UNMIL activities in areas where its work was concentrated. The proximate communities allow us to measure spill-overs from deployment communities. As we show below, the areas where UNMIL's activities were concentrated were not typical Liberian communities in the

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[4] "Clan" in this case should not be confused with a *family* unit. It refers specifically to a *geographic* area.

[5] The list of 46 communities was taken from the publicly available deployment maps contained in the Reports of the Secretary-General on UNMIL.

sense that they tended to be places with relatively high conflict exposure, large populations, close proximity to the main road network, and low levels of social infrastructure per capita. The proximate and distant communities that we chose are meant to serve as "control" communities to compare to the deployment communities. Therefore, the proximate and distant communities differ from typical communities in Liberia in the same way that the deployment communities do.

18. The 11 deployment communities that we selected are a random sample from a *subset* of deployment communities. This subset does not include the eastern counties of Grand Kru, Maryland, River Cess, River Gee, and Sinoe and far western counties of Grand Cape Mount and Gbarpolu. This is shown in the rightmost map in Figure 1. The time available made it impossible to extend the fieldwork to these areas, which are relatively inaccessible from the entry point of Monrovia. Substitution communities in Bomi county were selected to compensate for our lack of access into Gbarpolu and Grand Cape Mount. Nonetheless, we intend to make clear that while the sample includes a good mix of areas—in terms of urban/rural character, and geographical coverage—it does not provide an approximation to the full Liberian population. Given logistical constraints, we sought to minimize bias in our study of peacekeeping impacts, and thus forwent a significant amount of representativeness. The sample can be taken to characterize well conditions in the geographic belt containing Bomi, Montserrado, Margibi, Bong, Grand Bassa, Nimba, and Grand Gedeh counties, with some weaker coverage of Lofa.

19. The data contain responses from 1,295 completed interviews spread evenly over the 36 communities. Within each community, approximately 30 respondents were selected randomly and targeted for interview (in some cases, a bit more than 30 respondents were targeted). In addition to the household sample, ex-combatants were brought for interview with the assistance of local officers of the national ex-combatant reintegration program.[6] The 1,295 interviews include 1,020 respondents that were selected as part of the household sample, and 275 ex-combatant respondents selected as part of the auxiliary ex-combatant sample. The "margin of error"[7] is about 3% for the entire household sample and about 6% for the excombatant sample. The household sample is broken down into 324 households in deployment communities, 341 in proximate communities, and 355 in distant communities; thus the margin of error for each these subsamples is about 5.5%. These margins of error can be used to assess, roughly, the statistical significance of most findings below.

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[6]The current report does not include interviews with excombatants in Monrovia, only in rural areas. We have conducted interviews with excombatants in Monrovia, but that data still need to be processed.

[7]Following standard practice, the "margin of error" here refers to the half the width of the theoretical 95% confidence interval for yes-no questions in the case that responses are evenly split. It is a rough approximation, and it works as an approximate upper bound on the true margin of error when "yes" percentages are within the 20% to 80% range.

20. Remarkably, 113 (11%) of respondents selected in the household sample also claimed to have had some experience within an armed faction since 1989, whether as a result of abduction or voluntary participation. This is considerably higher than the proportion of the Liberian population that participated in the national ex-combatant reintegration program. That proportion is about 3%.[8] The difference is likely due to two factors: (1) the list of ex-combatants participating in the reintegration program excludes some ex-combatants that had reintegrated on their own into civilian life after the end of either the first Liberian war (1989-1996) or second war (1999-2003); and (2) the set of deployment and matched non-deployment communities in which we worked may have hosted a relatively high concentration of ex-combatants. In addition, it is commonly understood that some small percentage of individuals who participated in the reintegration process may have falsified their combatant histories to gain access to benefits. There is no doubt that some people are improperly classified as excombatants and non-combatants in the survey sample, owing to the vagaries of the process by which ex-combatant status has been determined. But we think the rates of such misclassification are low, and that important patterns should not be obscured.
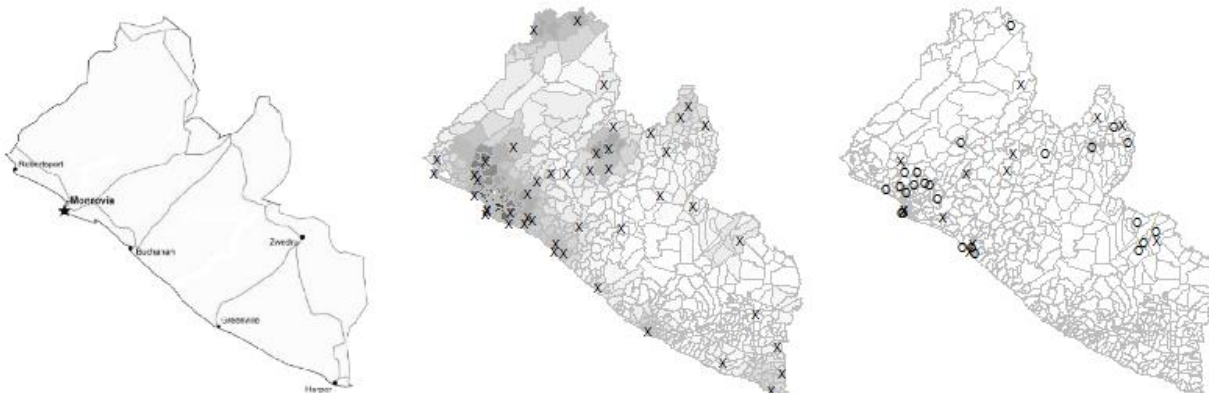
IV. Exposure to UNMIL

21. The maps in Figure 1 show roads, district boundaries, and then in the middle and right maps, conflict exposure levels, deployments base locations, and the locations of the communities that are included in the sample. Deployment base assignments are clearly associated with levels of past conflict and road access. The plots in Figure 2 show proximity to deployment bases and three community-level socio-economic indicators that were measured in 2004: number of households (on the base-10 logarithm scale), schools per 100 households, and health posts per 100 households. We see that deployments tended to be closer to communities that were more populous and slightly less developed in terms of numbers of schools and health posts per household. We have accounted for these baseline differences in our sampling plan by matching deployment communities to proximate and distant communities that have similar values on these community-level variables. Details are in the technical appendix.

22. Though deployment bases were located in fixed positions, the survey results suggest that peacekeeping troops were quite mobile. Whereas 3 out of 4 respondents in deployment communities report at least some exposure to peacekeeper patrols, about 2 out 3 respondents in proximate and distant communities report the same—only slightly less than in deployment

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[8]UNMIL reported that the national DDRR process serviced 103,019 ex-combatants by the time of its closing in July 2009. The population of Liberia was estimated as approximately 3.5 million in the 2008 census.

Figure 1: **Roads, conflict exposure, deployments, and study sample locations**


The leftmost map shows the major road network in Liberia. In the middle map, darker shading means higher exposure to major armed conflict from 1989 to 2003. The middle map also shows UNMIL deployment base locations, marked with an "X", taken from Reports of the UN Secretary-General since 2003. The map on the right shows locations of the communities included in the study. The "X" points are communities that hosted deployment bases, and the "O" points are communities that did not. The lines on the middle and right map show the perimeters of clans. We can see that deployment location is closely related to conflict history and proximity to the major road network.

communities. Other forms of exposure to UNMIL activities (e.g. electoral programs or quick impact projects) are described below in the relevant thematic sections.

V. Respondent perceptions about UNMIL

23. The survey shows that UNMIL enjoys high legitimacy as a security provider among respondents. Respondents overwhelmingly stated that they had confidence in UN peacekeepers' ability to prevent violence. Among the respondents who were able to give an answer to questions about UNMIL's effectiveness (this was about 85% of respondents, the rest mostly said "don't know"), only 4% stated that they did not have confidence in UNMIL's ability to prevent violence, 13% stated that they confidence only in UNMIL's ability to prevent fighting among armed groups, 3% stated that they had confidence only in UNMIL's ability to protect civilians, and about 78% stated that they were confident that UNMIL was capable of both preventing fighting among armed groups *and* protecting civilians. Nearly all (98%) of these respondents stated, in an unprompted manner, that UNMIL's primary role with

Figure 2: **Community proximity to deployment base and socio-economic development**
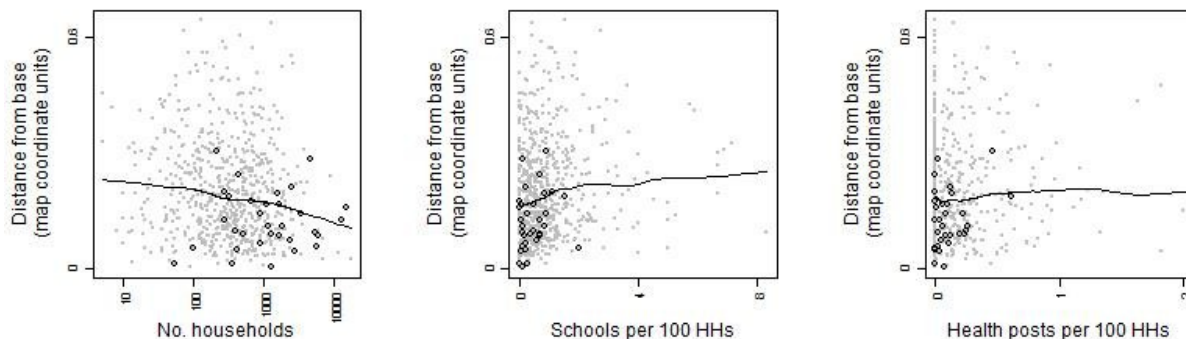
Each point in the graphs is a community (clan) in Liberia. The large hollow points show the communities that are included in the study. The lines are locally weighted regression fits that show basic trends.

respect to civilians was to ensure their safety (as opposed to delivering development, etc.). Along similar lines, about 97% of these respondents said "yes" when asked whether UNMIL helped end the war. About 93% said that they felt safer now as compared to the time before UNMIL's arrival six years earlier. Respondents were asked to list to whom, among international and domestic forces, they would turn if they faced insecurity from armed groups. About 88% of these respondents included UNMIL on their list; a bit more than a third of those who included UNMIL on their list did not name anyone else, implying that about 30% of these respondents overall viewed UNMIL as their *sole* security provider against the threat of renewed conflict. About 60% of those who listed UNMIL along with other security forces considered UNMIL to be the most important, meaning that about 35% of these respondents overall considered UNMIL as the *most important* among a range of security actors. Taking this together, we find that about 65% of these respondents considered UNMIL as the primary security provider against threats from armed groups.[9] Finally, respondents were asked whether UNMIL should leave the country now "because they failed", stay on longer "to finish the work they started", or leave "because they have accomplished the work they came to do", about 82% of respondents indicated that they should stay. None of these rates differed significantly across the deployment, proximate, and distant community types, suggesting that beliefs about UNMIL's security effectiveness were not closely linked to the

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[9]To clarify the calculation: 88% of respondents listed UNMIL, and 34% of those listed only UNMIL, so $88\% * 34\% = 30\%$ reported UNMIL as the sole security provider; of the 66% that listed UNMIL along with others, 60% named UNMIL as the most important, meaning $88\% * 66\% * 60\% = 35\%$ of respondents reported UNMIL as the most important among many. Adding these two together gives the 65% figure.

amount of exposure that people had to the peacekeepers.

24. In a vignetting exercise, respondents were asked to consider a hypothetical war in a foreign country—in this case, the vignette was based on Burundi.[10] 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. 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: 78% of respondents chose this option, compared to 13% and 9% choosing the first and last options, respectively. Interestingly, respondents who received a vignette characterizing both rebels and government as hard-line were the *most* likely to prefer third party intervention; they were more likely to choose this option (83%) than those who received a vignette characterizing the belligerents as compromise-seeking (74%). For those who indicated a preference for third party intervention or some hybrid of a third party/domestic process, we asked what role was most appropriate for intervening peacekeeping forces for the hypothetical war: a symbolic observational role, a supporting role, or a decisive interventionist role. In all conditions, majorities stated that a "supporting" role was most appropriate (65% overall).

VI.   Monitoring cessation of hostilities

A.   Deployment and major re-escalation

25. According to the Armed Conflict Location and Event Database published by the Peace Research Institute of Oslo, the last major conflict event in the Liberian civil war occurred in late July 2003. This anticipated the signature of the Comprehensive Peace Agreement in Accra on 18 August 2003, which was soon followed by the deployment of ECOWAS forces. UNMIL assumed control of the peacekeeping operation as of 1 October 2003, two months after the end of major fighting. No subsequent major battle events have been recorded. Thus, no major re-escalation occurred on UNMIL's watch. Of course, there is no definitive way to attribute the post-Accra peace to UNMIL's presence as opposed to being the result of natural progress in the peace process.

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[10]The same vignetting exercise was used in the Cote d'Ivoire/UNOCI study.

B. Excombatant respondent perceptions

26. Ex-combatant perceptions provide a glimpse into whether UNMIL has established itself as a credible deterrent force. Ex-combatant respondents expressed respect for UNMIL in this way. We focus here on the responses of the 275 respondents from the sample of ex-combatants that were identified via the national reintegration program. Similar to their civilian counterparts, 74% of excombatants stated that they were confident that UNMIL was capable of both preventing fighting among armed groups and protecting civilians, and 94% said "yes" when asked whether UNMIL helped to end the war. Nearly all ex-combatant respondents stated that UNMIL made it more difficult for them and "their enemies" to launch attacks (98% and 94% respectively), and nearly all (90%) stated that third party peacekeeping was crucial to their decision to disarm. Among the respondents who agreed that peacekeeping was crucial for their decision to disarm, 72% stated that only UN peacekeeping forces (in contrast to ECOWAS forces, as an alternative) could have played this role. When asked why, the most common reasons were about evenly split between some expression of "more trustworthy", "more powerful", or "they represent the world."

C. Evidence from household sample respondents

Table 2: **Civilian Insecurity Index Over Time**

	Pre-deployment period				Early deployment period		Late deployment period	
	Prior to Accords		Summer/Fall 03		Fall 03-Fall 05		Since Winter 06	
Community type	Mean	(SE)	Mean	(SE)	Mean	(SE)	Mean	(SE)
Distant	5.1	(0.1)	1.1	(0.2)	0.4	(0.2)	0.2	(0.1)
Proximate	5.1	(0.1)	1.3	(0.3)	0.2	(0.1)	0.3	(0.1)
Late Deployment*	5.2	(0.3)	1.5	(0.5)	0.4	(0.2)	<0.1	(<0.1)
Early Deployment*	4.6	(0.2)	2.0	(0.4)	0.8	(0.2)	0.2	(0.1)

Late deployment communities refer to those that did not host any deployments until mid-2005. Early deployment communities are those that hosted a deployment before early 2005.

The table shows mean values of a civilian insecurity index, constructed by adding the number of "yes" responses to questions about whether the respondent witnessed any of seven types of conflict-related activities (see text for details). "SE" stands for the standard error of the sample mean. A higher score indicates greater insecurity. Measures were taken for the four time periods indicated in the column headings. We see that on the whole, insecurity levels declined greatly since the signing of the peace accords, but that deployment communities did not enjoy more of a decline than comparable distant or proximate communities.

27. As noted above, nearly all respondents associated UNMIL's presence with greater stability and security. There may be some "courtesy bias" in these responses, however. Thus, we investigate security impacts further with reports of events associated with the risk of conflict recurrence. We asked respondents a set of seven retrospective questions about whether they had witnessed activities that were indicative of the possibility of renewed conflict. These ac-

tivities include whether one's community experienced armed group fighting, ethnic violence, disappearances or presence of "unfamiliar" people, rumors about recruitment, rumors about possible attacks, people stockpiling food, or people fleeing. Each respondent could say "yes" or "no" to the questions. The questions were asked with reference to two periods: (1) the period just prior to the end of the war, and then (2) one randomly selected period in the post-conflict period—either mid-late 2003, late 2003-late 2005, or early 2006 to present.[11] We added the "yes" responses to create what we can call an "index of pessimism," measuring respondents' retrospective assessment of how pessimistic he or she was about the possibility of renewed conflict at a given time. We then studied whether changes in the pessimism score over time are associated with proximity to peacekeeping deployments.[12]

28. Table 2 reports the results of the analysis. There is a very large jump between the first, pre-Accords period and the period immediately following the signature of the peace accords. The index captures the dramatic improvement in the security following the Accords but prior to any deployments. The dip in respondents' perceptions of insecurity following the signature of the Accords was not as great in the deployment communities as in the distant or proximate communities. When we move the early deployment period, we find that the dip in insecurity in the early deployment communities is not as great (a 60% dip) as in the other communities that did not host deployments as of early 2005 (64-85% dips). Moving to the late period (since Winter 2006), insecurity levels in deployment communities finally come down to the level enjoyed in the distant and proximate communities; indeed there were almost no reports of conflict-related incidents in late deployment communities for the last period, although the difference with respect to the other communities is not statistically significant. The evidence does not suggest that deployments were associated with significant differences in insecurity at the *local* level. Security gains seemed to occur in a blanket manner across the country following the signature of the Accords in 2003. The largest gains occurred immediately following the signature of the Accords and prior to UNMIL's deployment, although conditions improved steadily over time after UNMIL's deployment. such improvements were not significantly faster in deployment communities, suggesting that "local security impacts" were not significant. The country-wide improvements in the security situation *may* be due to a general calming and deterring effect associated with UNMIL's presence in the country, but our micro-level data do not allow us to study the plausibility of this macro-level claim.

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[11]Respondents were only asked about one subsequent period to minimize fatigue from answering too many questions.

[12]To ensure that respondents' relocation histories did not bias the analysis, the mean and standard deviation for each time period was computing using only respondents who had settled in their current community of residence by the given period.

VII. Disarmament, demobilization, reintegration and rehabilitation

Table 3: **Faction History (1999-2003), Excombatant Respondents**

Faction membership	Sample size	Sample percent
AFL, LURD, MODEL, Militia groups	2	1%
LURD, MODEL, Militia groups	4	1%
AFL, LURD	12	4%
AFL, MODEL	1	< 1%
AFL, Militia groups	20	7%
LURD, MODEL	1	< 1%
MODEL, Militia groups	5	2%
AFL	37	13%
LURD	59	21%
MODEL	54	20%
Militia groups	14	5%
No affiliation recorded*	66	24%

There was no response recorded in the data for these respondents. They may have had factional affiliations from the conflict prior to 1999, they may have refused to answer, or there may have been an enumerator error in recording the response.

A. Describing the ex-combatant sample

29. The data contain a total of 388 individuals who claim to have participated in an armed faction at some point during the first or second Liberian civil war. Of those, 275 were identified via the national excombatant reintegration program, and the other 113 were identified in the household sample. Among those identified through the reintegration program, 50-60% of those individuals claim to have joined their faction voluntarily, as opposed to through forcible recruitment. Among those that were identified via the household sample, around 75-85% claim to have participated voluntarily. For the analysis in this section, we restrict attention to the 275 respondents in the ex-combatant sample, because their status as actual ex-combatants has been vetted by the national reintegration program. As we show in Table 3, those who revealed their factional history were fairly evenly split among those who were affiliated Armed Forces of Liberia (AFL), LURD, and MODEL. We note that on many of the questions reported below, the rate of non-response due to "don't know" answers was quite high—from 5% up to 33% of responses.

B. UNMIL's provision of security during disarmament and demobilization

30. 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 opposing factions and the second asked whether ex-combatants feared the weapons they had surrendered would be stolen by opposing forces. In both of these cases, large majorities said "no": among those who gave a response, 85% said "no" on the former and 72% on the latter; the number of "don't know" responses was high—40 respondents and 73 respondents, respectively—although we have no good reason to believe that the rate of "no" responses among them would be much different. All but 22 out of the 275 ex-combatant respondents claim to have entered the DDR process in 2004 or later. They would have been processed after UNMIL revised procedures in light of the December 2003 episode at Camp Scheiffelin near Monrovia.[13] However, there is no significant difference in the rate of "insecure" responses among those processed before and after January 2004. (In fact the rate of insecure responses is *higher* for post-2003 cases, but the difference is not so great as to be statistically significant.) Among the 214 respondents that answered, nearly all of them (91%) indicated that UNMIL was the force assigned to provide security at their cantonment site; remarkably, all 19 of those respondents who *did not* identify UNMIL as the security provider also indicated that they did indeed fear attack. Despite the small sample size, it is a stark pattern. UNMIL's absence seems to be associated with insecurity in these respondents' minds.

C. Participation in the reintegration program

31. As discussed above, the 275 respondents in the excombatant sample were identified through the national reintegration program, and so they were all participating in the program in some way. Among the 113 excombatants identified in the household sample, approximately half (55 of the respondents, or 49%) indicated that they had not participated in the reintegration program; 28 of these claimed to have participated in the AFL or LURD factions during the 1999-2003 war, which would have made them eligible for reintegration benefits. In addition, it is widely believed that some number of the participants in the reintegration program had not served in the fighting forces. After so many years of irregular conflict, all of this is to suggest the degree of "fuzziness" in the line that separates "excombatants" from civilians in Liberian society.

32. Focusing on the 275 respondents in the excombatant sample, 103 respondents (37%)

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[13]The opening of the DDR process in Monrovia in December 2003 was met with rioting as facilities were inadequate for processes and delivery of benefits to the 12,000 plus combatants that presented themselves.

Table 4: **Demographic factors and economic outcomes in the matched excombatant and household samples**

	Matched household sample (n=189)	Matched excombatant sample (n=168)
Men	93%	93%
Women	7%	7%
15-25	21%	21%
26-35	56%	56%
36-50	23%	23%
51+	0%	0%
a.No formal school	27%	27%
b.Primary unfinished	20%	20%
c.Primary finished	29%	29%
d.More than primary	24%	24%

	Matched household sample (n=189)	Matched excombatant sample (n=168)
a.No income reported	23%	17%
b.1-4500LRD/month	46%	50%
c.+4500LRD/month	31%	33%
a. Agriculture	55%	60%
b. Unskilled labor	14%	13%
c. Skilled labor	1%	6%
d. Commerce	12%	13%
e. Soldier/police	3%	1%
f. Professional	4%	0%
g. Student	10%	5%
h. No occupation	2%	2%

The left table shows balance in demographic features in the matched household and excombatant samples. The right table shows economic outcomes for this matched sample.

indicated that they had registered for benefits, and 90 (33%) indicated that they had not (the remaining 82 stated that they did not know). Reasons for non-registration were given in only a small fraction of the 90 cases, and these were spread across "card lost", "too far", and "rejection by the JIU." Among those that did register, the vast majority (88 respondents, or 85%) indicated that they chose only vocational training (rather than education or education plus vocational training), as might be expected from the age distribution of the excombatants (refer to Table 1). A solid majority of (80 respondents, or 78%) of the trainees received some information about what kinds of training would be economically viable; carpentry and mechanics were by far the most common vocational training options. Only about half (53 respondents, or 51%) indicated that they had completed their training; reasons for non-completion were given by only a small number (21) of the respondents, and the most common among these responses were "lost my card", "dissatisfaction", and "program stopped."

D.   Economic reintegration

33. The goal in current reintegration programs is to close gaps between the economic conditions of excombatants and their civilian counterparts, and to help excombatants achieve a sustainable livelihood. While an in-depth examination of reintegration is beyond the scope of this report, we provide some broad-brush results from the survey. Table 4 shows demographic characteristics and economic outcomes for a subset of our data that include members of the excombatant and household sample. In this subset, we have done the best we can to match up respondents from the household sample to the profile of the excombatant sample. The reason for doing this is straightforward. In comparing the economic outcomes of respondents in the excombatant sample to those in the household sample, we want to account for demo-

Table 5: **Demographic factors and economic outcomes in samples matched to the profiles of respondents who fully participated in the reintegration program**

	Matched household sample (n=57)	Matched partic. (n=37)	Matched non-partic. (n=62)
Men	100%	100%	100%
15-25	11%	11%	11%
26-35	68%	68%	68%
36-50	21%	21%	21%
a.No formal school	24%	24%	24%
b.Primary unfinished	19%	19%	19%
c.Primary finished	27%	27%	27%
d.More than primary	30%	30%	30%

	Matched household sample (n=57)	Matched partic. (n=37)	Matched non-partic. (n=62)
a.No income reported	16%	20%	12%
b.1-4500LRD/month	44%	59%	69%
c.+4500LRD/month	40%	21%	19%
a. Agriculture	64%	61%	61%
b. Unskilled labor	12%	17%	13%
c. Skilled labor	0%	5%	11%
d. Commerce	16%	5%	7%
e. Soldier/police	3%	0%	0%
f. Professional	4%	0%	0%
g. Student	1%	3%	8%
h. No occupation	0%	8%	0%

The left table shows balance in demographic features in the matched samples of household respondents, excombatant respondents who fully participated in reintegration programs ("partic."), and excombatant respondents who did not fully participate ("non-partic."). The samples are matched to the profile of the excombatant respondents who fully participated. The right table shows economic outcomes for this matched sample.

graphic factors that may trivially explain differences in economic outcomes. As was shown in Table 1, there are large differences in gender balance, age, and educational attainment for respondents in the household and excombatant samples. There are also differences in the geographic distribution of respondents in the two samples. Thus, we matched as many of the excombatant sample respondents as we could to household sample counterparts on the basis of all these factors. We were able to match 189 excombatant respondents to 168 household sample respondents in this way.[14] When we do so, we find that on the whole, excombatants tend to earn as much, and perhaps slightly more, than their civilian counterparts. In terms of livelihoods, the profile of occupations among excombatant respondents is quite similar to that of their household sample, although there are very slight increases among excombatants in skilled labor and agriculture, and a slightly lower propensity to pursue studies.

34. We also looked at whether full participation in the reintegration program was associated with improvements in economic outcomes. Our ability to do this was constrained by the small number of excombatant respondents that actually finished training as part of the program. We call these "full participants" in the reintegration program. Using the same matching method as described in the previous paragraph, we found excombatant respondents who either forwent reintegration training altogether or did not complete it ("non-participants") and respondents from the household sample that matched the profile of the full participants. Demographic characteristics and economic outcomes for this matched sample are shown in Table 5. We were not able to match all program participants—only 37 of them could be

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[14]In some cases, multiple respondents from one sample were matched to a single respondent from another; in these cases, we weight the multiple matches construct an "averaged" single match.

matched. Thus, despite the small sample size, a few things can be discerned. First, in general, full participation in the program was not associated with improvement in earnings or occupation—earnings are lower on average, and the "no occupation" rate is higher. Second, as is evident from comparing Table 4 to Table 5, high earning excombatants drop out of the sample after we match to the profile of full participants, however high earning household sample respondents remain. Perhaps the most compelling explanation of both of these facts is that excombatants selected whether or not to remain in the reintegration program based on whether or not they had better options elsewhere. Thus, the more skilled, capable, or better-connected excombatants seem to have chosen to forgo training to pursue otherwise available economic opportunities. Given that reasons for non-participation included things like "office was too far" and "dissatisfaction", it does seem that excombatants were engaging in cost-benefit calculations of this sort. For those respondents who found training to be sufficiently valuable as to complete it, the training does not seem to have closed the gap with either their non-participating excombatant counterparts or their civilian counterparts.

35. Subjective perceptions from respondents in the excombatant and households samples suggest that economic reintegration problems are not a pressing concern on the minds of many. Perhaps surprisingly, both excombatant and household sample respondents tended to describe their economic conditions now as "good" (77% and 82% respectively). Among excombatants, this was not something that varied over income groups, although upper income group respondents in the household sample were more likely to report their current conditions as "good" or "excellent." When asked to compare their economic conditions to those of excombatants in their communities, respondents in the household sample tended to state that their conditions were the "same" (40%) or "better" (40%); remarkably, perceptions on this question were similar among excombatants, with 54% stating that conditions were the "same" and 36% stating that conditions were "better."

E. Social reintegration

36. The evidence on social reintegration shows that in general, excombatant respondents do not face major problems in gaining acceptance. The high rates of reported acceptance suggest that UNMIL's role in fostering acceptance could only have been limited. A large majority (77%) of excombatant respondents indicated that they spent most of their time with "family and civilian friends" as opposed to "friends from faction" (12%) or "alone" (10%). Nearly all excombatant respondents indicated that they faced "no problems" in gaining acceptance from their families (94%) or their communities (93%). The evidence does not suggest that discrimination of excombatants is a major concern. In both the household and excombatant samples, responses varied widely on the question of whether excombatants were

more or less easy to distinguish from noncombatants: 42% of household sample respondents said "very easily", 12% said "somewhat easily", 23% "somewhat difficult", and 24% "very difficult"; for excombatants, the percentages were 33%, 16%, 24%, and 27% respectively. No striking geographic pattern was found in average responses at the clan level, nor did it seem that our measure of conflict history did much to explain this variation. In clans where more than half of household respondents indicated that excombatants were "very easy" to identify, excombatant income levels tended to be lower on average. Given the totality of the evidence on social reintegration, it does not seem that this is indicative of excombatant discrimination leading to economic problems, but rather that in some communities, there are some excombatants who are conspicuously challenged in their ability to settle into a productive livelihood. This does not appear to characterize excombatants in general though.

37. The data do suggest that UNMIL's presence was associated with excombatants being less engaged in local associations, although the reasons for this are unclear. We compared rates of participation in local cooperatives and community associations among respondents in the matched household and excombatant samples displayed in Table 4; 28% of matched household sample respondents said that they were involved such groups, and 34% of matched excombatant sample respondents indicated the same. In looking at the relationship between such social engagement and peacekeeping deployments, we find a curious pattern. Rates of participation among excombatants are much higher in the *distant* communities (68%) as opposed to the proximate communities (26%) and deployment communities (27%). There are no such differences for respondents from the household sample.

VIII.   Civilian protection and insecurity

Table 6: **Household Sample Respondent Reports of Victimization by Armed Groups**

	Reported cases during war	Reported cases after war (post-2003)
Forced to hide due to armed group	357 (35%)	6 ($< 1\%$)
Possessions looted/vandalized by armed group	466 (46%)	6 ($< 1\%$)
House damaged/destroyed by armed group	362 (35%)	4 ($< 1\%$)
Injured or maimed by armed group	247 (24%)	6 ($< 1\%$)
Sexual abuse of household member by armed group	122 (12%)	3 ($< 1\%$)

A.   Victimization by armed groups

38. We discussed above how UNMIL enjoyed great legitimacy among respondents as a security provider, although such responses may somewhat overstate this legitimacy due to courtesy biases. We also noted above that UNMIL took control of the peacekeeping operation after the end of major hostilities, and that no major re-escalation took place. Along those lines, we asked household respondents to tell us if they were subject to various forms of victimization by armed groups. The responses are displayed in Table 6, which provides further evidence of the fact that when the war ended with the Accra agreement in 2003, it ended everywhere in the country. Areas more or less proximate to UNMIL's deployments did not differ in this regard. The evidence suggests that UNMIL had little active role to play in dealing with major aggression by armed groups, although it remains possible that UNMIL's presence was a blanket deterrent for the entire country against any such aggression.

39. The measured shown in 6 show incidence of victimization at the level of households. A special interest area is in violence towards women. The survey asked respondents whether they had ever been taken prisoner or hostage by an armed group. About 21% of respondents indicated that this had happened to them; this rate of reported victimization did not differ significantly across men and women (22% and 20%, respectively).

B.   Crime

40. Unfortunately, the data do not permit us to properly assess whether proximity to deployments is associated with more or less crime. The crime reports data do not contain enough detail for us to determine the precise timing of crime victimization events. We asked respondents to indicate whether, in the years "since 2004", they had feared robbery of physical attack or had actually been the victim of robbery or physical attack. Respondents in deployment and proximate communities were a bit more likely to report that they feared or have actually experienced robbery or physical attack within the past few years: 28% of respondents in deployment and proximate communities reported fearing such attacks, as compared to 24% in distant communities; 22% and 27% of household respondents report actually having experienced such attacks in deployment and proximate communities, respectively, as compared to 19% in distant communities. None of these reported rates of victimization differed significantly across the male and female respondents in the sample. But the negative association between deployment proximity and reports of attacks is concentrated among among recently settled households: the odds of experiencing actual attack are about 30% higher for newly settled households in proximate communities than for their longer-settled counterparts. What we do not know is is whether these robberies of attacks *prompted* the resettlement or whether they happened after resettlement. If yes, then this

would be evidence of security benefits in deployment communities; if no, then this would suggest that resettlement into deployment communities comes with higher rates of crime-based victimization. The data are not fine grained enough for us to parse this out, and so we recommend analysis of crime statistics from other sources to determine what is actually going on.

C.   Resettlement

41. Households often respond to insecurity by relocating. For this reason, data on displacement, migration, and resettlement are important indicators in the analysis of human security dynamics. Table 7 shows our best estimates of settlement patterns in relation to peacekeeping deployments. As a baseline, we use the household population data gathered as part of UN Office for the Coordination of Humanitarian Affairs (UN-OCHA) special rapid assessment in 2004-5. These data are used to construct a rough estimate of the number of households per community at the time of the end of the war. The fact that the assessment was done some months after the end of the war means that some post-war dynamics are already captured in the measure, but it is the best baseline measure that is available. We show that the baseline values are very similar across distant, proximate, and deployment communities. This is an intentional feature of our sample: we designed the sample so that such differences would be small, allowing us to isolate the impact of deployments. We emphasize that this *does not* characterize the population, but is rather the result of a sampling tactic that we used to increase our leverage in making statements about the impact of deployments (refer to section III and Figure 2 above). The next line shows estimates from the 2008 national census. It shows substantial differences in the number of households over distant, proximate, and deployment communities. Assuming that any biases and error in the UN-OCHA are not overwhelming, these differences can be attributed to distant, proximate, and deployment communities experiencing vastly different settlement patterns between 2004 and 2008. We estimate that deployment communities experienced both substantially lower out-migration and substantially higher resettlement and in-migration. We estimate that the rate of out-migration from distant communities was about 1.5 times the rate in deployment communities (74%/50%, from section V of the table). The estimated rate of resettlement was about 4 times higher in deployment communities than in distant communities (17%/4%, from section VI) and the rate of in-migration was about two times higher in deployment communities than in distant communities (18%/10%, from section VIII).

42. These higher rates of settlement into deployment communities may be due to direct facilitation of settlement by UNMIL, the economic attractiveness of such communities due to market stimulation associated with deployments, or due to perceptions that deployment

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areas would be more secure. The data on insecurity displayed in Table 2 above shows that armed-conflict-related insecurity did not differ substantially from community to community, so the available evidence does not favor of the security interpretation at this level. As discussed in the previous section, the crime data are too coarse to permit any conclusions about whether crime-related insecurity may explain the differences in settlement dynamics. Data on economic outcomes presented below (in section X below) *do* show marked differences in the market vitality of deployment communities as compared to distant communities, lending some credence to the "economic attractiveness" explanation. Data on facilitated resettlement/migration were not available to allow us to assess the validity of the "direct facilitation" explanation.

Table 7: **Settlement Patterns, by Deployment Proximity**

	Distant clans in sample	Proximate clans in sample	Deployment clans in sample
I. Average number of households per clan, 2004 (UN-OCHA Estimate)	2,573	2,102	2,582
II. Average number of households per clan, 2008 (LISGIS Census Estimate)	1,019	1,227	2,232
III. 2009 Sample Survey Results:			
a. Prewar inhabitants who never left	31%	21%	20%
b. Prewar inhabitant displacees/migrants who returned during war	6%	9%	6%
c. Displacees/migrants from other clans who arrived during war	29%	25%	32%
d. Prewar inhabitant displacees/migrants who returned after war	9%	10%	20%
e. Displacees/migrants from other clans who arrived after war	25%	35%	21%
IV. Estimated household distribution per clan[a]			
a. Prewar inhabitants who never left	316	258	446
b. Prewar inhabitant displacees/migrants who returned during war	61	110	134
c. Displacees/migrants from other clans who arrived during war	296	307	714
d. Prewar inhabitant displacees/migrants who returned after war	92	123	446
e. Displacees/migrants from other clans who arrived after war	255	430	469
V. Estimated percentage of 2004 households who out-migrated by 2008[b]	74%	68%	50%
VI. Estimated number resettling households as a percentage of 2004 households[c]	4%	6%	17%
VII. Estimated number in-migrating households as a percentage of 2004 households[d]	10%	20%	18%

[a] *The estimates in section IV of the table come from combining the estimates from sections II and III.*

[b] *The estimates in section V come from subtracting lines a, b, and c in section IV from the estimates in section I and then dividing by the latter.*

[c,d] *The estimates in sections VI and VII come from adding lines c and d, respectively, from section IV and dividing by the estimates in section I.*

UN-OCHA estimates come from a rapid assessment conducted in 2004-5. Clans in the sample were matched on these estimates. The 2008 census enumeration shows that the population sizes differ substantially. Assuming that bias or error in the UN-OCHA data is not overwhelming, this reflects significant differences in settlement dynamics.

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IX. Humanitarian assistance

43. We showed above that UNMIL enjoyed great legitimacy as a security provider. This was not quite the case with respect to the *peacekeeping* operation's reputation as a provider of humanitarian assistance. Respondents were asked what activities peacekeepers engaged in regularly in their communities. We recorded whether respondents reported "nothing", various types of indirect humanitarian assistance (that is, meeting or providing security for local leaders), or various types of direct humanitarian assistance (that is, discussing problems with civilians, distributing food or water, medical assistance, or repairing local infrastructure). For the most part, respondents did not tend to see peacekeepers as having much of an humanitarian assistance role: 41% of respondents reported "nothing." Among those who reported and UNMIL peacekeepers played some humanitarian role, 26% reported some indirect assistance, and 25% reported some direct assistance (these latter two percentages are not exclusive, as some respondents reported both direct and indirect assistance). Of course, these responses may simply reflect respondents separating in their minds the humanitarian assistance provided by UN agencies from the peacekeeping mission itself. The responses did not vary significantly across deployment, proximate, and distant communities.

X. Economic impacts

A. Peacekeeping economies

44. Peacekeeping forces are known to affect local economies in various ways due to procurement and individual staff spending.[15] In addition, peacekeeping deployments provide local "security bubbles" which create an attractive spaces for local investment. For these reasons, we study how deployment patterns are associated with the economic well being of household sample respondents. Table 8 shows economic outcomes for respondents in deployment, proximate, and distant communities. The results are indicative of how deployments may transform community-level economies. On income, we see that deployments are associated with a substantial increase in the percentage of respondent households earning over the LRD 4500 mark (just under $2 per day), although we also see a slight increase in the number of respondents reporting that their households earn nothing. Such a change in the income distribution may be due to the fact that on the one had, deployment communities provide greater earning opportunities, which in turn attract people from other communities who may earn no income as they wait to realize such opportunities. This "transformation" interpretation

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[15]Refer to Michael Carnahan, William Durch, and Scott Gilmore, *Economic Impact of Peacekeeping*, United Nations Department of Peacekeeping Operations Best Practices Unit and the Peace Dividend Trust, 2006.

Table 8: **Economic Outcomes, by Proximity to Deployments**

		Distant (n=355)	Proximate (n=341)	Deployment (n=324)
Household income	a.No income reported	20%	28%	25%
	b.1-4500LRD/month	59%	50%	44%
	c.+4500LRD/month	22%	23%	31%
Respondent occupation	a. Agriculture	56%	50%	45%
	b. Unskilled labor	6%	4%	10%
	c. Skilled labor	3%	6%	3%
	d. Commerce	17%	18%	21%
	e. Soldier/police	1%	1%	1%
	f. Professional	5%	6%	6%
	g. Student	8%	8%	11%
	h. No occupation	5%	6%	5%
Consumption (1): Meals eaten yesterday	0 meals	3%	6%	5%
	1 meal	39%	40%	43%
	2 meals	47%	45%	42%
	3 meals	11%	9%	10%
Consumption (2): Recent home improvement	No	82%	82%	74%
	Yes	18%	18%	26%

The table shows the percent distributions of respondents for economic outcomes in communities that hosted peacekeeping deployments, were proximate to deployment communities, and were distant from peacekeeping deployment locations. The results suggest that deployments are associated with important differences in community economies.

is also consistent with the differences in the results for occupations. Deployment communities are associated with higher proportions of respondents engaged in unskilled labor and in commerce, as well as lower engagement in agriculture, although the differences are not very pronounced. In terms of basic consumption—the number of meals eaten—there are no differences that stand out. But in terms of more substantial consumption—home repairs and improvements—we find a positive association. The signs point toward deployments serving as stimulants to local labor and commercial markets.

B.   Quick impact and employment projects

45. The economic impact described in the previous section is what we might call "incidental," because the changes are not necessarily intended. UNMIL also engaged in programs that sought to have direct effects. These included quick impact and employment projects. We obtained information from UNMIL staff on the location of these projects. Such information could only be obtained after the household sample data were collected, and so this limits our analysis somewhat. The reason is that UNMIL undertook quick impact and unem-

Table 9: **Economic Outcomes by Quick Impact or Employment Projects in the Matched Subsample**

		Project communities (n=175)	No-project communities (n=131)
Household income	a.No income reported	13%	13%
	b.1-4500LRD/month	70%	56%
	c.+4500LRD/month	17%	31%
Respondent occupation	a. Agriculture	69%	67%
	b. Unskilled labor	6%	3%
	c. Skilled labor	1%	6%
	d. Commerce	13%	12%
	e. Soldier/police	0%	0%
	f. Professional	3%	4%
	g. Student	4%	7%
	h. No occupation	6%	3%
Consumption (1): Meals eaten yesterday	0 meals	4%	4%
	1 meal	40%	37%
	2 meals	43%	41%
	3 meals	13%	18%
Consumption (2): Recent home improvement	No	84%	78%
	Yes	16%	22%

The table shows the percent distributions of respondents for economic outcomes in communities that did and did not receive quick impact or employment projects. The data do not suggest that these projects significantly improved local economic conditions.

ployment projects in deployment, proximate, and distant communities alike, although they were considerably more common in the sampled deployment communities (10 out 13 had either a quick impact or employment project) than in the sampled proximate and distant communities (4 out of 11 and 6 out of 13, respectively, had either quick impact or employment projects). In order to identify the impact of these projects, per se, in isolation from deployments, we thus need to match up deployment communities that received projects with deployment communities that did not, and so on for proximate and distant communities, while also accounting for the conflict history, population size, and social infrastructure variables used to design the original sample. We are able to match up 6 out of the 20 sampled clans that received projects with 4 out of the 13 sampled clans that did not. The matched set includes 3 proximate clans and 7 distant clans—no deployment clans could be matched. The no-project clans (with deployment proximities) are: Deygbo (proximate), Lower Mecca (distant), and Lower Zor (distant) in Bomi county, and Tchien Menyea (distant) in Grand Gedeh county. The project clans are Gbor (distant), Manna (proximate), and Tehr (proximate) in Bomi county, Gborbo (distant) and Tarleh (distant) in Grand Gedeh county, and

Mehn (distant) in Rural Montserrado. The data are appropriately weighted to ensure the the project and no-project communities are balanced in their deployment status and the other background variables.[16] The results are shown in Table 9. The evidence here does not show that the projects had significant economic benefits for the recipient communities. In fact, the no-project communities fare better on almost every score. The sample size is small, however, so small differences (e.g. less than 15 percentage points) are not statistically meaningful.

XI. Social impacts

Table 10: **Percentage of Respondents Able to Affirm that Community Activities Took Place within Past Six Months, by Proximity to Deployments**

	Distant (n=355)	Proximate (n=341)	Deployment (n=324)
Public celebrations	79%	75%	64%
Public projects	84%	80%	67%
Rallies	35%	33%	27%
Security meetings	48%	48%	36%

The table shows percentage of respondents who were able to affirm that public celebrations, public projects, political rallies, or security meetings took place in their community in the past six months. Respondents are categorized by whether they are from communities that hosted peacekeeping deployments, were proximate to deployment communities, or were distant from peacekeeping deployment locations. The results suggest that deployment communities are less cohesive.

46. We have already noted above that excombatant respondent participation in local cooperatives and associations is higher in distant communities than in proximate and deployment communities. Household sample respondent participation rates in these activities do not vary by deployment proximity. Other evidence indicates that deployment proximity is associated with less vibrant community life in other ways as well. Table 10 shows results from questions that asked respondents whether any celebrations, public projects, political rallies, or security meetings took place in their community in the past six months. For a respondent to answer "yes", there must have been such activities, and the respondent must have been aware of it. Both of these requirements get at the same underlying quantity of interest—namely, engagement in community life. The table shows that respondents from deployment communities tended to be less engaged in community life. This result may be

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[16]As should be clear, two of the no-project communities were each matched to single project communities, and the two other no-project communities were each matched to a pair of project communities. For the latter, a weighted average was taken to construct a "synthetic" match. This procedure makes more use of the information in the data than would one-to-one matching procedure.

indicate consequences of economic and resettlement impacts of deployments in the localities. We recommend that this issue be the subject of further investigation.

XII. Re-establishment of political order

47. Respondents expressed satisfaction with the Comprehensive Peace Accords, with only 6% saying they were "not satisfied" with the Accords, 62% "satisfied", and 32% "very satisfied." Demographically, those reporting that they earned "no income" were considerably less likely to say that they were "very satisfied" (no significant education, gender, or age differences). When asked what was the most important feature of the Accord, respondents tended to emphasize elections (33%), reconciliation (26%), and power-sharing (28%). When asked who benefitted the most from the Accords, the most common response was "don't know" (42%), followed by "LURD" (25%) and then "the government" (15%). Responses to these questions did not vary in meaningful ways based on whether communities were more or less proximate to peacekeepers.

48. We measured people's levels of political trust with an index that added up 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. Demographically, higher educated men tended to exhibit less trust. Respondents in deployment communities also tended to exhibit considerably less trust than their counterparts in proximate and distant communities. This is further evidence of relative social malaise in deployment communities, which as we mentioned in the section on social impacts, is worthy of more attention.

49. Finally, we asked respondents whether their community chiefs had fled during the time of the conflict, and if so, whether they had returned.[17] Out of the 36 clans included in the study, the evidence suggests that 11 experienced such leadership flight, including 5 that received deployments, 3 that would be proximate communities, and three that would be distant communities. The numbers are too small to meaningfully test whether deployments facilitated leadership return, but we note here that only in one out of the four deployment communities did the leader return, as compared to two out of three distant communities; in none of the proximate communities did the leader return.

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[17]This information was gathered from the surveys. We only used answers from respondents who indicated that they had been living in the same community prior to the onset of the second civil war in 1999. Sometimes respondents gave different answers about whether local leaders fled and, if they fled, when they returned. There was always a clear modal response, so that is the one that was assigned to the clan.

XIII.   Electoral assistance

50. We collected basic data on voting and campaign participation in the 2005 elections. Self-reported voter turnout was high among respondents in the household sample, with 89% of respondents reporting that they voted; there were no significant differences between distant, proximate, and deployment communities in such reports. The self-reported rate of participation in meetings or rallies was about 42%. Interestingly, this was considerably higher among *women* in deployment communities: the odds of a women in a deployment community participating in the 2005 campaign was about double that of women in distant communities. Respondents tended to say that they thought the 2005 elections were free and fair (74%). Excombatants reported slightly higher levels of political engagement than their counterparts in the household sample: 91% reported that they voted, and 55% reported having participated in meeting or rallies for the 2005 elections. Excombatants were somewhat less likely than respondents from the household sample to report that the elections were fair (64%). For excombatants, reports of voting were higher in deployment and proximate communities as compared to distant communities (92% and 93% versus 82%, respectively), although excombatant reports of having participated in meetings or rallies were slightly lower in deployment communities (54%) versus proximate (70%) or distant communities (67%).

51. Nearly all respondents (92%) in the household sample indicated that UNMIL was somehow involved in electoral processes where they lived, with 61% of respondents affirming that UNMIL sensitization took place in their community, 8% affirming that training took place, and 31% affirming that UNMIL personnel were involved in security polling places. Affirming that sensitization took place in one's community was not related to a respondent's perception of whether or not the 2005 elections were fair, perhaps because respondents formed opinions based on what actually happened on election day. Affirming that sensitization took place was associated with a slightly higher propensity to report having voted in 2005 (92% for those affirming that sensitization took place, and 85% for those who did not). The rather small number of respondents who affirmed that UNMIL training took place in their community were both more likely to consider the elections to have been fair (91% instead of 72%) and to report that they voted (96% instead of 88%). A rather curious result is that those who reported UNMIL security activity in their local polling stations were less likely to report elections as having been fair (67% as opposed to 77%), but were nonetheless more likely to report having voted than those who could not affirm security activity having taken place (96% versus 86%).[18]

52. What we cannot establish from these associations are whether they indicate effects

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[18]The associations reported here are bivariate associations. When we study the associations jointly with multiple regression, the marginal relationships are just as pronounced.

of the electoral activities on individuals, or if they reflect some disposition in respondents that makes them more likely to report on UNMIL electoral activities and election conditions in certain ways. Sorting this out is challenging. Comparisons between respondents from different communities is plagued by the fact that different communities faced very different electoral circumstances—something that is not adequately captured in the data. Comparing respondents from the same community who nonetheless differed in what UNMIL electoral activities is problematic, because we don't have a good sense of why respondents from the same community would have reported different types of activity (or non-activity). One approach is to study outcomes at the level of communities themselves—that is, by using average responses as a measure of "extent of penetration" of UNMIL electoral activities. When we do so, only the positive association between training and perceptions of fairness and the negative association between security activity and perceptions of fairness stay the same. A negative association emerges between security activity and voting, however, and other associations effectively disappear. Because the measured associations are intriguing, we recommend that a more sound analysis be conducted—one that uses data on actual UNMIL program activity. Such data could not be furnished to us during our period of fieldwork.

XIV.   Human rights promotion

A.   UNMIL's respect for human rights

53. Respondents appreciated UNMIL peacekeeping personnel as respectful. We asked respondents whether they thought UNMIL peacekeepers treated people in their communities "with respect and dignity"; 84% responded "always", 8% "sometimes", 2% rarely, and 5% "never."

B.   Social cohesion and human rights attitudes

54. We examine whether proximity to deployments is associated with differences in human rights perceptions. We hypothesize that deployment bases facilitate the establishment and operation of NGOs and civil society organizations; in addition, human rights promotion done under the auspices of the peacekeeping operation itself will tend to be concentrated near base areas. We test whether deployment and proximate communities show greater progress in human rights promotion than comparable "distant" communities. The evidence suggests impacts associated with perspectives on gender, but there is little to suggest that deployment areas were hubs of activity that had any significant impact on inter-ethnic cohesion or perspectives on transitional justice.

55. We first examine attitudes toward political and gender rights. We asked whether

people feel that it is important to hold their leaders accountable, whether they deem violent protest to be legitimate, whether they think that women should be granted equal rights and responsibilities, and whether they feel that women should be allowed to hold office. In comparing deployment, proximate, and distant communities, we find no significant differences in attitudes toward accountability or violent protest; 80% of people agree that they have a right to keep a close eye on their leaders, 76% say that violent protest is not okay. These percentages do not differ significantly across community types. We do find significant differences in perceptions toward women's rights promotion. Whereas about 63% of people in both distant and proximate communities agree that women should have equal rights and responsibilities, the percentage is about 71% in the deployment communities. Interestingly, this effect is concentrated among *men*. On the rights of women to hold office, we find that approximately 61% of people in distant and proximate communities agree with this right, whereas the percentage in deployment communities is approximately 64%. In this case, the effect is concentrated among *women*.

56. We next examine ethnic identity, and the extent to which individuals in different communities tend, on average, to cling to a strong sense of ethnic identity. While ethnic identification can provide a basis for joint community action, given the politicization of ethnicity during the course of the Liberian conflict and the fact that violence was often interpreted along ethnic lines, we might take strong signs of ethnic parochialism as being worrying. We used an index that measures levels of ethnic parochialism. Respondents were asked three questions: whether they thought it is necessary to support co-ethnics even if they disagree with them; whether they thought the fate of co-ethnics had more to do with politics than hard work; and whether they thought their personal fate depended a lot on the fate of their co-ethnics as a group. The index is simply the number of "yes" responses. On this score, we find that respondents in deployment communities express significantly *higher* levels of parochialism than their counterparts in proximate and distant communities. This difference is totally attributable to the much more parochial responses of *recently resettled individuals* in deployment communities. This is further evidence on the importance of effects that deployments may have on post-conflict household settlement patterns.

57. Finally, we examine whether activities in the vicinity of peacekeepers may have improved public awareness of transitional justice processes and stimulated demands for such processes. We asked whether respondents had heard "nothing", "not much", "some", or "a great deal" about the national Truth and Reconciliation Commission; about 44% of respondents indicated that they had heard some or a great deal, and there were no differences across deployment, proximate, and distant communities. In terms of demands for transitional justice, we asked what respondents think would be the appropriate thing to do to combatants that committed violent abuses during wartime; 65% indicated a preference to "forgive those

who admit wrongdoing", 30% indicated "forgive all of them", and 7% indicated a preference for punishment. These percentages did not differ across deployment, proximate, and distant communities. Finally, we asked whether respondents thought that it was better to "seek the truth" about what happened during the war or "try to forget about the past." We find that 35% of respondents in distant communities express a preference for seeking the truth. This figure is 31% and 41% for respondents in deployment and proximate communities, respectively; these are not significantly different from the distant community percentage, although they are significant different from each other.

XV.   Public information

58. UNMIL Radio enjoyed widespread listenership among our respondents: 77% of respondents indicated that they had listened to it. Among listeners, 48% indicated listening every day, 41% indicated a few times per week, 9% a few times per month, and only about 2% indicated listening less than once a month. Listenership patterns were roughly similar in deployment, proximate, and distant communities, with slightly more of the respondents from deployment communities listening every day than in proximate and distant communities (53% in deployment communities, versus 49% and 43% in proximate and distant communities, respectively). These commonly high levels of engagement with UNMIL's public information could help to explain why attitudes toward UNMIL's role in the peace process were so similar across the different types of communities. When asked what programs they listened to most often, the largest number of listener respondents said "peace and reconciliation" (41%), followed by "news" (30%), and "culture, sports, and music" (19%). 84% of listener respondents considered UNMIL radio to be "more objective" than other local, national, or international stations, and 80% considered UNMIL radio to be more detailed.

XVI.   Conclusion

59. This study sought to identify UNMIL's impacts at the local level and to gauge the success of certain activities conducted under the auspices of UNMIL's substantive sections. Although UNMIL assumed control of peacekeeping operations after fighting ended, it enjoys high legitimacy as a security provider among Liberians represented in our sample. This perception may help explain the substantially lower out-migration and higher resettlement and in-migration that deployment communities have experienced in recent years. The study also finds that UNMIL has helped revitalize local economies, generate political interest (especially on the part of women and former combatants), and increase awareness about human and gender rights.

60. Nonetheless, there are a few areas that still need improvement. First, the legitimacy that UNMIL enjoys as a security provider can result in a dependency that could be difficult to sever. Indeed, most respondents stated that UNMIL should stay in the country. If the new security forces do manage to gain the same level of confidence, this could threaten the sustainability of peace.

61. A second priority area is the reintegration of newly resettled households. This population seems to experience more social malaise than the rest of the population. For instance, reported crime victimizations were concentrated within this population. Whether such malaise prompted resettlement in the first place or occurred after resettlement, they cannot be ignored. Furthermore, we noted that deployment communities tended to be less engaged in associational and community life. Whether this result reflects the social costs of years of civil war or simply indicates the consequences of economic and resettlement impacts of deployments in the localities, it is a serious problem that may threaten to undo the growing political interest among Liberians and indeed the peace itself.

62. Finally, with respect to exit strategy, UNMIL and the broader humanitarian community can contribute to consolidating the peace in Liberia by (i) supporting the reintegration of newly resettled households; (ii) supporting efforts to foster social and community cohesion, especially among the newly resettled households; and (ii) providing electoral assistance to sustain political interest among ordinary citizens. These efforts, combined with the government's own initiatives in these areas could provide a more solid foundation for a self-sustaining peace.