



“MIN ILA” CASH TRANSFER
PROGRAM FOR DISPLACED
SYRIAN CHILDREN IN LEBANON
(UNICEF AND WFP)

Impact Evaluation Report Endline

“Min Ila” Cash Transfer Program for Displaced Syrian Children in Lebanon (UNICEF and WFP)

Endline Technical Report

June 2018

Jacobus de Hoop, UNICEF Office of Research–Innocenti
Mitchell Morey, American Institutes for Research
Hannah Ring, American Institutes for Research
Victoria Rothbard, American Institutes for Research
David Seidenfeld, American Institutes for Research



1000 Thomas Jefferson Street NW
Washington, DC 20007-3835
202.403.5000

www.air.org

Copyright © 2018 American Institutes for Research. All rights reserved.

ISBN 978-9953-0-4715-7

CONTENTS

ACKNOWLEDGMENTS	10	VII. DESCRIPTION OF INTERVIEWED HOUSEHOLDS IN NLG/MIN IIA GOVERNORATES AT BASELINE	48
EXECUTIVE SUMMARY	11	VII.1 Household Demographics at Baseline	48
I. INTRODUCTION	18	VII.2 Economic Well-Being at Baseline	51
I.1 Context	19	VII.3 Children Ages 5–9 at Baseline	51
I.2 Objectives of the Study	20	VII.4 Children Ages 10–14 at Baseline	51
I.3 Related Literature	21	VIII. ATTRITION ⁵³	
I.4 Roadmap	22	VIII.1 Characteristics of Endline Sample Versus Baseline Sample	53
II. NLG/MIN ILA PROGRAM	24	VIII.2 Balance of baseline characteristics of remaining households	55
III. THEORY OF CHANGE	27	IX. ENDLINE RESULTS	57
III.1 Pathways to Impacts	27	IX.1 Child Food Consumption	57
IV. EVALUATION QUESTIONS	30	IX.2 Child Health.....	59
IV.1 Education outcomes	30	IX.3 Child Work	60
IV.2 Broader child well-being outcomes	31	IX.4 Child Subjective Well-Being	62
IV.3 Household Outcomes	31	IX.5 School enrollment	64
V. STUDY DESIGN	33	IX.6 School Attendance.....	66
V.1 Quantitative Approach.....	33	IX.7 Educational Aspirations	67
V.2 Qualitative Approach	37	IX.8 Educational Spending	67
VI. OVERVIEW OF DATA COLLECTION AND INSTRUMENTS	40	IX.9 Household financial well-being and food security	69
VI.1 Baseline Data Collection	40	X. OPERATIONAL PERFORMANCE	72
VI.2 Rapid Follow-Up Data Collection.....	40	X.1 Quantitative Sample.....	72
VI.3 Endline Quantitative Data Collection Instruments.....	40	X.2 Familiarity With the NLG/Min Ila Program	73
VI.4 Endline Data Collection	42	X.3 Perceptions About Program Selection	73
VI.5 Institutional Review Board.....	45	X.4 Perceived Conditionality	73
VI.6 Data Entry.....	46	X.5 Accessing Payment.....	75
VI.7 Data Security	46	X.6 Challenges With Second Shift	76

XI. CONCLUSION AND RECOMMENDATIONS	79
XI.1 Results on Program Objectives	80
XI.2 Recommendations.....	81

APPENDICES

APPENDIX A: REFERENCES	83
APPENDIX B: TECHNICAL EXPLANATION OF IDENTIFICATION STRATEGY, GEOGRAPHICAL REGRESSION DISCONTINUITY DESIGN	90
APPENDIX C: FULL ATTRITION ANALYSIS	93
APPENDIX D: DIFFERENTIAL IMPACTS BETWEEN GIRLS AND BOYS	103
APPENDIX E: TREATMENT ON THE TREATED REGRESSION RESULTS	109
APPENDIX F: RDD GRAPHS	116

FIGURES

FIGURE 1. CONFIGURATIONS OF FUNDING AMOUNTS BY CATEGORY	25
FIGURE 2. THEORY OF CHANGE	28
FIGURE 3. PILOT AND COMPARISON AREAS	34
FIGURE 4. AGE DISTRIBUTION	49
FIGURE 5. LENGTH OF DISPLACEMENT	50
FIGURE 6. PERCEPTIONS ABOUT SELECTION	74
FIGURE 7. PERCEIVED CLARITY OF ELIGIBILITY CRITERIA	74
FIGURE 8. DISTANCE TO ATM	76
RDD GRAPHS	117-152

TABLES

TABLE 1. QUALITATIVE METHODS AND RESPONDENTS	37
TABLE 2. QUALITATIVE DATA-COLLECTION TEAMS	44
TABLE 3. HOUSEHOLD DEMOGRAPHICS	48
TABLE 4. OTHER PROGRAMS RECEIVED BY MIN ILA HOUSEHOLDS AT BASELINE	51
TABLE 5. ATTRITION BY GOVERNORATE	53
TABLE 6. OVERALL ATTRITION AT ENDLINE	54
TABLE 7. DIFFERENTIAL ATTRITION AT ENDLINE	55
TABLE 8. ITT RESULTS FOR FOOD CONSUMPTION OUTCOMES (AGES 10–14)	58
TABLE 9. ITT RESULTS FOR HEALTH OUTCOMES (AGES 5–9)	59
TABLE 10. ITT RESULTS FOR HEALTH OUTCOMES (AGES 10–14)	60
TABLE 11. ITT RESULTS FOR TIME USE OUTCOMES (AGES 5–9)	61
TABLE 12. ITT RESULTS FOR TIME USE OUTCOMES (AGES 10–14)	61
TABLE 13. ITT RESULTS FOR CHILD PSYCHOSOCIAL WELL-BEING OUTCOMES (AGES 10–14)	63
TABLE 14. ITT RESULTS FOR SCHOOL ENROLLMENT (AGES 5–9)	64
TABLE 15. ITT RESULTS FOR SCHOOL ENROLLMENT (AGES 10–14)	64
TABLE 16. ITT RESULTS FOR SCHOOL ATTENDANCE (ALL AGES)	67
TABLE 17. ITT RESULTS FOR EDUCATIONAL ASPIRATIONS (AGES 10–14)	67
TABLE 18. ITT RESULTS FOR EDUCATION SPENDING (ALL AGES)	68
TABLE 19. ITT RESULTS FOR ECONOMIC WELL-BEING OUTCOMES	69
TABLE 20. ITT RESULTS FOR HOUSEHOLD FOOD CONSUMPTION OUTCOMES	70
TABLE 21. UNDERSTANDING OF PROGRAM ELIGIBILITY (QUANTITATIVE DATA)	73
TABLE 22. BENEFICIARIES’ ACCESS TO ATMS	75

TABLE C.1. OVERALL ATTRITION AT ENDLINE	93
TABLE C.2. DIFFERENTIAL ATTRITION	98
TABLE D.1. ITT DIFFERENTIAL GENDERTEST FOR HEALTH OUTCOMES (AGES 5–9)	103
TABLE D.2. ITT DIFFERENTIAL GENDERTEST FOR HEALTH OUTCOMES (AGES 10–14).....	104
TABLE D.3. ITT DIFFERENTIAL GENDERTEST FOR FOOD CONSUMPTION OUTCOMES (AGES 10–14).....	104
TABLE D.4. ITT DIFFERENTIAL GENDERTEST FOR TIME USE OUTCOMES (AGES 5–9)	105
TABLE D.5. ITT DIFFERENTIAL GENDERTEST FOR TIME USE OUTCOMES (AGES 10–14).....	105
TABLE D.6. ITT DIFFERENTIAL GENDERTEST FOR CHILD PSYCHOSOCIAL WELL-BEING OUTCOMES (AGES 10–14).....	106
TABLE D.7. ITT DIFFERENTIAL GENDERTEST FOR EDUCATION OUTCOMES (AGES 5–9)	107
TABLE D.8. ITT DIFFERENTIAL GENDERTEST FOR EDUCATION OUTCOMES (AGES 10–14).....	107
TABLE E.1. TOT RESULTS FOR HEALTH OUTCOMES (AGES 5–9)	110
TABLE E.2. TOT RESULTS FOR HEALTH OUTCOMES (AGES 10–14).....	110
TABLE E.3. TOT RESULTS FOR FOOD CONSUMPTION OUTCOMES (AGES 10–14)...	111
TABLE E.4. TOT RESULTS FOR TIME USE OUTCOMES (AGES 5–9).....	111
TABLE E.5. TOT RESULTS FOR TIME USE OUTCOMES (AGES 10–14)	112
TABLE E.6. TOT RESULTS FOR CHILD PSYCHOSOCIAL WELL-BEING OUTCOMES (AGES 10–14).....	112
TABLE E.7. TOT RESULTS FOR EDUCATION OUTCOMES (AGES 5–9)	113
TABLE E.8. TOT RESULTS FOR EDUCATION OUTCOMES (AGES 10–14).....	113
TABLE E.9. TOT RESULTS FOR ECONOMIC WELL-BEING OUTCOMES	114

ABBREVIATIONS AND ACRONYMS

AIR	AMERICAN INSTITUTES FOR RESEARCH
IRB	INSTITUTIONAL REVIEW BOARD
ITT	INTENTION TO TREAT
MEHE	MINISTRY OF EDUCATION AND HIGHER EDUCATION
NLG	NO LOST GENERATION
OOR	OFFICE OF RESEARCH—INNOCENTI
RDD	REGRESSION DISCONTINUITY DESIGN
RACE	REACHING ALL CHILDREN WITH EDUCATION IN LEBANON
TOT	TREATMENT ON THE TREATED
UN	UNITED NATIONS
UNHCR	UNITED NATIONS REFUGEE AGENCY
UNICEF	UNITED NATIONS CHILDREN’S FUND
VASYR	VULNERABILITY ASSESSMENT OF SYRIAN REFUGEES IN LEBANON
WFP	WORLD FOOD PROGRAMME

ACKNOWLEDGMENTS

This report was written by the American Institutes for Research (under contract to United Nations Children’s Fund [UNICEF] Lebanon) and UNICEF Office of Research–Innocenti (OoR). The views, thoughts and opinions expressed in this study are those of the authors alone and do not necessarily represent those of the institutions, agencies or individuals involved.

We thank UNICEF Lebanon for the opportunity to carry out this study and for its financial and technical support. We would further like to recognize the many individuals and organizations without whom it would not have been possible to complete this study. We thank the Program Management Unit of the Reaching All Children with Education project in Lebanon’s Ministry of Education and Higher Education, including Sonia Khoury, Bane Khalife, Georges Ghassan, and Maroun Hobeika; the UNICEF Middle East and North Africa Regional Office; OoR; the United Nations (UN) Refugee Agency; the World Food Programme (Jordi Renart and Soha Moussa); and Statistics Lebanon for technical and/or financial support at various stages of this project.

Our special thanks go to Violet Speek-Warnery, Georges Haddad, Sharlene Ramkisson, Jamil El Khoury, Juan Santander, Maxime Bazin, Abed Alrahman Faour, Louisa Lippi, and Georges Fares in UNICEF Lebanon for their technical support during the research design and implementation

of the fieldwork. We thank Rabih Haber, Hanane Lahoud, and Elie Joukhadar of Statistics Lebanon and Mohammed Elmeski of AIR for their support during the implementation of the fieldwork. We gratefully acknowledge feedback on the initial evaluation design by members of the UNICEF OoR Research Review Group, including, in particular, Sudhanshu Handa (now at the University of North Carolina at Chapel Hill) and Amber Peterman.

Our acknowledgments would be incomplete without mentioning our team of very capable research assistants. AIR’s Kevin Kamto and Victoria Rothbard provided invaluable data support. We also acknowledge the input of the team of data collectors and supervisors from Statistics Lebanon, whose dedication during data collection ensured that the data collected were of high quality.

The patience exercised by the Syrian refugee households, community leaders, and community members during interviews is also gratefully acknowledged. It is our hope that the insights from the information they provided will translate into valuable support for their communities.

*Jacobus de Hoop
Mitchell Morey
Hannah Ring
Victoria Rothbard
David Seidenfeld*

EXECUTIVE SUMMARY

In the 2016–17 school year, the United Nations Children’s Fund (UNICEF), in partnership with the United Nations World Food Programme (WFP) and in coordination with the Ministry of Education and Higher Education (MEHE) in Lebanon, started to pilot a child-focused cash transfer program for displaced Syrian children in Lebanon. The program, known as the No Lost Generation (NLG) or “Min Ila” (meaning “from/to”) was designed to reduce negative coping strategies harmful to children and reduce barriers to children’s school attendance, including financial barriers and reliance on child labor. UNICEF Lebanon contracted the American Institute for Research (AIR) to help UNICEF Office of Research (OoR) design and implement an impact evaluation of the program.¹ The purpose of the impact evaluation, one of the first rigorous studies of a social protection program supporting children in a complex displacement setting, is to monitor the program’s effects on recipients and provide evidence to UNICEF, WFP, and MEHE for decisions regarding the program’s future. This report investigates and discusses the program’s impacts on child well-being outcomes, including food security, health, child work, child subjective well-being, enrollment, and attendance, after 1 year of program implementation.

The Context:

The Syrian crisis is now in its seventh year and continues to negatively impact the region as millions of Syrian refugees move into neighboring countries. Lebanon has one of the highest per-capita ratios of registered refugees in the world (Government of Lebanon and the United Nations, 2014). According to the revised Lebanon Crisis Response Plan (LCRP 2018), Lebanon hosts 1.5 million Syrians who have fled conflict in Syria, as well as 34,000 Palestine refugees from Syria. The LCRP states that “more than 76 percent of displaced Syrians are living below the poverty line.” The report claims that these poor displaced Syrians carry an average debt of \$798 per household, with a majority of their debt related to funds for food. To respond to their situation, many displaced Syrian households turn to negative coping strategies such as selling off assets and

withdrawing children from school. There are many children of school age in this population with 586,540 displaced Syrian children registered in Lebanon and 57,506 Palestine Refugees between 3-18 years old. Over half of these children are not enrolled in a certified education program (formal and non-formal).

The rapid influx of refugees burdens the Lebanese economy, costing the country roughly US\$18.15 billion by 2015 and placing huge pressure on public services. The 1.5 million displaced Syrians increase the demand on infrastructure and social services, which struggle to meet increased needs. The LCRP states that “Lebanon’s healthcare facilities have been overburdened by an increase in utilization of up to 50 percent in some cases, greatly affecting their capacity to absorb a higher caseload as well as their financial sustainability.” Meanwhile basic infrastructure cannot keep up with the large demand, for example 64 percent of the population does not have access to safe drinking water services.

In short, most Syrians arrived with limited savings and have struggled to earn steady incomes to meet their families’ basic needs, such as food, healthcare, and shelter. These basic needs tend to require immediate attention, which means that Syrian families often must forgo education and its long-term benefits in favor of short-term needs.

The Program:

In the 2016–17 school year, UNICEF Lebanon started to pilot NLG/Min Ila in partnership with WFP and in cooperation with MEHE in the governorates of Mount Lebanon and Akkar. The objective of the pilot was to test and evaluate whether and how to scale-up the program to national coverage. NLG/Min Ila was designed to help households meet the implicit costs of education and reduce reliance on children for negative coping strategies such as child labour and early marriage. Syrian refugee children ages 5–14 who lived in the Mount Lebanon and Akkar governorates and were enrolled in a second-shift school (children enrolled in first shift were not eligible) received a basic monthly education transfer of US\$20 to cover a portion of the indirect costs of going to school, such as school

¹ Statistics Lebanon conducted all rounds of data collection.

snacks, transportation, and appropriate clothing and shoes. Syrian children ages 10 and older who were enrolled in a second-shift school received an additional monthly US\$45 to factor in the higher earnings of a working child in this age group. The child well-being transfer lasted for the duration of the school year, and payments were made every month via a common ATM card used by all major agencies delivering cash transfers in Lebanon (the Lebanon One Unified Inter-Organizational System for E-cards, or LOUISE). While no conditions had to be met to receive the cash, school attendance was monitored and households received visits if children did not attend school regularly, the objective of which was to refer households to additional services (e.g. health, child protection, etc.).

In the current 2017–18 school year, the program has expanded into the governorate of North Lebanon and the benefit level has been altered. There is no variation in the amount of the basic monthly transfers provided to children enrolled in a second-shift school. Children who are enrolled in Preparatory Early Childhood Education² are disabled, or face difficulties reaching school due to distance, terrain or security issues continue to receive the basic monthly transfer of US\$20.³ Children outside of these categories now receive a lower basic monthly amount: US\$13.50. The additional amount provided monthly to older children has been lowered to US\$20 and is now provided only to children ages 12 and older. These changes were made to cope with several changes in the programming environment.

Impact Evaluation:

The nonexperimental longitudinal study design compares beneficiaries in the pilot governorates of Mount Lebanon and Akkar with households that would be eligible for the program but who are not receiving the programme because they live in the nonprogram governorates of North Lebanon and South Lebanon and Nabatieh. The study uses a geographic regression discontinuity design (RDD), in which households that are located near the border separating pilot and comparison governorates are compared with each other. The

² This is the equivalent of kindergarten in second-shift schools; that is, for children who are 5 years old.

³ This transfer is now referred to as the Reaching School program.

study follows the same households over time, with the baseline data collected September–October 2016 prior to the start of the program, midline data collected February–March 2017 during the first school year in which the program operated, and endline data collected November–December 2017, at the beginning of the 2017–18 school year. The purpose of this study is to measure the impact of the program on children’s educational outcomes and their broader well-being. The evaluation includes 1,440 households, with roughly 20 from each of the study’s 74 clusters, all of which are located near at least one second-shift school. This study is an impact evaluation that estimates the effects of the program on specified outcomes of interest using a counterfactual group, as opposed to a more general evaluation that investigates other aspects of the program such as sustainability and efficiency.

We present findings by outcome area in the order they fall along the pathways to program goals as explained in the theory of change. By investigating progress along the theory of change, we can assess whether the program is moving in the right direction toward stated goals and where it might hit potential obstacles. Most of the findings presented in this report are based on endline data collected at the start of the second year of program operation. However, we make reference to the midline findings where relevant (De Hoop, Morey, & Seidenfeld 2017).

Food Consumption and Child Health:

Min Ila had a positive impact on children’s food consumption. Fewer children in pilot governorates ages 10–14 skipped a meal the previous day than similar children in the comparison group, which is an impact of a 13 percentage point reduction (15% of children in pilot governorates skipped a meal at endline). More children in pilot governorates started the day with breakfast than comparison children, with a 19 percentage point impact of the program (68% ate breakfast). Fewer children in pilot governorates also went to bed hungry at the end of the day, with a 13 percentage point reduction in hunger (11% went to bed hungry). We find that in addition to buying food, the households in pilot governorates also spent more on healthcare for their children. Households in pilot governorates spent on average US\$9.95 more on healthcare for their

children over the previous 30 days than households in comparison governorates. The probability that caregivers indicated that their children were in good health improved by 10 percentage points for younger children and 8 percentage points for older children in pilot governorates as compared with non-pilot governorates.

Child Work:

The program consistently reduced the percentage of children ages 10–14 carrying out household chores. The Min Ila program reduced the number of children caring for a family member by 17 percentage points as compared with children in non-pilot governorates, with 28% of children in the pilot governorates spending time caring for a family member. Similarly, fewer children in pilot governorates fetched firewood or water (14 percentage point reduction). Reductions in work in the household are particularly strong for

girls, with the program consistently reducing the number of girls performing each of these tasks by 23 percentage points.

Subjective Well-Being:

The program improves children’s well-being in pilot governorates as compared with children in non-NLG/Min Ila governorates. Children in pilot governorates felt more optimistic about the future, were more trusting of other people, and felt more confident and assertive. There is also suggestive evidence of a reduction in depression rates. Similar to children’s time use, we find slightly larger impacts for girls than for boys, possibly related to the finding that a higher percentage of girls than boys were able to reduce their time working in the household. Meanwhile, 13% of children report low self-esteem, which is the same as the comparison group, so the program does not seem to have an effect on this outcome.



Education:

Aggregate MEHE figures suggest that formal school enrollment rates of displaced Syrian children increased rapidly across the country from the past (2015–16) to the current school year. Average enrolment in second shift schools increased by 51 percent in NLG/Min Ila pilot areas compared to 41 percent in the rest of the country during the 2016–17 school year (midline), potentially signalling an impact of the cash transfer program on enrolment outcomes. This study also found that schooling rates increased in both pilot and comparison areas, from nearly 60% at baseline to nearly 80% at follow-up. School enrollment increases were particularly pronounced for children ages 5–9, whose school enrollment increased from slightly over 60% to nearly 90%.

As the result of a sharp nationwide increase in second-shift school enrollment of Syrian children in the 2016–17 school year, more than half of all second-shift schools in the pilot areas of the study reached full capacity while registering children and had to turn away children who wanted to enroll. While MEHE was prepared to open new second shifts in existing schools to accommodate the increase, as in previous years, in practice these capacity constraints were not resolved in the study areas of the pilot governorates. This situation created a ceiling effect because it is impossible for the program to increase enrollment above the capacity of the second-shift schools. In other words, the program could not demonstrate its full potential due to the limit on spaces to enroll children in second-shift schools, a prerequisite to receiving the program. As a result, no impacts on school enrollment were observed either at midline or at endline even though school enrollment increased over time.

At midline, roughly halfway during the 2016–17 school year, school attendance increased by 0.5 to 0.7 days a week among children who did enroll in a second-shift school, an improvement of about 20% over the control group. During endline, which took place at the start of the 2017–18 school year, self-reported school attendance rates among children enrolled in school were high in both pilot and comparison areas (an average of 4.85 days attendance per week out of 5 days). Hence, the margin for improvement in

attendance was low and no impact on attendance could be observed. Qualitative results suggest that attendance starts high and decreases during the school year, making it harder for the program to demonstrate effects on attendance at the beginning of the school year. These qualitative results are consistent with the study's findings on attendance between midline that occurred in the middle of the school year and endline, that occurred at the beginning of the school year.

Moreover, the program improved several other education-related outcomes at endline. The annual amount of money spent on children's education expenses increased, on average, by US\$60.58 as a result of the program. Households reported spending on average US\$103.18 on educational expenses in NLG/Min Ila pilot governorates. Interestingly, the program generated a slightly larger impact on spending for girls (US\$65.59 impact) than for boys (US\$56.24 impact). The average total spending on education for girls was the same as boys at endline, suggesting that the program brought more gender equity in spending on education. The program also increased the percentage of students using the bus to travel to school by 23 percentage points, with 57% of children enrolled in school taking the bus at endline.



©UNICEFLebanon2014/DavidBrunetti

Limitations:

Several limitations could affect the impact evaluation's ability to detect programmatic effects. We name the two most important ones here. First, this study was designed to capture program effects among children living in the vicinity of an active second-shift school. The rationale was that these children could readily enroll in a second-shift school in response to the program, allowing the impact evaluation to capture the impact of increasing the demand for education through a cash transfer program. Due to the sample being selected from areas with existing schools, expanded enrollment in newly opened second shifts not located near the sampled schools could not be captured.

Second, we cannot entirely rule out the possibility that other systematic changes in the pilot or comparison governorates drive the findings presented in this report. For instance, if another major government intervention was carried out in the NLG/Min Ila pilot areas but not in the comparison areas (or vice versa) this may lead to incorrect attribution of changes in child well-being indicators to the program. However, there are currently no indications that such systematic factors confound or drive the findings presented in this report.

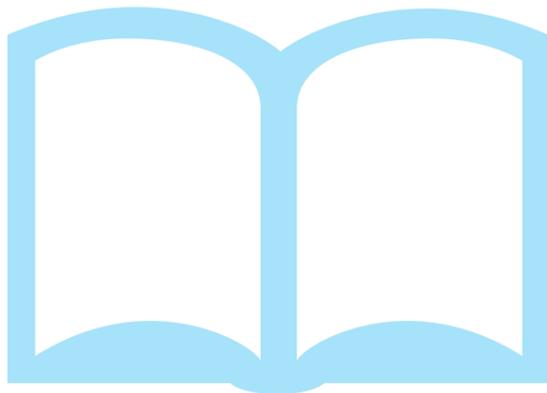
Conclusion and Recommendations:

Min Ila improved children's food consumption and their physical health, lowered child engagement in work for the household, improved indicators of children's subjective well-being and increased school attendance at midline. As cited throughout this report, many studies demonstrate the causal link between these domains and child educational outcomes. Therefore, in addition to improving the well-being of children (a primary goal of the program), Min Ila also makes positive gains for indicators along the causal pathway in the theory of change to improved educational goals.

The positive impacts generated by the program also demonstrate the ability of stakeholders including UNICEF, WFP, and MEHE, to successfully implement the cash transfer program in a challenging refugee setting. After one full year of implementation, the program managed to reach an increasing number of beneficiaries with frequent and regular payments. The stakeholders also ambitiously set out to learn about the program through a rigorous impact evaluation that uses an RDD design to estimate effects. Although cash transfer programs are regularly paired with an impact evaluation, few cash programs in refugee settings have rigorously established program effects. There are many programs that aim to assist refugees, including similar cash transfer programs for Syrian refugees living in Jordan and Turkey, jointly supporting hundreds of thousands of children, yet very few have been rigorously evaluated, leaving an important gap in our knowledge about what programs work to help refugees. This study implements a geographical RDD to estimate program effects with strong internal validity in a challenging context. Thus, this study, one of the first studies of its kind, represents a meaningful contribution to the literature on the effectiveness of cash transfer programs to assist refugee families in sending their children to school. The evidence generated from this study should prove useful for policymakers and funders to make informed decisions on how to allocate scarce resources for refugees in low- and middle-income countries.

This study is an impact evaluation with primary objectives to provide evidence on the effectiveness of the program that can both feed into broader policy discussions and global learning, and not necessarily to provide recommendations about program implementation. However, the authors worked collaboratively with UNICEF Lebanon and WFP to generate several recommendations based on the results of the study. UNICEF Lebanon country office requested that one recommendation relates to the design of the program to target stakeholders and policymakers who design and implement programs in Lebanon, while another targets people who procure or conduct research in Lebanon and relates to future research. The last two recommendations result from the operational performance piece of the evaluation.

1. The primary objective of the NLG/Min Ila program was to improve education-related outcomes, namely enrolment and attendance. Although the program only affected attendance at midline and neither attendance nor enrolment at endline, the programme demonstrated significant improvement in other child well-being aspects that are related to education. The program generated effects for children across important domains such as health, food consumption, child work, and subjective well-being. These domains are important in and of themselves for healthy child development and wellbeing. Given these important results, we recommend that the program revisit the primary objective to move towards a more holistic improvement of a child's well-being with the focus of covering multiple needs, not just education.
2. We cite many studies throughout this report that show the connection between education outcomes and health, food consumption, child work, and subjective well-being and explain how these are important steps along the pathway to affecting education outcomes. However, all of these studies occurred outside of Lebanon and in different contexts, mostly being poverty programs and not programs for refugees. Thus, we recommend conducting research into the connections between these important domains for child-wellbeing within Lebanon and especially within the refugee context, in order to strengthen and understand the child from a holistic point of view.
3. Although we did not find program impacts on enrolment in school, the evidence suggests that demand for school went up but that supply was not able to respond quickly enough. Many parents who wanted to enroll their children in school were unable to do so due to insufficient capacity. Given that the cash transfer program aimed to increase school enrolment and attendance, we recommend continued advocacy for expanding school supply in areas where public schools have reached capacity. A more general recommendation for humanitarian agencies, particularly those operating in settings of massive displacement, is that close coordination between demand and supply side policies is critical for programs to realize their full potential and maximize their effectiveness.
4. When investigating the operational performance of the program, as described in more detail below, we learned that recipients of the program may have misunderstood key aspects that might affect their behavior. For example, recipients did not clearly understand why they were eligible to receive the program and what are the selection criteria. Similarly, they may have falsely believed that there are conditions to continue receiving the program, thinking that they cannot miss days of school. Teachers and school administrators also perceived this conditionality. This misunderstanding might prevent or dissuade other eligible households from participating in the program, fearing that they are not eligible or cannot meet the perceived conditions. Clear communication about the program to the community and school administrators may improve program operations and increase the number of participants in the program.



Section I

INTRODUCTION

I. INTRODUCTION

In the 2016–17 school year, the United Nations Children’s Fund (UNICEF), in partnership with the United Nations World Food Programme (WFP) and in coordination with the Ministry of Education and Higher Education (MEHE) in Lebanon, started to pilot a child-focused cash transfer program for displaced Syrian children in Lebanon. The program, known as the No Lost Generation (NLG) or “Min Ila” (meaning from/to) Program was designed to reduce negative coping strategies harmful to children and remove barriers to children’s school attendance, including financial barriers and reliance on child labor and early marriage. UNICEF Lebanon contracted the American Institutes for Research (AIR) to help UNICEF Office of Research (OoR) design and implement an impact evaluation of the program. The purpose of the impact evaluation is to identify the program’s effects on recipients and provide evidence to UNICEF, WFP, and MEHE for decisions regarding the program’s future. This study focuses on estimating the impacts of the program using a counterfactual group, as opposed to a more general evaluation that investigates other aspects of the program such as sustainability and efficiency. This endline report presents the main impacts generated by the NLG/Min Ila cash transfer program at the start of its second year of operation.

The combination of context, program, methodology, and scope make this impact evaluation a unique and important contribution. First, the impact evaluation includes a rigorously and scientifically identified comparison group through a regression discontinuity design (RDD) to help understand the changes induced by the program. Second, a large number of refugee households were tracked for more than a year to be able to detect meaningful program effects. Third, the evaluation comprises quantitative data collected from caregivers and children as well as qualitative interviews with a variety of stakeholders. Last, the impact evaluation investigates an array of topics that fall along the causal pathway for the goals of the program, including some that are rarely examined in a protracted refugee setting, such as children’s mental well-being.

Refugee settings create challenges that often preclude rigorous evaluations. Highly mobile refugee populations are difficult to identify and track. The sensitive nature of the refugee situation makes them less likely to trust strangers or talk to them about their life, a necessary condition for conducting research. UNICEF Lebanon and the AIR research team worked to mitigate these challenges, resulting in a study that provides a unique insight into the effects of a humanitarian cash transfer program on the lives and well-being of its beneficiaries. The evidence generated from this study should prove useful for policymakers and funders to make informed decisions on how to allocate scarce resources to support refugees in low- and middle-income countries. The evidence is particularly relevant for neighboring countries facing many similar challenges and implementing similar cash transfer programs for Syrians, programs that support hundreds of thousands of children.



©UNICEFLebanon2014/DavidBrunetti

I.1 Context

The Syrian crisis is now in its seventh year and continues to negatively impact the region as millions of Syrian refugees move into neighboring countries. Lebanon has one of the highest per-capita ratios of registered refugees in the world (Government of Lebanon and the United Nations, 2014). According to the revised Lebanon Crisis Response Plan (LCRP 2018), Lebanon hosts 1.5 million Syrians who have fled conflict in Syria, as well as 34,000 Palestine refugees from Syria. The LCRP states that “more than 76 percent of displaced Syrians are living below the poverty line.” The report claims that these poor displaced Syrians carry an average debt of \$798 per household, with a majority of their debt related to funds for food. To respond to their situation, many displaced Syrian households turn to negative coping strategies such as selling off assets and withdrawing children from school. There are many children of school age in this population with 586,540 displaced Syrian children registered in Lebanon and 57,506 Palestine Refugees between 3-18 years old. Over half of these children are not enrolled in a certified education program (formal and non-formal).

The large numbers of refugees is a burden on the Lebanese economy, costing the country roughly US\$18.15 billion by 2015 and placing huge pressure on public services. The 1.5 million displaced Syrians increases the demand for infrastructure and social services, which struggle to meet increased needs. The LCRP states that “Lebanon’s healthcare facilities have been overburdened by an increase in utilization of up to 50 percent in some cases, greatly affecting their capacity to absorb a higher caseload as well as their financial sustainability.” Meanwhile basic infrastructure cannot keep up with the large demand, for example 64 percent of the population does not have access to safe drinking water services.

In short, most Syrians arrived with limited savings and have struggled to earn steady incomes to meet their families’ basic needs, such as food, healthcare, and shelter. These basic needs tend to require immediate attention, which means that Syrian families often must forgo education and its long-term benefits in favor of short-term needs.

The Reaching All Children with Education (RACE) project, in the Lebanese Ministry of Education and Higher Education (MEHE), has partnered with international donors, the United Nations, and local nongovernmental organizations to implement education interventions to address this crisis. These efforts include introducing a second shift in public Lebanese primary schools for displaced Syrian children—the so-called second shift. A large number (over 65,000) of Syrian children are also enrolled in first shift, together with Lebanese. As a result of these efforts, almost 158,000 children were enrolled in formal education for the 2015–16 school year including both first and second shift schools. Despite these efforts, the 2015 VASyR (Vulnerability Assessment of Syrian Refugees in Lebanon)—a nationally representative assessment carried out by the UNHCR, UNICEF, and WFP—found that over half of all Syrian children did not go to school. The VASyR assessment showed that children were more likely to be out of school as their age increases, with a particular increase in dropout rates starting around 10 years of age. Key factors driving inadequate attendance were limited ability to afford the costs related to school attendance, despite a fee waiver for all children enrolled in public primary school, and household reliance on children for income generation.

UNICEF, in partnership with the WFP and in coordination with the MEHE in Lebanon, started to pilot the NLG/Min Ila program in the governorates of Mount Lebanon and Akkar. The objective of the pilot was to test and evaluate whether and how to scale-up the program to national coverage. Min Ila was designed to help households meet the implicit costs of education and reduce reliance on children for income generation. We describe the design of the program in the next section titled NLG/Min Ila Program.

To better understand the effects of the NLG/Min Ila program, UNICEF decided to implement a rigorous, mixed methods impact evaluation. The nonexperimental longitudinal design of the impact evaluation compares beneficiaries in the pilot governorates of Mount Lebanon and Akkar with households that would be eligible for the program but that live in the nonprogram governorates of North Lebanon and South Lebanon and Nabatieth.

The study uses a geographic regression discontinuity design (RDD), where households located near the border that separates program and nonprogram governorates are compared with each other. The study follows the same households over time, with the baseline data collected in September–October 2016 prior to the start of the program, midline data collected February–March 2017 during the first school year in which the program operated, and endline data collected November–December 2017, at the beginning of the 2017–18 school year. The midline aimed to measure the immediate effects of the program on children’s school participation. The endline, on which most of this report focuses, aimed to give more comprehensive insight into the effect of the program on school participation and broader child well-being. The sections below on evaluation design and data collection provide more details about these study characteristics.

I.2 Objectives of the Study

During the design of the study, the following study objectives were established:

- 1. Immediate schooling effects:** The study aims to provide insight into the direct effects of the program shortly after the start of the 2016–17 school year. In particular, the study establishes the extent to which the program increased school enrollment and the program’s impact on school attendance.
- 2. Schooling effects after the first school year:** The study also examines effects on children’s education outcomes at the beginning of the 2017–18 school year, after one year of program delivery, including attendance, enrollment, reasons for dropping out during the school year, and other barriers to education.
- 3. Broader effects on children’s lives.** The cash transfer pilot program is expected to have cascade effects on other important areas of children’s lives, particularly given that the household visits refer households to a range of services beyond education-focused ones (e.g., protection interventions, health services, etc.).

The study gives a comprehensive overview of the effects on negative coping strategies harmful to children, including engagement in child work, accessing healthcare, and mental well-being, such as depression, self esteem, and optimism for the future. However the study does not investigate directly the effect of the referral system.

- 4. Broader effects on children’s households.** The cash provided to households may lead to changes in expenditure patterns, the intra-household division of labor, and food consumption.
- 5. Age and Gender Differences.** The impact of the cash transfer program will likely be different for specific subgroups of the Syrian refugee population. The impact evaluation aims to establish how the effect of the cash transfer program varies across key subgroups—for example, by gender and age of child.



I.3 Related Literature

This study relates to an extensive literature on the effects of cash transfer programs on education and broader well-being outcomes in developing country settings (for reviews of the literature examining impacts on education outcomes see Baird et al., 2014; Fiszbein & Schady, 2009; Saavedra & Garcia, 2012), and a smaller literature on the effects of cash transfers and other education interventions in humanitarian settings (see Burde et al., 2015; Doocy, Tappis, & Lyles, 2016).⁴ The systematic reviews and meta-analyses referenced here find that cash transfer programs average a 6% improvement on school enrollment and a 3% improvement on student attendance. Effect sizes on schooling outcomes have been found to depend in part on the size of the transfer and access to schools. However, none of the studies include rigorously estimated effects of cash transfer programs on education outcomes in refugee settings.

A particularly relevant and related study was conducted by the Overseas Development Institute (ODI), which evaluated a UNHCR and UNICEF cash assistance program for Syrian refugees living in Jordan (Hamad et al., 2017). The ODI study presented several limitations in that it was unable to tease out the effects of the program quantitatively because they did not collect baseline measures for beneficiaries and there was no rigorously identified comparison group. Thus, it is unclear if any findings resulted from the program or another factor that could affect beneficiaries, such as other programs or changes in the economy. The study found that cash assistance plays an important role in helping households survive; however, they still struggle to cover necessary costs, such as housing and food.

4 Puri et al. (2015) note that although rigorous impact evaluation methods can be useful for learning about the effectiveness of interventions following humanitarian emergencies, these evaluations are harder to implement in the aftermath of humanitarian crises, where ethical concerns sometimes prevent the use of control or comparison groups. For this reason, only a few studies have examined the impact of cash transfers in humanitarian contexts in a rigorous manner.

The study finds that children in beneficiary households engage in child labor and, although spending on education is higher for beneficiary households, no direct effects of the program on education outcomes, such as enrollment and attendance, were found. The study investigated social capital and psycho-social well-being, and found that the cash assistance primarily helped refugee families by reducing their stress and, thus, improving intra-household relationships.

The International Rescue Committee Lebanon evaluated a winter cash transfer program for refugees in Syria in 2014 (Lehmann & Masterson, 2014). The program provided a one-time transfer of US\$575 to Syrian refugees living at high altitudes (above 500 meters) in Lebanon, with the goal of keeping people warm and dry during the winter months. The primary finding was that the transfer size was too small to achieve the program’s goal because people were unable to afford sufficient supplies to remain warm. However, the study found that the transfer helped to increase school enrollment and reduce child labor, although these were not program goals. Specifically, the study found that the program increased enrollment by 6 percentage points, resulting in 39% of children attending school. One limitation of the study is that it did not investigate the percentage of children in the sample who had access to schools in which to enroll. It is possible that the cash transfer might have had a bigger effect on education if it was targeted to children of school age who had the ability to enroll if they wanted to and were not facing possible supply side constraints.

The American University of Beirut conducted an impact evaluation of the Multipurpose Cash Assistance program for Syrian refugees in Lebanon in 2016 (Battistin 2016). The program provides a monthly transfer of on average \$171 to households deemed eligible through a proxy means test. The study found that beneficiary households spent more money on food and material items than non-beneficiaries. However this additional spending did not generate any impacts on school enrolment, child labor, stress, or satisfaction.

One potential explanation for the lack of impacts is that only the most well off beneficiary households (top 1%) were included in the study and the cash would likely have the lowest impact on them. It is quite possible that the program generated impacts on the households with lower proxy means test scores.⁵

I.4 Roadmap

The remainder of this report proceeds as follows:

Section 2 provides a detailed description of the program, including changes that occurred during the period of the study.

Section 3 presents the program's theory of change as designed by stakeholders and discusses the possible pathways that the NLG/Min Ila program might affect in order to achieve program goals. We designed the study based on this theory of change.

Section 4 lists the evaluation questions that motivate the evaluation, including the domains, indicators, and populations included in the study.

⁵ Unfortunately the study suffers from several challenges that limit its ability to adequately measure the program's effect. The study attempts to use a regression discontinuity design to estimate impacts of the program by comparing households around the proxy means test cutoff score. Although over 20,000 households received the program, the study only included 261 treatment households due to problems with sampling and data quality (roughly 500 households for total study sample). This small sample size taken right around the cutoff means that the study lacked sufficient power to detect meaningful effects and that the study only included the most well-off households (top one percent) still eligible for the program according to the proxy means test. The program would likely have larger effects for poorer and more vulnerable households further from the cutoff score, that comprised 99% of the beneficiaries. Another problem with the study is that it did not account for clustering of households geographically, which would further reduce the power of the study.

Section 5 presents the study design. We break up the study design section into quantitative and qualitative methods because this is a mixed-methods evaluation. We discuss the identification strategy in detail, including the validity of the estimation strategy, instruments, and limitations.

Section 6 describes the data-collection process, including training, timing, methods, and challenges.

Section 7 presents a description of the households at baseline before the program began. The data from this section come from the baseline report and serve as a brief reminder of where the study sample started prior to cash delivery.

Section 8 provides a summary of attrition at endline by describing the households that remain in the study, how they compare to the households that started in the study, and between the treatment and comparison groups. It is important to investigate attrition to demonstrate that the study maintained the benefits of its original design.

Section 9 presents the findings of the study, first focusing on children, including food consumption, health, work, mental well-being, and education. We then present impacts of the program to the household beyond children. For each domain, we first present the quantitative findings and then present the qualitative findings.

Section 10 discusses the operational performance of the program from the beneficiaries' perspective. This section helps us understand if the beneficiaries perceived any challenges and how that might have affected the program's ability to achieve intended goals.

Section 11 concludes with a brief summary of findings that consolidates everything in a concise story.

We include multiple appendices at the end of the report that contains tables, figures, and technical explanations of methods or analyses that are referenced throughout the body of the report.

Section II

NLG/MIN ILA PROGRAM

II. NLG/MIN ILA PROGRAM

Min Ila was designed to address income-related barriers to school participation, including limited means to incur school-related expenditures and reliance on children for income generation. The program was implemented alongside existing education interventions addressing non-income constraints on enrolment and attendance, including a fee waiver for all children enrolled in public primary school (1st and 2nd shift), provision of stationary and bags, and investments in supply and quality.



During the pilot phase, Syrian refugee children ages 5–14 who lived in the Mount Lebanon and Akkar governorates and were enrolled in a second-shift public school received a basic monthly education transfer of US\$20, to cover a portion of the indirect costs to going to school, such as school snacks, transportation, and appropriate clothing and shoes. Syrian children ages 10 and older who were enrolled in a second-shift school received an additional monthly US\$45 to factor in the higher earnings of a working child in this age group.

The child well-being transfer lasted for the duration of the school year, and payments were made every month on a common ATM card used by all major agencies delivering cash transfers in Lebanon (the Lebanon One Unified Inter-Organizational System for E-cards, or LOUISE). While no conditions had to be met to receive the cash after enrollment into the program, school attendance was monitored and households received household visits if children did not attend school regularly. The purpose of these visits was (1) to record reasons for dropping out, and (2) to refer households to existing complementary services to help children get back into school. Frontline workers carrying out the

household visits were trained to emphasize that the purpose of the visits was to offer additional help in the form of referrals, and not to check on how they were spending the cash or to take the cash away if children were not attending school. Visits started around January 2017.

In the current 2017–18 school year, the program has been expanded into the governorate of North Lebanon and the benefit level was altered. There is now variation in the amount of the basic monthly transfers provided to children enrolled in a second-shift school. Children who are enrolled in Preparatory Early Childhood Education (Prep ECE),⁶ are disabled, or face difficulties reaching school due to distance, terrain, or security issues continue to receive the basic monthly transfer of US\$20.⁷ Children outside of these categories now receive a lower basic monthly amount of US\$13.50. The additional amount provided monthly to older children, moreover, has been lowered to US\$20 and is now provided only to children ages 12 and older.

⁶ This is the equivalent of kindergarten in second-shift schools; that is, for children who are 5 years old.

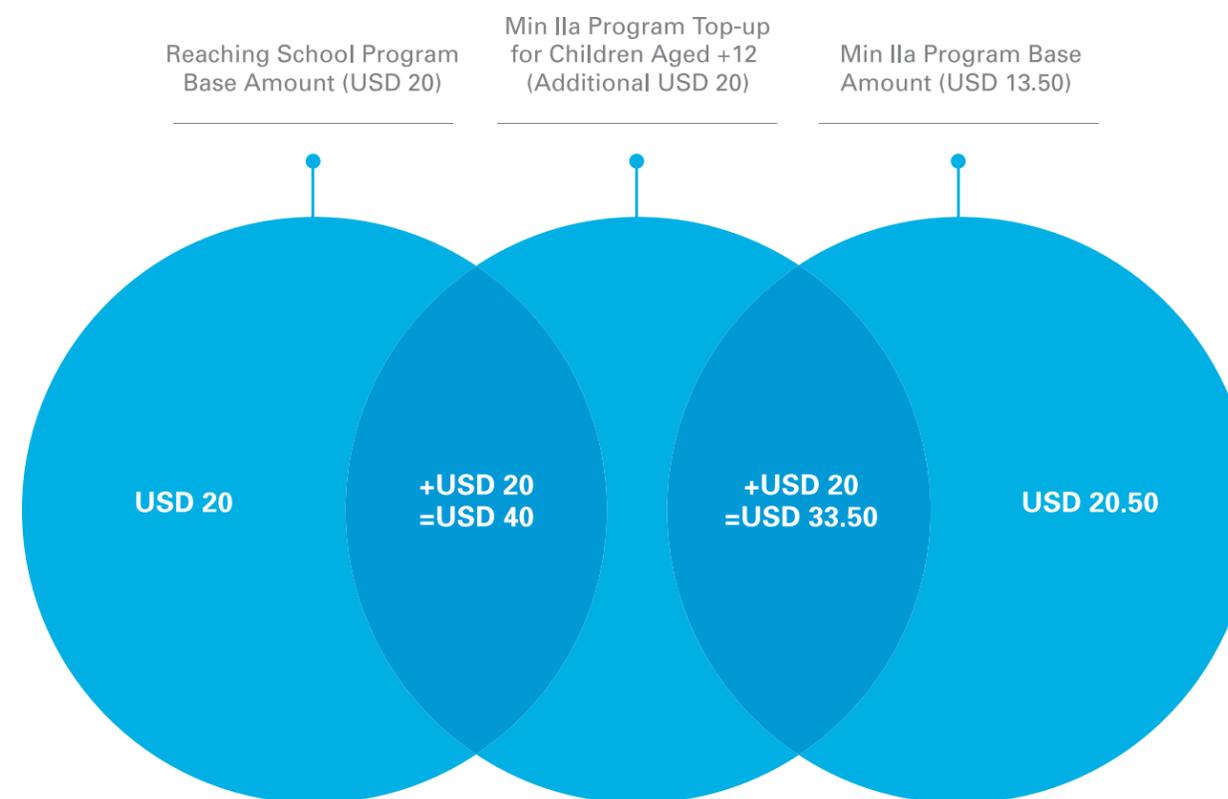
⁷ This transfer is now referred to as the Reaching School program.

These changes to the benefit level and age of eligibility for the top-up were made due mainly to a sharp reduction in the amount of funds available for cash transfer programs in the UNICEF Lebanon Country Office (LCO) as compared with what was expected; while the overall UNICEF LCO funding increased between 2016 and 2017, the vast majority of the funds were earmarked for activities that did not include “cash-based programming”. The lack of funds for cash-based programming was due in part to an ongoing debate among humanitarian donors over whether a single agency should deliver all unconditional household cash transfer programs or whether such programs should

be situated within the relevant wider policy and supply-side interventions, led by organizations whose mandate is aligned with the program’s objective (e.g., cash-based safety nets in a development setting within the ministry with the relevant mandate). While the other major cash transfer programs for refugees in Lebanon are targeted using a proxy means test and designed to help households meet basic needs, the NLG/Min Ila Program is targeted to households who still face challenges obtaining primary education due to income constraints (i.e. those enrolled in 2nd shift schools) and may rely on negative coping strategies harmful to children.

As summarized in Figure 1, there are four possible amounts that a child can receive in the current 2017–18 school year:

Figure 1. Configurations of Funding Amounts by Category



Section III

THEORY OF CHANGE

III. THEORY OF CHANGE

Policy-relevant research should be built on a theory of change that maps out the causal chain across activities, outputs, outcomes, and impacts as well as the assumptions that underlie that theory of change (White, 2009).

the need to resort to negative coping strategies and, specifically, reducing child labor and child marriage. The impact of the cash transfer may be smaller or larger depending on local conditions in the household and community. These moderators include household characteristics, access to other services, prices, and shocks.

III.1 Pathways to Impacts

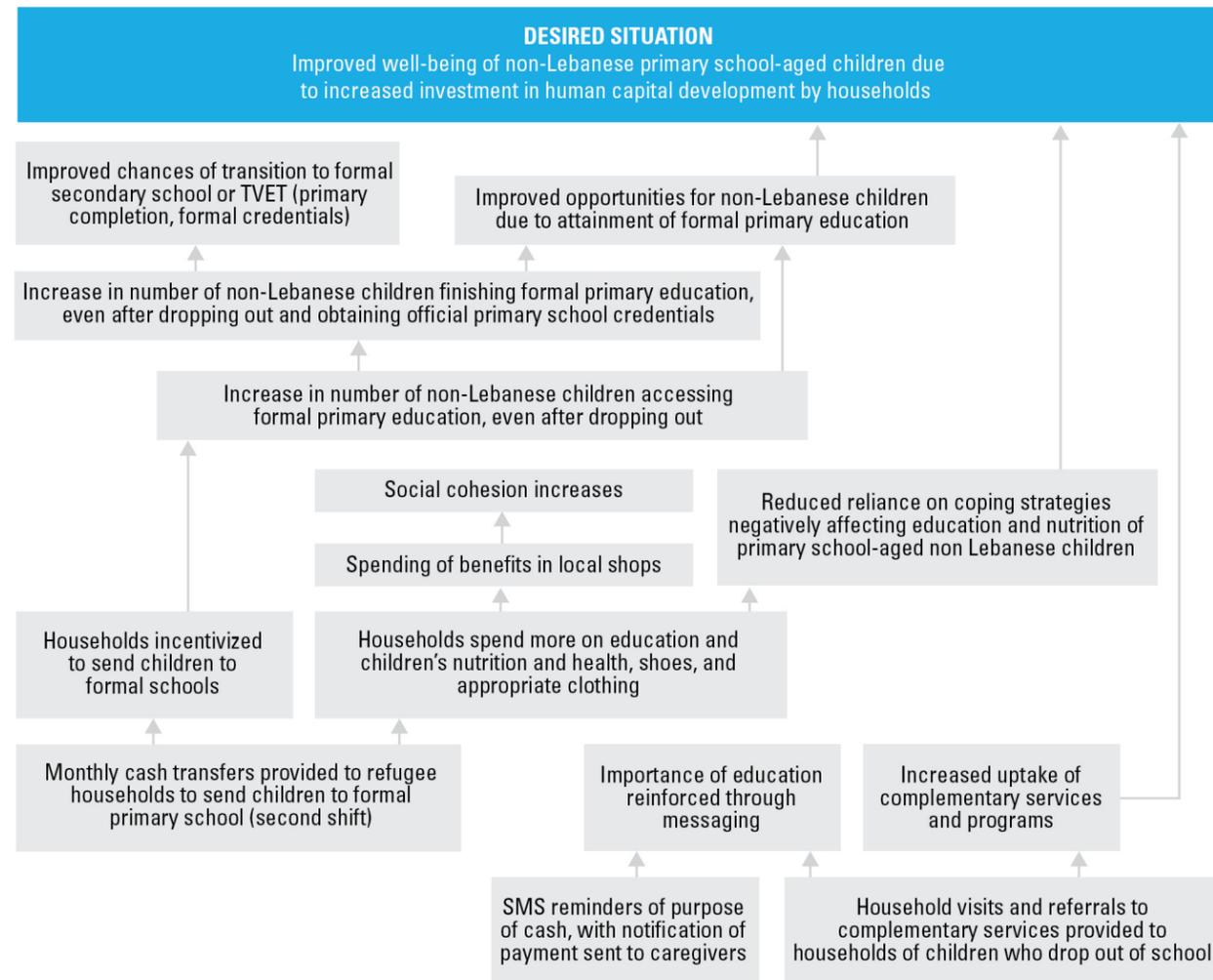
Households with very low levels of consumption spend almost all of their income. We therefore expect that among the beneficiary population, virtually all of the cash transfer will be spent during the initial stages of the program, with a focus on meeting basic needs such as food, clothing, transport, and shelter. After immediate basic needs have been met, and possibly after a period of time, the influx of new cash may then trigger further responses within the household economy; for example, the use of services and the ability to free up children to attend school.

This study focuses on the pathways of the theory of change related to the cash transfer activities starting on the bottom left side of the figure. These pathways relate to the objectives of the study presented in the introduction. The other indicators and domains are beyond the scope of this study for several reasons, including that they require more time than the length of the study to demonstrate effects (like the number of non-Lebanese children finishing formal primary education) or require data collection in populations not included in the study (e.g., spending of benefits in local shops). Similarly, the program includes activities beyond cash transfer, such as messaging to households, which can affect pathways in the theory of change that are beyond the objectives of this study. Therefore, we focus on the pathways relevant to the cash transfer activity that are possible to assess, given the timing and resources available for the evaluation.

Figure 2 shows the theory of change developed by UNICEF Lebanon and RACE for all program activities. This study focuses on the cash transfer part of the program. We expect the cash transfer to have a direct effect on household consumption and the use of services by reducing



Figure 2. Theory of Change



Assumptions

- Sufficient capacity of second-shift schools to absorb new demand
- Schools allow children to enroll and write exams, even without ID documents
- Social/complementary services exist and are functional
- Common ATM card system (LOUISE) established and functional
- Households will spend cash on nutrition and health as well as indirect costs of education, contributing to overall improved well-being
- Second-shift schools allow to drop-outs to return to class as per agreement with RACE PPMU

Risks

- Non-Lebanese return or are forced to return to Syria
- No funding available for transfers
- Strategy to expand second-shift supply in saturated areas is not successful
- No funding available to expand second shift
- Legal situation of refugees allows engagement in higher value-added types of work

Section IV

EVALUATION QUESTIONS

IV. EVALUATION QUESTIONS

The theory of change presented in the previous section, in conjunction with the study objectives presented in the introduction, motivated the evaluation questions listed below. The evaluation questions then determined which domains and indicators to include in the study.

One stated purpose of the NLG/Min Ila cash transfer program is to promote children's school enrollment and attendance. The theory of change depicts the pathways of how the transfer should alleviate the financial burden of school participation, including reducing reliance on child labour earnings to meet basic needs, so parents can afford to send their children to school. Therefore, it was important to test education-related outcomes, such as enrollment and attendance. We investigated differential impacts by boys and girls as specified in the objectives of the study. The first set of research questions relates to the program's goal of improving education for non-Lebanese children.

IV.1 Education outcomes:

1. Does the Min Ila transfer increase school attendance and enrollment?
 - a. Do children in pilot governorates enroll in school at higher rates than children in comparison governorates?
 - b. Do children in pilot governorates enroll in second-shift schools more frequently than children in comparison governorates?
 - c. Do children in pilot governorates attend more frequently when enrolled in a second-shift school as compared to children in comparison governorates enrolled in a second shift school?
2. Do households in pilot governorates spend more money on children's school related expenses not covered by MEHE such as school lunch, clothing, PTA, etc.?
3. Do boys in pilot governorates experience different education impacts than girls in pilot governorates?

The theory of change also shows how the cash transfers can affect non-education-related child outcomes, such as food security, health, work, and psycho-social well-being. Households may have extra money for other purposes if they are left with more income after paying school costs than they would have had with the child out of school. In this case, the household may increase spending to better meet children's basic needs, such as food, or reduce the time the child spends working. Additionally, children enrolling in and attending school may change their mental state, so it is important to understand how the transfer affects children's mental well-being. These outcomes could result from the cash transfer part of the NLG/Min Ila program and are part of the study objectives. Therefore, we include the second set of research questions investigating broader impacts on child well-being.

IV.2 Broader child well-being outcomes:

1. Do children in pilot governorates experience increased food consumption?
2. Does the Min Ila transfer reduce child work?
 - a. How does time spent on paid labor change?
 - b. How does time spent on unpaid labor change?
 - c. How does time spent on household chores change?
3. Are children in pilot governorates physically healthier due to the transfer?
4. Are children in pilot governorates mentally healthier due to the transfer?
 - a. Are they less depressed?
 - b. Do they show more positive behaviors and outlooks?
5. Do boys in pilot governorates experience different well-being impact than girls in pilot governorates?

In addition to investigating the impacts of the program on children, we also looked into possible impacts on the household overall, specifically food security, adult labor, income, and debt. These outcomes were not direct goals of the program, thus are not depicted in the theory of change, yet they could be affected and so were included in the study.

IV.3 Household Outcomes:

1. What are the impacts of the program on household food consumption?
2. Does the program affect adult labor?
3. Does the program affect household finances?
 - a. Does the program affect household income?
 - b. Does the program affect household debt?



Section V

STUDY DESIGN

V. STUDY DESIGN

V.1 Quantitative Approach

The impact evaluation of Lebanon's child-focused cash transfer program uses a longitudinal, geographical regression discontinuity design (RDD).⁸ The study compares households in pilot governorates with school age children (specifically, Akkar and Mount Lebanon, where the program is being piloted) with similar households in neighboring governorates (North Lebanon and South Lebanon and Nabatieth, respectively) that did not begin receiving the transfers during the period of the study. We selected the sample prior to the start of program enrollment when beneficiaries did not yet know they would receive the program.

Program eligibility is based on second shift enrollment, thus we designed our sampling strategy around second shift schools to increase the likelihood that households with children of school going age would have the opportunity to benefit from the program. The 74 second-shift schools closest to the border separating pilot governorates from comparison governorates (roughly half of all the second-shift schools) were selected to facilitate the implementation of a geographical RDD: 21 in Akkar, 22 in North Lebanon, 20 in Mount Lebanon, and 11 in South Lebanon and Nabatieth. To ensure that all selected schools would be located in similar peri-urban and rural areas, schools located in the three largest cities of Lebanon (Beirut in Mount Lebanon, Tripoli in North Lebanon, and Sidon in South Lebanon) were not considered. Following the RDD we prioritized schools around the border in order to have the best counterfactual to the pilot governorates. The assumption, tested at baseline, is that households around the border will have similar socio-economic status as well as other important factors that relate to decisions about enrolling and attending school. Subsequently, Syrian households living in the so-called cadasters, in which the schools were located, were sampled into the study. Cadasters are small administrative

⁸ Nonexperimental designs do not manipulate the selection process to determine who receives the program, while randomized controlled trials use a lottery process to select who will receive the program and who will not.

geographical units, somewhat comparable in size to census enumeration areas in other countries. For sampling, we relied on the UNHCR's registry of Syrian households in Lebanon (at the time in 2016, the majority of displaced Syrians in Lebanon were presumed to be registered with the UNHCR). The UNHCR provided a list of up to 100 randomly drawn eligible households (i.e., households with children ages 5–14) in each cadaster.⁹ These households were sorted in random order and survey teams visited households for inclusion in a baseline survey in the order of this ranking until 20 households had been interviewed. This procedure resulted in a sample of 1,440 households with 1,784 children ages 6–9 and 1,647 children ages 10–14.

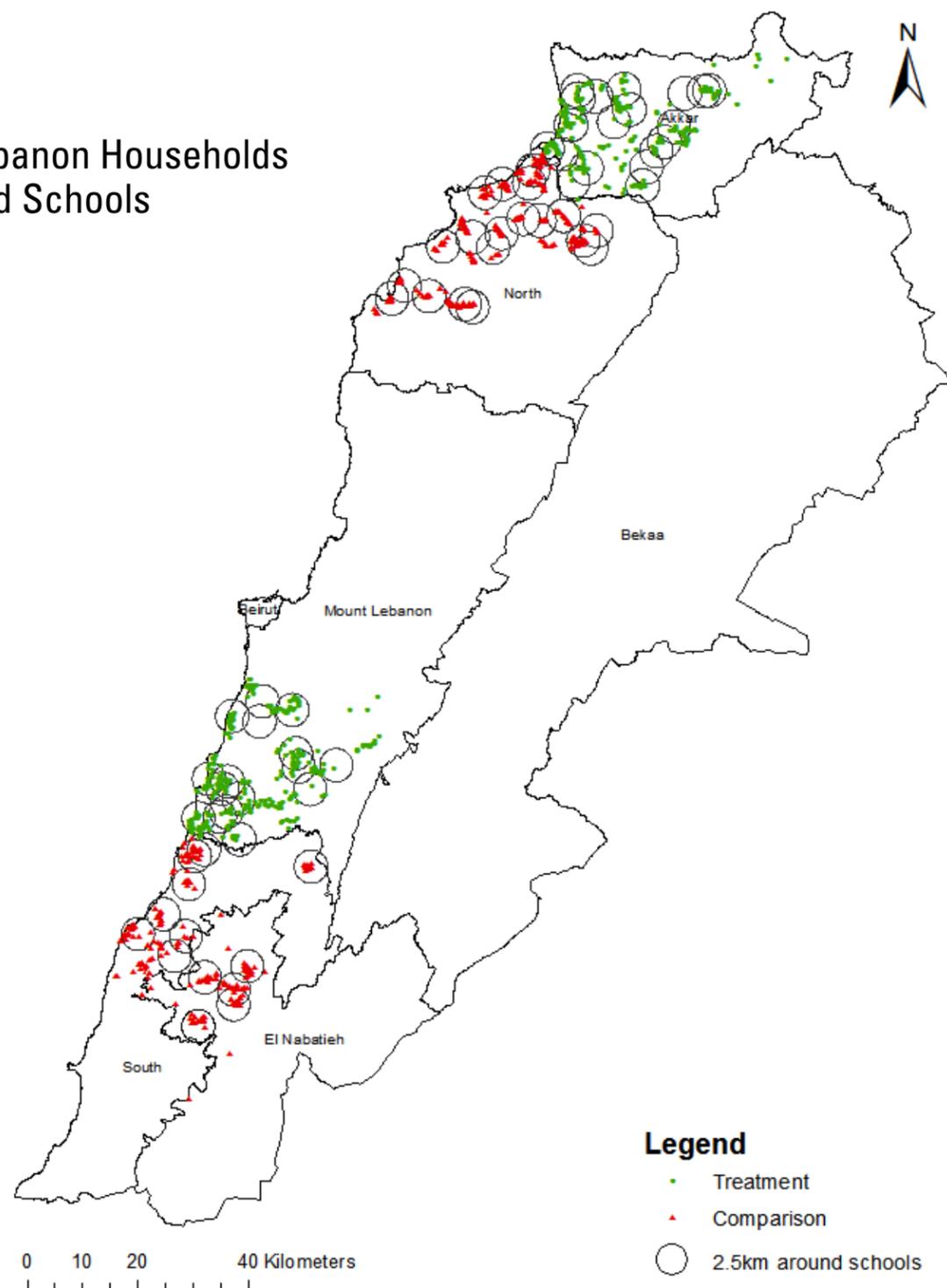
As part of the baseline data collection, global positioning system coordinates were collected for each household, enabling us to calculate their distance from the border with its paired governorate. Figure 3 shows the geographic distribution of second-shift schools and study households. Large circles denote the 2.5-kilometer radius around the second-shift schools, small green circles denote each pilot household, and small red triangles denote each comparison household. The majority of households live within a 2.5-kilometer radius from a second-shift school and the study design was based on the assumption that children living within this radius would not be out of school due to supply constraints.¹⁰ We will return to this assumption below.

⁹ If the list provided by the UNHCR contained fewer than 90 households, the evaluation team included additional neighboring cadasters as necessary in an attempt to obtain a list of at least 90 households in the vicinity of the school. It typically required more than 50 households on a list to find and reach the needed 20 households per cadaster for the study.

¹⁰ During the 2015–16 school year, UNICEF and its partner NGO Caritas Lebanon ran a school bus program, providing transport to school for children living outside this 2.5-kilometer radius. This program was stopped in the governorates of Akkar and Mount Lebanon during the 2016–17 school year, but continued in the rest of the country. However, as children living within the 2.5-kilometer radius from a second-shift school should not benefit from the bus services, this program was unlikely to confound the results presented in this report.

Figure 3. Pilot and Comparison Ares

Lebanon Households and Schools



As we will discuss below, the baseline data show that, generally speaking, schooling and other welfare outcomes improve as we move to the south of the country. However, outcome variables do not *directly* change as one crosses the governorates of Akkar and North Lebanon (north) border and the governorates of Mount Lebanon and Nabatieth (south) border.¹¹ This finding lies at the core of the geographical RDD estimation strategy, which we use to examine whether the program resulted in any changes in schooling outcomes. Given that outcome variables did not directly change when crossing the borders, separating pilot and comparison areas at baseline and assuming that the pilot program was implemented successfully and reached only those households living in pilot areas, then any direct changes at these borders at follow-up can be reasonably attributed to the pilot program itself.

We made a few technical decisions in the analysis regarding whose response we would use (child or caretaker) and who to include in the analysis (everyone or subsets of group). We discuss these decisions here for transparency and explain our justification. At endline, we introduced a new instrument administered directly to older children age (i.e., children ages 10–14 at baseline) that includes questions only the child can answer, such as feelings on self-esteem, stress, and optimism discussed in the next section). The child instrument included some questions that were also asked in the household instrument, such as enrollment and attendance in school. Therefore, we have two responses for each child ages 10–14 on some outcomes, one from the child directly and one from the caretaker (we discuss the different instruments later in this report). We decided to analyze and present the child responses for all indicators that were collected in the child survey when there was a choice between the child response and the caretaker response. We have many child-level indicators that only exist in the child response survey, so we want to be consistent and present all child-level indicators from the same respondent: the child.

¹¹ This finding is in line with the fact that more generally geographic, economic, and political situations do not change when crossing these same borders. Education policies, moreover, are determined centrally and do not differ across governorates.

Another analysis decision related to the analysis sample: Should we include everyone in the study or only those who received the program? This question arises because, as explained in more depth later, roughly half of the households in pilot governorates with school age children did not enroll them in a second shift school and thus did not receive the cash transfer. Some enrolled their children in other schools (first shift, private, etc.) and some did not enroll their child in any school. One objective of the program is to encourage households to enroll their child in public primary school, and the study attempts to confirm this impact. To investigate this effect, we needed to use everyone from the baseline sample in our analysis, including households in pilot governorates that did not receive the program because they did not enroll in second-shift school. This analysis, which is called intent to treat (ITT), is displayed in the main text. We also conducted all analyses for those households that enrolled their child in a second-shift school, thus limiting our treatment group to only households that received the NLG/Min IIa cash transfer. This analysis is called treatment on the treated (TOT). We present these analyses in Appendix E. ITT is often carried out when we do not have control or insight on who will receive the program when implemented outside of the study. Whereas, the TOT is carried out for programmes where you know in advance who will receive the programme. This difference is the rationale behind choosing to present ITT in the body of the report. As you will see, the two analyses produced very similar results.

V.1.1 Limitations to the Quantitative Evaluation Design

A major reason for choosing a nonexperimental RDD (rather than a randomized controlled trial) is that a programmatic decision was made to roll out the pilot program at scale in the governorates of Akkar and Mount Lebanon. Randomization could not occur either within pilot governorates or at other levels. UNICEF is aware that the current design leaves open the theoretical possibility that observed differences between pilot and comparison households result from an effect other than the cash transfers, if circumstances that occur in pilot governorates do not occur in comparison

governorates (such as differences in local politics). However, there are currently no indications of such structural differences between governorates.

This study was designed to capture program effects among children living in the vicinity of an active second-shift school. The rationale was that these children could readily enroll in a second-shift school in response to the program, allowing the impact evaluation to capture the impact of increasing the demand for education through a cash transfer program, as at the time of the pilot of the 1,291 public primary schools operating normal (first-shift) classes, only 292 of these were operating second-shift classes. However, as discussed in more detail below, due to a nationwide increase in second-shift enrollment of Syrian children, more than half of all second-shift schools in the pilot areas of the study reached full capacity while registering children in the 2016–17 school year. While the policy of MEHE was to open new second shifts in existing schools to accommodate an increase in demand,

and MEHE was prepared to do this, as in previous years, this was not always possible in practice for various reasons, including tensions between refugee and host communities in some areas. This situation may have created a ceiling effect for the study because it is impossible for the program to increase enrollment above the capacity of the second-shift schools. In other words, the program cannot demonstrate its full potential due to the limit on spaces to enroll children in second-shift schools—a prerequisite to receive the program.

Another limitation relates to the timing of data collection, especially with respect to school-related outcomes. The rapid follow up attendance data were collected in March 2017, several months after school began, however the endline data were collected in October/November of 2017, right at the beginning of the school year. Qualitative evidence suggests that attendance is higher at the beginning of the school year and drops off as the year progresses. We discuss this challenge more later and how it might affect the results.



©UNICEFLebanon2014/DavidBrunetti

V.2 Qualitative Approach

To triangulate the quantitative findings, we collected qualitative data in pilot governorates using key informant interviews (KIIs) and focus group discussions (FGDs). We qualitatively explored issues related to perceptions of children's schooling; Min Ila program challenges and benefits; and perceived impacts of the program on children and households.

Respondents include school administrators, teachers, caregivers, and children. The distribution of respondents by location is shown in Table 1. There are several all-girls schools in Akkar that contain second-shift programs and are included in the study. We highlight throughout the report when a respondent came from one of the all-girl schools.

Table 1. Qualitative Methods and Respondents

Method	Respondent(s)	N	Location	Topics Covered (Illustrative)
KII	School administrators and teachers	10	Akkar	Implementation challenges and benefits (particularly for second-shift schools) and perceived impacts
KII	School administrators and teachers	10	Mount Lebanon	Implementation challenges and benefits (particularly for second shift schools) and perceived impacts
FGD	Caregivers	2	Akkar	Access; perceived impacts; coping mechanisms; support systems; use of transfer funds; transition of children from nonformal to formal school (if applicable)
FGD	Children	2	Akkar	Access; school experience; home experience; social support; factors influencing attendance/achievement; educational aspirations; transition of children from nonformal to formal school (if applicable)
FGD	Caregivers	2	Mount Lebanon	Access; perceived impacts; coping mechanisms; support systems; use of transfer funds; transition of children from nonformal to formal school (if applicable)
FGD	Children	2	Akkar	Access; school experience; home experience; social support; factors influencing attendance/achievement; educational aspirations; transition of children from nonformal to formal school (if applicable)

We conducted KIIs with school administrators, teachers, and Parent-Teacher Association leaders in Akkar and Mount Lebanon. KIIs are useful for eliciting opinions on how a program has affected a community and to gather perspectives from service providers (in this case, school administrators and teachers) about how the Min Ila program has influenced the community and interacted with other programs and services. KIIs with school administrators and teachers also shed light on remaining challenges to operating second-shift schools and enrolling non-Lebanese students.

We conducted FGDs with caregivers and children benefiting from the Min Ila program in both Akkar and Mount Lebanon. Employing a focus group format allowed the research team to understand the experiences of a greater number of beneficiaries in a short period of time and in a group environment with their peers, where we can observe interactions among participants. FGDs with caregivers and children generate in-depth information related to school and home experiences, including issues of access, factors influencing attendance and

completion, educational aspirations, use of transfer funds, and support mechanisms for caregivers and their children.

The research team created a preliminary coding outline and structure on the basis of the research questions, interview protocols, and memos of ideas that emerged during data collection. This coding outline served as the tool to organize and subsequently analyze the information gathered in the KIIs and FGDs. The qualitative team used grounded theory to identify themes, categories, and theories that emerged from the data and that confirmed or refuted the researchers' initial impressions. That is, rather than basing the analysis on a hypothesis, grounded theory uses the data to generate categories and themes. The researchers created concepts and categories based on the data, refining the concepts to eventually inform the overall findings. During this process of data reduction, researchers characterized the prevalence of responses, examined differences among groups, and identified key findings and themes related to the research questions.



Section VI

OVERVIEW OF DATA COLLECTION AND INSTRUMENTS

VI. OVERVIEW OF DATA COLLECTION AND INSTRUMENTS

The evaluation included three waves of data collection: a baseline, rapid follow-up, and endline. Each wave of data collection varied in the time of year it was conducted, instruments included in the data collection, and methods used to collect data. This section provides an overview of data collection for all three waves, with more detail provided for the endline data collection as previous waves are detailed in their respective reports. All data were collected by Statistics Lebanon, with training and supervision conducted by UNICEF Office of Research and AIR.

VI.1 Baseline Data Collection

Baseline data collection consisted of a quantitative household survey (described in the previous section) collected in person with the caregivers in the household. Statistics Lebanon collected baseline data from 18 August 2016 through 1 November 2016. Statistics Lebanon sent teams of data collectors to all four governorates at the same time to collect data concurrently.

VI.2 Rapid Follow-Up Data Collection

Rapid follow-up data collection consisted of a short, quantitative survey implemented over the phone with the caregivers for all households in the study. The rapid follow-up instrument focused solely on education outcomes enrollment and attendance with the purpose of estimating the effects of the program after only a few months of cash transfer payments. Statistics Lebanon conducted the rapid follow-up data collection from 3 March 2017 through 1 April 2017, about halfway through the school year. The timing of the rapid follow-up data collection occurred soon after the programmatic daily visits to monitor attendance began in January 2017. Statistics Lebanon successfully interviewed 96% of the sample households from baseline.

VI.3 Endline Quantitative Data Collection Instruments

The evaluation relies on a single household survey instrument to collect household-level outcome data and a child-level survey for all children ages 10–14.

VI.3.1 Household Level

The theory of change and research questions motivated the domains covered in the household-level data collection. These domains, which are displayed in Table 2, include the following: household demographics, living conditions, economic and poverty status, parent characteristics, and child characteristics. Indicators in these domains relate to control variables, moderating variables, or outcome variables. Control variables are those that would not likely change as a result of the program but might affect the outcome variable, such as household size, marital status, parents' education level, and date of displacement from Syria. Moderating variables might change the program's ability to affect outcomes, such as distance to the nearest school and access to other programs and services. Outcome variables are indicators that the program strives to affect as either intermediate or final goals, such as child enrollment and attendance in school, child labor, child health, and child food security.

Topics in Household Survey Questionnaire

- Roster
- Health
- Education—5+ years old
- Main economic activity—5+ years old
- Income
- Household assets
- Housing conditions
- Household enterprises
- Credit
- Access to facilities and services
- Self-assessed poverty and food consumption

VI.3.2 Child Level

We used the theory of change and objectives of the study to motivate the child survey, with the domains covered in Table 3 representing key aspects to children's mental well-being. These domains include mental health, self-esteem, social support, trust and optimism, education, time use, and food consumption. The indicators that make up these domains primarily serve as outcomes variables. To the extent that there is overlap between the children's survey and the household survey (for example, school attendance), we focused on child responses in order to be consistent with all child-level outcomes.

The child instrument brings together a number of commonly used and field-tested scales that are already translated to Arabic. We provide a brief description of each scale:

Mental Health: We use the Center for Epidemiological Studies' Depression for Children scale that includes 20 items that ask children about their emotional state over the last week

(see [Faulstich, Carey, Ruggiero, Enyart, & Gresham, 1986](#)). For the [Lebanese-Arabic translation of this instrument](#), see Ayyash-Abdo, Nohra, Okawa, & Sasagawa (2016).¹²

Self-esteem: We use the Rosenberg Scale (Rosenberg, 1965) to assess self-esteem. It consists of 10 items that ask a child about their feelings of self-worth and confidence. The Arabic-translated version for the Rosenberg scale can be found at: https://www.researchgate.net/post/Where_can_I_find_the_Arabic_version_Rosenberg_Self-esteem_scale

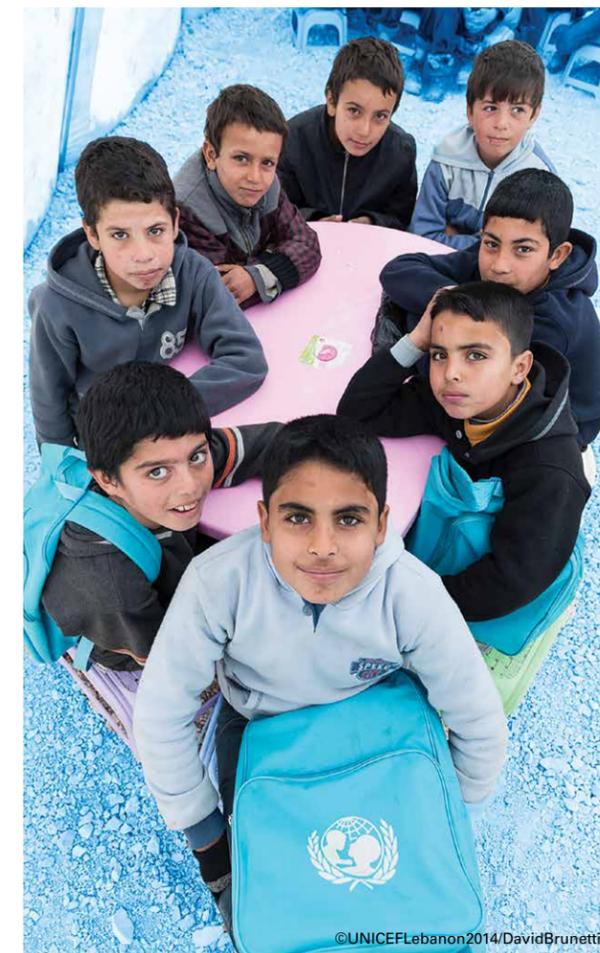
Social Support: We use the Multidimensional Scale for Perceived Social Support that consists of 13 items that ask a child about their perceptions of having someone in life to turn to for support under varying circumstances (Zimet, Dahlem, Zimet, & Farley, 2010). See also Merhi and Kazarian (2012).¹³

Trust and Optimism: We assess trust and optimism through 11 items that ask a child about their feelings on trusting others and their outlook on life, taken from the Holistic Student Assessment (Malti, Zuffianò, & Noam, 2018).

Education, Time Use, and Food Consumption: These are all the same items as from the household instrument at baseline and endline.

Topics in Child Survey Questionnaire

- Mental Health
- Self-Esteem
- Social Support
- Trust and Optimism
- Education
- Time Use
- Food Consumption



¹² The translated version was kindly shared by Huda Ayyash-Abdo.

¹³ See page 163 of Merhi and Kazarian (2012) for the Arabic translation of the table. Retrieved from <http://arabpsynet.com/Journals/AJP/ajp23.2.pdf>

VI.4 Endline Data Collection

Endline data collection instruments consisted of a quantitative household survey conducted in person at baseline by Statistics Lebanon. The quantitative endline questionnaire strongly overlapped with the baseline questionnaire and contained most of the original baseline items. Endline data collection also included a quantitative child survey administered directly to children ages 10–14. The endline data collection included qualitative FGD and KI with caregivers and children in pilot governorates, and teachers and principals in pilot governorates. The study focused the qualitative data collection on learning about the experiences of potential recipients of the program, thus was not included in the comparison governorates. Quantitative data collection for the endline began on 6 November 2017 and concluded on 15 December 2017. Qualitative data collection for endline began on 8 November 2017 and concluded on 24 November 2017.

The data collection activities for endline are summarized in Tables 4 and 5. The initial goal was to begin endline quantitative data collection in the beginning of October 2017, at the start of the new school year. The reason for carrying out endline data collection at the beginning of the school year (as opposed to the middle of the

school year) was that the NLG/Min Ila program was scheduled to scale up into the comparison governorate North Lebanon. The NLG/Min Ila team agreed to postpone the rollout of the program in the governorate of North Lebanon by several weeks to allow for completion of the endline data collection. This short window allowed the impact evaluation team to reinterview households while Year 2 of NLG/Min Ila program operations had started in pilot governorates and the program had not yet scaled up into comparison areas.

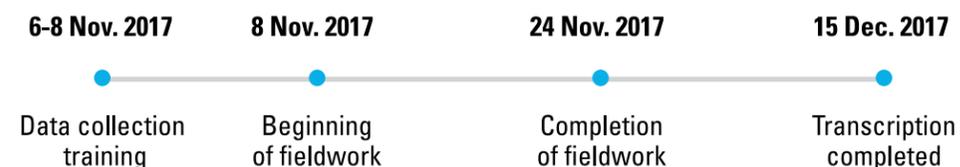
However, a teachers' strike delayed the start of the new school year and hence the start of NLG/Min Ila operations. Although the research team had already conducted the data collection training in preparation for the October start date, the research team postponed the data collection process until 6 November to account for the delay in the school year. The NLG/Min Ila team agreed to postpone the rollout of the program in North Lebanon accordingly. The evaluation team supported the UNICEF country office in running refresher training on 2–3 November. After entering the field the following week, Statistics Lebanon completed data collection over the course of the following 6 weeks. After 3 additional weeks of data cleaning and processing, Statistics Lebanon delivered the cleaned dataset on 9 January.

Quantitative Endline Data Collection Timing



Qualitative data collection activities are summarized in table 6.2 below. Similar to the quantitative data collection, the evaluation team supported UNICEF Lebanon and Statistics Lebanon in conducting a qualitative data collection in early November, which was followed immediately by fieldwork.

Qualitative Date-Collection Timing



VI.4.1 Quantitative Training and Piloting

There were two rounds of quantitative data collection training. The first training occurred according to the original data collection plan, and the second training was added as a refresher when fieldwork was delayed due to the teachers' strike.

During the first round of trainings, UNICEF facilitators Dr. Jacob de Hoop and Jamil El Khoury, and AIR facilitator Dr. Mohammed Elmeski, led data collectors through a detailed walk-through of the original questionnaire in English. The purpose of the walk-through was to ensure that the data collectors understood each question and the corresponding response options. Many of the data collectors had participated in baseline data collection, so they were already somewhat familiar with the material. At the end of the training, they practiced administering the first version of the Arabic translation of the survey. One person was asked to administer the questionnaire, another played the role of the respondent, and the remaining data collectors were strictly instructed to observe and only share their notes at the end of the interview. This exercise was intended to familiarize the data collectors with the Arabic version of the instrument before the pilot.

The research team conducted a piloting exercise to practice the survey after having the training. AIR and Statistics Lebanon met with the data collection team for two hours to go through the revised version of the questionnaire. The data collectors then began the pilot in a Beirut neighborhood largely occupied by Syrian refugees. In addition

to piloting the questions, some data collectors conducted the interview using tablets. This was an opportunity to practice using the tablets, and it also allowed data collectors and programmers to improve the tablet survey program by assessing its performance during the pilot.

The research team conducted a second training in response to delays caused by the teachers' strike. The goal of the second training was to ensure data collectors were still comfortable with the survey questions and protocols. Jamil El Khoury facilitated the training and repeated the original training in an abbreviated format. The majority of the data collectors participating in the training had received the full training approximately 5 weeks prior. The second training only needed to refresh their memories about the survey instrument.

VI.4.2 Qualitative Training and Piloting

A qualitative training workshop was held in early November 2017 in preparation for endline qualitative data collection. Dr. Elmeski facilitated the 2-day workshop, which was attended by two data collectors, recruited by Statistics Lebanon, and Jamil El Khoury. The training was followed by a 1-day pilot exercise.

The training included an introduction to the "Min Ila" program, an overview of qualitative evaluation methods, ethics, recording and notetaking, and translation and transcription. It concluded with

a review of the qualitative protocols. Dr. Elmeski also shared a qualitative training manual with data collectors, which provided a comprehensive overview of qualitative research methods. The review of the protocols provided the data collectors with the opportunity to familiarize themselves with the consent language and each of the three protocols (e.g., school administrator/teacher KII, caregivers FGD, and the children's FGD). During this exercise, Dr. Elmeski worked with the data collectors to address questions and discuss any challenges that they encountered during the role-play exercise. The review of the instruments was intended to familiarize the data collectors with the Arabic version of the qualitative instruments before conducting the pilot.

The research team carried out a piloting exercise to practice conducting one KII and one FGD following the conclusion of the qualitative training, carried out under the supervision of Dr. Elmeski. The data collection team piloted the protocols for the school administrators, teachers, and caregivers in Mount Lebanon. During the pilot, one person conducted the interview and the other took notes and then the data collectors switched roles for the second pilot. Following the piloting exercise, the data collectors debriefed with Dr. Elmeski to discuss any challenges related to the instruments.

The data collection team made several revisions to the protocols following the training and pilot. The final protocols were then translated from Arabic to English.

VI.4.3 Quantitative Data Collection

Statistics Lebanon oversaw data collection and cleaning in all governorates included in the study. Statistics Lebanon also assigned a principal supervisor to coordinate and supervise data collection across the five data collections teams. Each team consisted of a team leader and four data collectors. One team was assigned to each of the four governorates, and the remaining team provided backup and spot-checked the questionnaires. The team leaders were responsible for contacting interviewees, assigning activities, and supervising data collectors. Data collection began on 6 November and ended on 15 December. Data collection occurred in a staggered manner. The North Lebanon governorate received transfers beginning in December. The research team designed the data collection schedule to complete data collection in North Lebanon first. The data collection team areas and dates are shown in Table 6.

Table 2. Qualitative Data-Collection Teams

Area	Date
North	6 November–24 November
Mount Lebanon	6 November–15 December
South	6 November–24 November
Akkar	27 November–15 December
Nabatieh	27 November–15 December

VI.4.4 Qualitative Data Collection

Statistics Lebanon oversaw and supervised the qualitative data collection team, which consisted of two data collectors. Data collection began on 8 November and ended on 24 November 2017. Data collection started in Mount Lebanon and concluded in Akkar. The data collection team sampled respondents from four different second-shift schools in Mount Lebanon and four schools in Akkar. Separate focus group discussions were conducted for male and female caregivers and children to ensure that respondents felt comfortable to discuss sensitive issues, such as harassment, child labor, and barriers to girls' education, among other topics. During the data collection process, Statistics Lebanon shared interview transcripts with AIR as they were completed. AIR provided quality assurance by reviewing transcripts to ensure that they were of sufficient quality and detail.



VI.5 Institutional Review Board

The evaluation team took care to comply with the highest level of ethics and standards for working with human subjects as part of the study. The study design, instruments, and data-collection procedures passed AIR's Institutional Review Board (IRB), which assesses a project's compliance with the standards of conduct and protection of the rights of human research subjects, including the UNICEF procedures for ethical research involving children. All AIR staff, subcontractors, and consultants involved in the collection of data from human research participants (including children) must adhere strictly to the requirements of AIR's IRB and UNICEF's procedures for research involving children. The IRB preapproved all research activities and protocols involving human subjects in this study, as well as the information security plan to protect the confidentiality of data from research participants. All participants were asked for their informed consent/assent to engage in activities specific to the research components of this project. Participants were asked to give their consent/assent in Arabic, worded at an appropriate level for their age and educational background. UNICEF Lebanon reviewed and approved the ethics protocol acknowledging that it adheres to the UNICEF procedures for ethical research involving children.

AIR's IRB follows the standards set forth by the American Evaluation Association Guidelines and the Joint Committee on Standards for Educational Evaluation. Three general principles define these standards: (a) evaluators will conduct evaluations legally and ethically, taking into account the welfare of those involved in the evaluation, as well as the general public; (b) evaluators will conduct evaluations in a competent and efficient fashion that will lead to reliable and accurate results; and (c) evaluators will design evaluations and report the results in a manner that is useful and appropriate to the intended audience. Clear guidelines exist regarding the expectations with which local data collectors must comply (e.g., how to document informed consent, how to store and restrict access to physical files and electronic data files, the treatment of identifiable information, and so on).

All individuals and organizations that collect data on behalf of AIR are required to sign our Participant Protection Agreement to ensure that they are aware of the requirements for protection of human subjects in research.

VI.6 Data Entry

AIR contracted Statistics Lebanon to conduct all data collection activities for the endline study. All data were collected on tablets using a self-programmed platform. This technology allowed us to predefine required questions and acceptable variable responses, helping ensure the reliability of the data. Furthermore, the electronic platform allowed for real-time analysis of the data. As a result, we were able to identify minor issues with the data while data collectors were still in the field so they could address those issues.

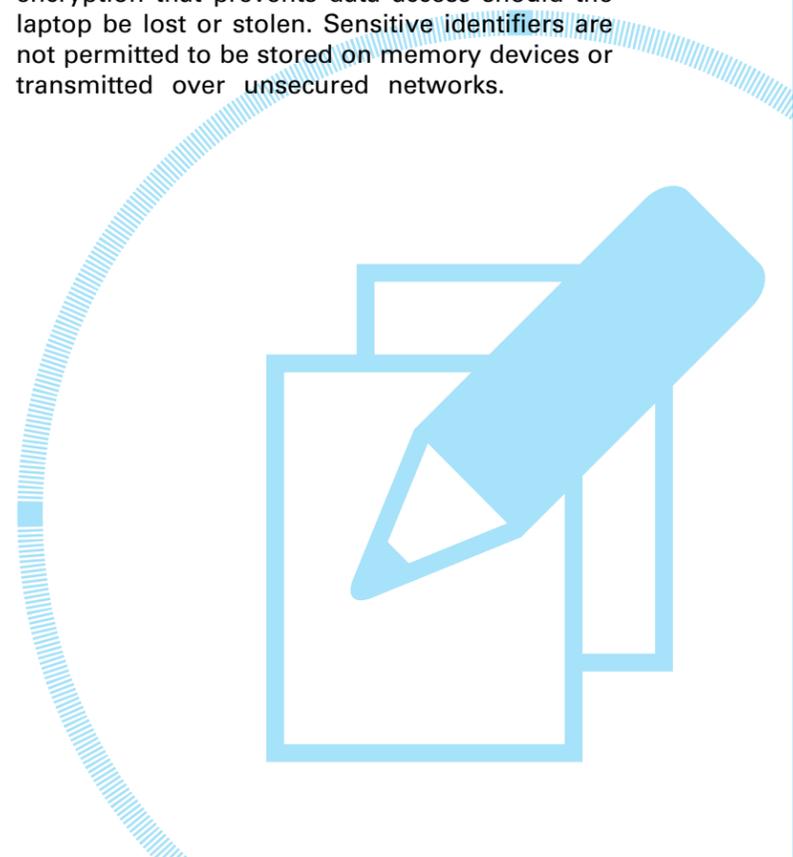
The data-collection process included several checkpoints to ensure eventual data quality. Prior to entering the field, the data collection team created a written English-language version of the survey. Statistics Lebanon used that document to create the electronic version in the appropriate dialect of Arabic. At that point, Dr. Elmeski, an Arabic-speaking member of the evaluation team, reviewed the electronic version of the survey, suggested any changes to align with the English version, and verified a final version. Finally, Statistics Lebanon sent preliminary data to the evaluation team one week after entering the field. The intermediate data allowed the evaluation team to provide real-time feedback so data collectors could correct errors while they were still in the field.

All data from qualitative interviews and focus groups were audio recorded, transcribed, and translated into English prior to coding and analysis in NVivo.

VI.7 Data Security

AIR has a long history of supporting the data security requirements involving personally identifiable information (PII) on project participants for multiple governments as well as nongovernmental organizations. AIR is a registered institution with the Office for Human Research Protections and has signed an assurance statement that we will abide by U.S. federal regulations.

The AIR Information Security Policy states that all PII that is accessed, stored, or transmitted on AIR-managed networks and computers is protected in accordance with a written, project-level, information security plan, upon which all personnel on the project are briefed and required to comply. The project information security plan includes a statement of applicable laws and regulations, the definition of the boundaries and security category of the information that requires protection, and a description of the appropriate security measures and procedures that are commensurate with the sensitivity of the data in both the electronic and hard copy domains. Laptops used by staff who collect and manage data are protected with whole-drive disk encryption that prevents data access should the laptop be lost or stolen. Sensitive identifiers are not permitted to be stored on memory devices or transmitted over unsecured networks.



Section VII

DESCRIPTION OF INTERVIEWED HOUSEHOLDS IN NLG/MIN IIA GOVERNORATES AT BASELINE

VII. DESCRIPTION OF INTERVIEWED HOUSEHOLDS IN NLG/MIN IIA GOVERNORATES AT BASELINE

Before looking at the impact of the program, we provide a brief description of eligible households in governorates where Min Ila was implemented at baseline. It is important to understand households in pilot governorates initial conditions before receiving the transfer so that we can evaluate whether the program affected key outcomes. Of note, this study is not designed to be representative of the entire population of Syrian refugees, thus the descriptive statistics presented here should not be compared to national surveys. The average household in a Min Ila governorate contained six people, including at least two children ages 5–14 (cash transfer recipient age) and two adults. The sample is primarily made up of working-age adults and children, with less than 1% aged 65 years or older.

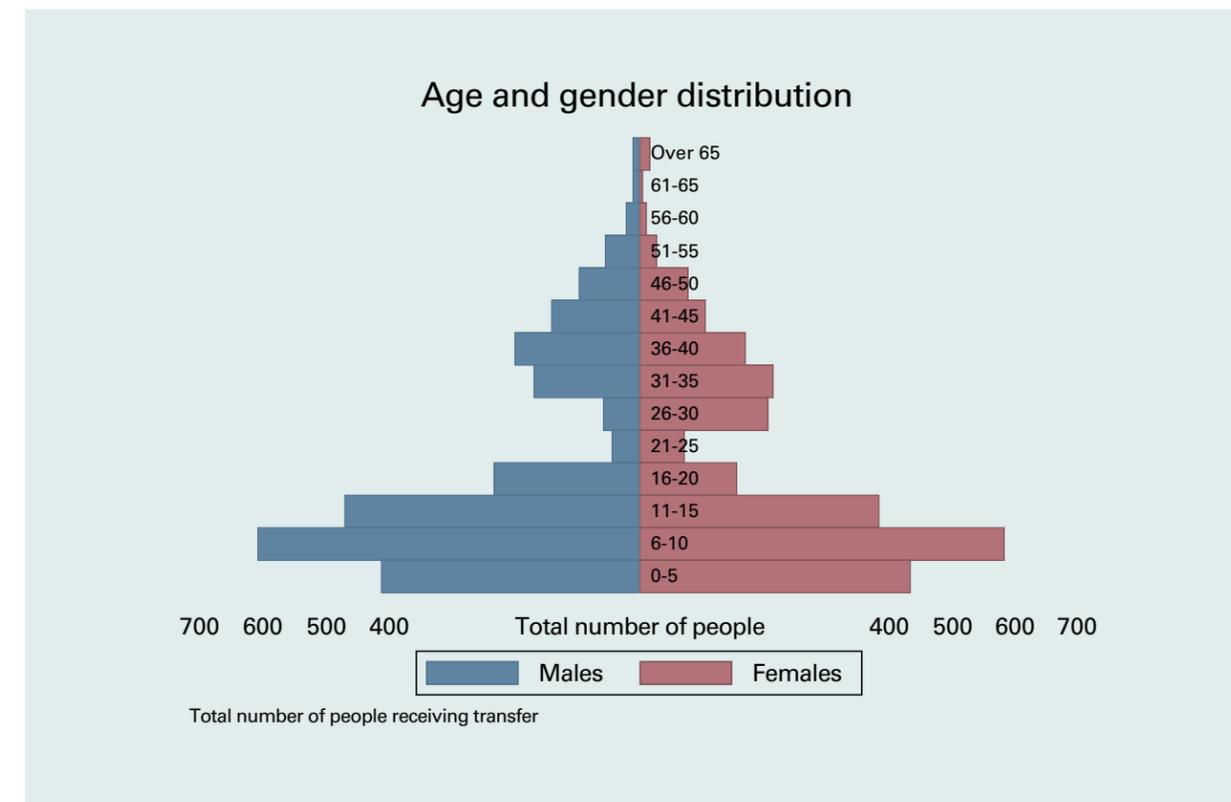
VII.1 Household Demographics at Baseline

The breakdown of the eligible sample by age and gender is shown in Table 7. The sample in pilot governorates is well balanced by gender, with roughly the same number of males and females in each age group. Most of the children are between 5 and 14 years old, which is unsurprising given that the study targeted households with at least one child in this age range (i.e., households that could potentially benefit from the NLG/Min Ila program). The distribution of the sample by age and gender is depicted in Figure 4. The bi-modal distribution has peaks for children ages 6–15 and adults ages 30–45. This demographic distribution is the result of the program’s targeting—children ages 5–14—which also makes it likely that their parents fall in the 30–45 age range. The total sample in the pilot governorates includes 4,998 people. Almost 42% of the sampled individuals in treatment areas are children ages 5–14.

Table 3. Household Demographics

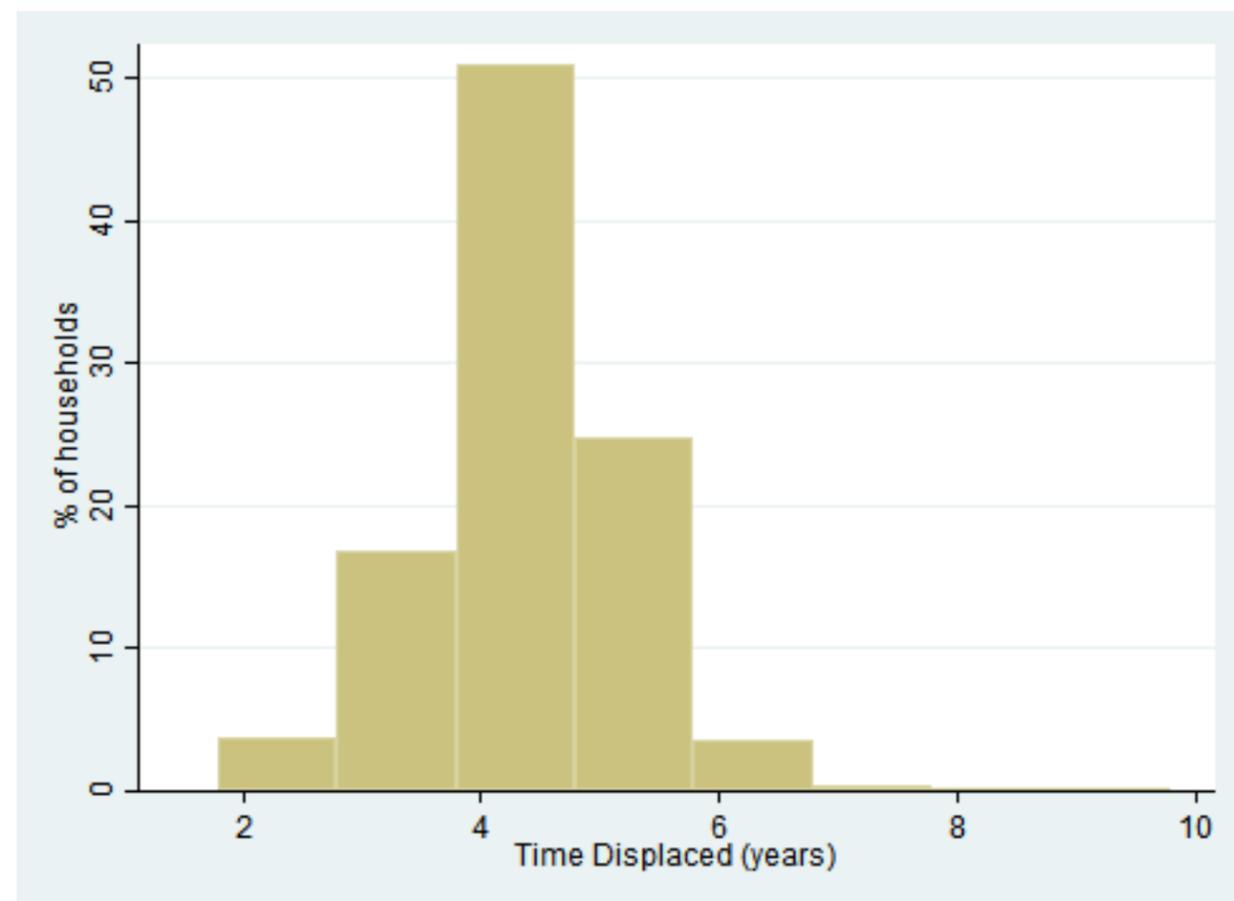
Age	Male	Female	Children Per Household	(Total (N
0–4	323	350	0.84	673
5–9	588	561	1.44	1,149
10–14	514	434	1.19	948
15–64	1,087	1,110	2.75	2,197
65+	10	21	0.04	31

Figure 4. Age Distribution



It is important to understand how long these households had been displaced and living in Lebanon at baseline to get a sense of how familiar they might be with their current context. The average household left Syria 4.71 years prior to the baseline, suggesting that households stayed in Syria for approximately 1 year after fighting broke out in April 2011. The distribution of time displaced from Syria for the households in the sample is shown in Figure 5.

Figure 5. Length of Displacement



VII.2 Economic Well-Being at Baseline

Households in pilot governorates survived on low levels of income (most of which comes from cash earnings and UN cash aid), took on debt to meet their needs, and faced frequent food insecurity. For the 89% of households renting their home, more than half of their income (54%) went toward rent. This helps to explain why 57% of children were out of school due to cost. Households relied on debt as an important way to meet their basic needs, supplementing their income by taking on debt at a rate equal to roughly half of their total income. Over half of the households did not have access to a safe water source and many had to purchase bottled water. Households faced frequent food insecurity over the week preceding the baseline survey. Slightly more than half of the sample households (52%) reported not having enough food in the 7 days prior to the survey, and more than one third (39%) of beneficiaries reported skipping a meal. Almost all households received at least one other type of UN cash transfer. The percentage of study households in pilot governorates at baseline that receives each of the other possible programs is shown in Table 8.

Table 4. Other Programs Received by Min Ila Households at Baseline

Transfer Program	Enrolled in % program
WFP Assistance	91.00
Muliti-purpose Cash Assistance	39.43
Winter Transfer (US\$147)	59.94
Winter Transfer (US\$75)	25.24
N	634

Note: Percentage of household present at endline who were enrolled in other programs at baseline. Household could be enrolled in multiple programs. Data come from administrative records.

VII.3 Children Ages 5–9 at Baseline

There were 1,149 children between the ages of 5 and 9 in the pilot governorates sample at baseline, half of whom were female (49%). Two-thirds of children ages 5–9 were enrolled in school in the 2015–16 school year (first and second shift). For almost half of the children who did not attend school (41%), the cost was the reason provided, despite that the direct costs of education (tuition and books) are already covered by UNICEF for all primary school children in public schools. Of the children in school, almost half of the children ages 5–9 (47%) took a fee-bearing bus or minibus to school. As a result, transportation costs were an added expense associated with school attendance for almost half of the children.

VII.4 Children Ages 10–14 at Baseline

There were 948 children between the ages of 10 and 14 in the pilot governorates sample at baseline, 46% of whom were female. Older children were more likely not to attend school at baseline. School enrollment decreased with age: 14-year-olds enrolled at almost half the rate of 10-year-olds (40% and 78%, respectively). The cost was the primary reason for children in this age range not attending school (63%). For children who were enrolled in school, households spent an average of US\$87.21 per child each year on educational expenses, which is roughly the same as the cost for younger children. Older children in school typically spent about 20 minutes travelling to school (the same amount of time as children ages 5–9). Approximately half of the children in school took a fee-bearing bus or minibus (43%).

Section VIII

ATTRITION

VIII. ATTRITION

Attrition occurs when households or children observed in the baseline sample are missing at follow-up, most often due to mobility when working with refugees. Attrition is important for two reasons. First, when the pilot and comparison samples differ in the types of households (or children) who attrit, the characteristics of the households (or children) remaining in the pilot and comparison groups may no longer be balanced, leading to potential bias in impact estimates. Second, the characteristics of households (or children) missing at follow-up may differ from the characteristics of the remaining sample with implications for generalizability of the study's findings to populations outside of the study.

We, therefore, proceed to examine the overall attrition rate, the baseline characteristics of households that leave the sample versus those that remain, and the baseline characteristics of households remaining in the sample in comparison with pilot governorates. This section focuses on attrition at endline (the reader is referred to the midline report for a discussion of midline attrition).

The study lost 12% of households from the baseline sample, with 88% responding to the endline survey. Table 9 shows that the attrition rate is between 86% and 94% for each of the four governorates. There were 1,440 households with a child between the ages of 5–14 at baseline. Only 164 of these households were not surveyed at the endline, with 1,276 remaining in the study.

Table 5. Attrition by Governorate

	Treatment		Comparison		Total
	Akkar	Mount Lebanon	North Lebanon	South Lebanon and Nabatieth	
Missing	56	38	61	14	169
Longitudinal	364	341	360	222	1,287
Total	420	379	421	236	1,456
Longitudinal (%)	87	90	86	94	88

VIII.1 Characteristics of Endline Sample Versus Baseline Sample

We compare differences of baseline values between the baseline sample and the sample that remains at endline for 107 indicators, to determine if attrition created a different sample on average than what we had at baseline. We tested five groups of indicators, specifically: household demographics (including size, number of children, distance to the border, deceased parent, etc.); housing conditions (including in need of urgent repairs, electricity source, access to pumped water, access to toilet, etc.); economic

well-being (including cash earnings per capita, in kind earnings per capita, total debt per capita, food security, program assistance, etc.); caregiver characteristics (including gender, marital status, education completed, employment, etc.); and child characteristics (including age, gender, education completed, enrollment status, child labor, etc.). We tested for differences using t-tests and using cluster-robust standard errors. We separated children by age groups: 5–9 and 10–14. We did because during Year 1 of NLG/Min Ila operation, these age groups received different payment amounts. We show all of the variables tested in Appendix C.

Table 10 shows that there are only four statistically different characteristics between the original sample and the sample that remains at endline. Table 10 (under the column labeled Diff) shows the difference in value between the baseline sample and endline sample (for baseline values). The column labeled SD (for standardized difference) represents the magnitude of the difference between the two samples for that indicator. Impacts can be presented as an effect size, a way of standardizing the size of the impact relative to the level of the variable. Here, we present a similar statistic, only it is the standardized difference, a way of standardizing the magnitude of the difference between the two

groups with respect to the level of the indicator. They are all under 0.05 standardized differences, implying relatively small differences. There is no pattern of direction or theme across the different indicators. The original sample is better off for some indicators while the remaining sample is better off for others. Moreover, the different indicators are spread across multiple domains, and there is no clear pattern suggesting that one sample is systematically different than the other: they appear to be at random. We conclude that the original sample and the remaining sample are not meaningfully different and any generalizability of the study from the original sample remains intact with the endline sample.

Table 6. Overall Attrition at Endline

Variables	Original Sample		Remaining Sample		Balance Test			SD
	Mean	N1	Mean	N2	Diff	SE	p-value	
Household demographic characteristics								
Single parent household	0.08	1,371	0.07	1,214	-0.01	0.00	0.02	0.03
Economic well-being								
% received UNHCR winter (US\$75)	0.21	1,393	0.22	1,237	0.01	0.00	0.00	0.02
Younger children's characteristics (Ages 5–9)								
% girls out of school due to cost	0.47	360	0.48	319	0.02	0.01	0.09	0.04
Older children's characteristics (Ages 10–14)								
Time to school (in minutes)	21.00	1,008	21.54	893	0.56	0.21	0.01	0.04

Notes: Standard errors are robust to heteroscedasticity and clustered at the cadaster cluster level. Sample is restricted to households that remain in the sample at endline.

VIII.2 Balance of baseline characteristics of remaining households (differential attrition)

Differences in the baseline characteristics of households in pilot and comparison governorates that remain in the sample at endline should be limited to maintain the internal validity of the study design (Campbell & Stanley, 1963). We test for differences in baseline values of 107 indicators (discussed in the previous section) on overall attrition using the same RDD model we used to analyze impacts of the program, only here we are testing for potential impacts of attrition on baseline equivalence. We present all estimates between the households in pilot governorates and

comparison households that remain at endline in Appendix D. In Table 11 we focus on those estimates that are statistically significant at the 5% level. Similar to the overall attrition analysis, we find 10 statistically different baseline value indicators between the pilot and comparison households/children that remain at endline. There does not seem to be a clear pattern with respect to the differences between groups. Sometimes the remaining comparison sample is better off than the remaining pilot sample, while at other times it is the reverse. Overall, this analysis suggests that, on average, people missing from the endline sample looked similar at baseline regardless of whether they were from the pilot or comparison group, supporting the validity of the RDD approach employed in this study.

Table 7. Differential Attrition at endline

Variables	Comparison		Pilot		Balance Test			SD
	Mean	N1	Mean	N2	Diff	SE	p-value	
Household demographic characteristics								
% households with 7+ members	0.34	582	0.41	705	0.08	0.05	0.07	0.18
Housing								
Rent (USD monthly)	181.79	550	168.92	700	-49.13	16.17	0.00	0.49
Economic Well-being								
Household cash earnings PC USD (past 7 days)	10.13	582	8.29	705	-4.05	1.83	0.03	0.29
Total debt PC USD	31.77	582	50.06	705	20.38	9.95	0.04	0.29
Skipped meal	0.11	581	0.39	705	0.18	0.06	0.00	0.42
Adults' characteristics (Ages 17+)								
% Literate	0.85	3,327	0.83	4,166	-0.10	0.04	0.02	0.26
Younger children's characteristics (Ages 5–9)								
Time providing care (min)	116.40	829	44.65	966	-54.31	27.54	0.05	0.23
Time doing chores (min)	132.11	829	40.63	967	-73.91	30.63	0.02	0.29
Own shoes	0.90	822	0.92	997	0.10	0.05	0.05	0.35
Older children's characteristics (Ages 10–14)								
Time doing chores (in minutes)	134.51	605	49.47	800	-52.25	29.82	0.08	0.21

Note: Standard errors are robust to heteroscedasticity and clustered at the cadaster cluster level. Sample is restricted to households that remain in the sample. "PC" stands for per capita.

Section IX

ENDLINE RESULTS

IX. ENDLINE RESULTS

We present findings by outcome area in the order they fall along the path to program goals as explained in the theory of change. We want to explore impacts along the theory of change to understand how the program works to achieve the ultimate goals. Programs often require time to achieve their ultimate goal. By investigating progress along the theory of change, we can assess whether the program is moving in the right direction toward stated goals and where it might hit potential obstacles. The main text groups findings by the following outcome areas: child food consumption, child health, child work, child subjective well-being, child school enrollment, school attendance, educational ambitions, and educational expenditure. We separate the quantitative analysis for children into two groups: younger (ages 5–9) and older (ages 10–14). We make this distinction for two reasons:

1. Children in these two age groups received different transfer sizes for Year 1 of the program (explained in the program description section of this report). The effects of these differing transfer sizes may persist in the new school year.
2. We introduced a child instrument at endline for children ages 10–14, and we want to separate their responses from the responses provided by caregivers for younger children at endline ages 5–9.

We also present program impacts on household food consumption and financial well-being. We explain in the text how each outcome relates to other program goals, supported by peer-reviewed, published research. Within each outcome area, we present the core quantitative and qualitative findings. Findings based on data collected at midline are discussed in the text but not shown in the tables. A more extensive discussion of the midline findings can be found in the midline report (see de Hoop, Morey, & Seidenfeld 2018). Appendix F contains the regression discontinuity graphs for all outcomes present in the body of the report.

IX.1 Child Food Consumption

Evidence from cash transfer evaluations globally demonstrates that transfers alleviate the burden on families to meet their basic needs (Baird et al., 2014; Bhalla, Handa, Angeles, & Seidenfeld, 2018; Fiszbein & Schady, 2009; Saavedra & Garcia, 2012). Households at low levels of consumption, are likely to spend all of any additional income rather than save it. Thus, we expect the immediate impact of the program will be to raise spending levels, particularly basic spending needs for food and healthcare, which will influence children's health, nutrition, and well-being. Besides being a goal of the program, children's food consumption also represents an important step along the pathway to increasing enrollment and attendance in school. Numerous studies demonstrate the positive effects of improved food consumption on children's enrollment and attendance in school (Ahmed, 2004; Jacoby, Cueto, & Pollitt, 1996; Kleinman et al., 2002; Pappas et al., 2008; Powell, Walker, Chang, & Grantham-McGregor, 1998; Simeon, 1998). Therefore, we start by presenting the results of the Min Ila program on food consumption.



The program impacts on children's food consumption for older children is shown in Table 12. As in the remainder of the results presented in the main text, the table contains three columns. Column (1) shows the impact of the program as identified by the evaluation. Stars indicate the statistical significance of the estimate (more stars indicate that the probability of finding the displayed result just by chance is lower, thus we have more confidence in the results). Outcome variables are reported in proportions (i.e., range from 0 to 1) unless indicated otherwise. To go from proportions to percentage points, reported impacts need to be multiplied by 100. Column (2) shows the average outcome for households in the study sample living in pilot governorates. Column (3) shows the number of observations on which the estimate is based, which is lower for child reported outcomes (which were collected only from children ages 10–14) than for outcomes reported by caregivers. For all outcome variables, we tested whether the program effect is different for boys and girls. We discuss the results of the differential impacts by gender in the main text of the report within

each domain only when the program impacts the indicator for the entire sample. We show the regression results of this analysis in Appendix D.

The results displayed in 12 shows that Min Ila had a consistent and positive impact on children's food consumption. Fewer children in pilot governorates ages 10–14 skipped a meal the previous day than similar children in the comparison group, with an impact of 13 percentage points reduction (15% skipped a meal at endline). More children in pilot governorates started the day with breakfast than comparison children, with a 19 percentage point impact of the program (69% ate breakfast). Fewer children in pilot governorates went to bed hungry at the end of the day, with a 13 percentage point reduction in hunger (10% went to bed hungry). We do not have results on food consumption for younger children because the household survey only assessed food consumption at the household level. Food consumption results for child ages 10–14 come from the child survey. There are no differential effects by gender for food consumption impacts as shown in Table D.1 of Appendix D.

Table 8. ITT Results for Food Consumption Outcomes (Ages 10–14)

Children's Food Consumption Outcomes	Impact (1)	Mean value at endline (2)	N (3)
Skipped a meal (yesterday)	-0.13*	0.15	743
Ate breakfast (yesterday)	0.19**	0.69	743
Went to bed hungry (yesterday)	-0.13*	0.10	744

Notes: Regressions clustered at the cadaster cluster; * 10%, ** 5%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All households come from child survey.

Qualitative interviews and focus groups with children, parents, teachers, and principals in pilot governorates corroborated the impact results. Most children reported having three meals a day, including breakfast before going to school, followed by lunch at home or eating a sandwich for lunch on the way to school or during break, and dinner when they arrived home after school. Several respondents stated that they had witnessed an improvement in food consumption among their students. Teachers explained this by noting that some children had begun to consume a more diversified and broader range of foods since the introduction of the cash assistance. For example, one teacher stated, *"They used to bring thyme, labnah (yogurt) sandwiches in a bad state while now they bring croissant, cheese, fruits, they buy from the grocery. So you feel they're really living like other children."*¹⁴

IX.2 Child Health

A large literature demonstrates the effects of cash transfers on child health, especially when the cash program targets children (De Groot, Handa, Ragnó, and Spadafora, 2017; Hirvonen, Bossuyt and Pigois, 2017; Huang, Singh, Handa, Halpern, Pettifor and Thirumurthy, 2017;). Similar to food consumption, improved child health represents an important

¹⁴ Akkar, Teacher, School 3, Halba.

step along the causal pathway to increased school enrollment and attendance (Alderman, Behrman, Victory, & Menon, 2001; Bobonis, Miguel, & Puri-Sharma, 2006; Glewwe, Jacoby, & King, 2001; Miguel & Kremer, 2004; Saps, Velasco-Benitez, Blom, Benninga, & Nichols-Vinueza, 2018; Trinies, Chang, Garn, & Freeman, 2016).

We find that the program generates positive impacts on health for younger children. Caregivers in NLG/Min Ila governorates are more likely to report that their younger child is in good health than reported by caregivers in comparison areas, with a 10 percentage point impact and an endline value in pilot governorates of 87%. Caregivers in pilot areas are also more likely to report that their younger child is able to walk 5 kilometers or sweep the floor (11 percentage point impact for both) than caregivers in comparison governorates. Households in pilot governorates also spent, on average, US\$9.95 more on healthcare for their younger children over the previous 30 days than comparison households.

We do not find any statistically significant impacts on health outcomes for older children; however, all of the impact estimates are in the positive direction. Tables 13 and 14 present the results for health-related outcomes by child age group. Here, too, we find no differential effects by gender for health impacts as shown in Tables D.2 and D.3 in Appendix D.

Table 9. ITT Results for Health Outcomes (Ages 5–9)

Children's Health Outcomes	Impact (1)	Mean value at endline (2)	N (3)
Child in good health	0.10**	0.87	1,160
Able to walk 5 kilometers	0.11*	0.73	1,160
Able to sweep floor	0.11*	0.77	1,160
Spending on healthcare (past 30 days, USD) ⁰	9.95***	6.97	754

Note: Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

⁰ Spending on healthcare restricted to those who had out-of-pocket expenses.

All results come from household survey.

Table 10. ITT Results for Health Outcomes (Ages 10–14)

Children's Health Outcomes	Impact (1)	Mean value at endline (2)	N (3)
Child in good health	0.06	0.88	1,083
Able to walk 5 kilometers	0.01	0.80	1,083
Able to sweep floor	0.06	0.84	1,083
Spending on healthcare (past 30 days, USD) ^o	5.82	8.17	733

Note: Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

^o Spending on healthcare restricted to those who had out-of-pocket expenses.

All results come from household survey.

IX.3 Child Work

Many cash transfer studies demonstrate that improving a household's food consumption, as well as their access to basic needs such as healthcare, decreases the demand for children to contribute to income generation and household chores (de Hoop & Rosati, 2014; Fisher et al., 2017; Handa et al., 2017; Kilburn, Handa, Angeles, Mvula, & Tsoka, 2017; Prifti et al., 2017). Additionally, there are several studies that demonstrate the connection between decreased child work and increased school outcomes. Reduced child work is one goal of the program; however, it also serves as a possible pathway to improving educational outcomes as demonstrated in several studies (Dammert, 2010; Khanam, & Ross, 2011; Kookana et al., 2016; Nonoyama-Tarumi, Loaiza, & Engle, 2010;).

Indeed, we found that the program consistently reduced the percentage of children ages 10–14 carrying out household chores and reduced the amount of time they spent on chores. Fewer children in pilot governorates fetched firewood or water (14 percentage point reduction). Additionally, the program reduced the probability of older children caring for a family member by 18 percentage points as compared with children in comparison governorates. For younger children, we only found a statistically significant reduction in time spent caring for a family member, a reduction of half an hour per day; however, all of the other impact estimates for young children move in the right

direction in that they signify a possible reduction in work. Tables 15 and 16 show the results of the program for younger and older children's time use.

The qualitative data, especially data from teachers and principals, provides additional perspective. Respondents described the various chores that children are responsible for at home, with some children and caregivers suggesting that they spent less time on chores when they were attending school. According to respondents, girls are typically responsible for cleaning, cooking, and caring for their siblings, while boys were usually tasked with running errands outside of the home. Girls who were enrolled in school in Akkar explained that they had fewer responsibilities at home since they started going to school. One girl stated, *"We won't end up with household chores. You need to take advantage of education and time you have to study."*¹⁵ A girl attending a different school in Akkar agreed, saying, *"My mother doesn't let me clean with her, my studies are more important than helping her."*¹⁶ When asked about chores that their children participate in at home, one mother living in Mount Lebanon explained that her son's responsibility is to study.¹⁷ There are no differential effects by gender for child work impacts as shown in Tables D.4 and D.5 of Appendix D.

¹⁵ Akkar, Girls School 3.

¹⁶ Akkar, Girls School 3.

¹⁷ Mount Lebanon caregiver, female.

Table 11. ITT Results for Time Use Outcomes (Ages 5–9)

Children's Time Use	Impact (1)	Mean value at endline (2)	N (3)
Performed any chore	-0.05	0.47	1,358
Fetches firewood/water (yesterday)	-0.05	0.23	1,357
Time collecting firewood/water (hours) (Ages 5–14)	-0.16	0.17	1,357
Cared for family member (yesterday)	-0.11	0.33	1,357
Time caring for family (hours) (Ages 5–14)	-0.55***	0.67	1,357
Performed cleaning, cooking, washing, shopping task (yesterday)	-0.05	0.35	1,358
Time performing cleaning, cooking, washing, shopping (in hours) (Ages 5–14)	-0.28	0.74	1,358

Note: Regressions clustered at the cadaster cluster; ** 5%, *** 1%.

Covariates include sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All results come from household survey.

Table 12. ITT Results for Time Use Outcomes (Ages 10–14)

Children's Time Use	Impact (1)	Mean value at endline (2)	N (3)
Performed any chore	-0.10*	0.44	748
Fetches firewood/water (yesterday)	-0.11*	0.20	738
Time collecting firewood/water (hours) ‡	-0.23**	0.14	1,067
Cared for family member (yesterday)	-0.18**	0.26	745
Time caring for family (hours) ‡	-0.52***	0.52	1,067
Performed cleaning, cooking, washing, shopping task (yesterday)	-0.12	0.32	744
Time performing cleaning, cooking, washing, shopping (hour) ‡	0.01	0.82	1,067
Played with other children (yesterday)	0.03	0.18	706

Note: Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include sex, age, and mother's education.

‡ Results derived from household survey; others from child survey.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

Both parents and children rarely reported child engagement in economic activities; hence, there is no evidence that the program reduced these activities. A possibility that we cannot rule out is that parents underreport a child's work out of fear of negative repercussions. The data collectors who collected data for this study indicated that respondents might not accurately convey true child (and adult) engagement in income-generating activities practices out of fear of losing program benefits.

Some respondents believed that there was a decrease in child labor associated with the cash transfer because children were now going to school instead of working. A principal in Akkar commented, *"I know 15–20 cases and even more [of boys working]. I noticed that last year. I haven't seen any similar cases yet this year."*¹⁸

IX.4 Child Subjective Well-Being

Mental health is a key component of the World Health Organization's (WHO's) definition of health and is important for enabling youth to reach their full potential in terms of education and productivity (WHO 2013). A study in Zomba, Malawi (see Baird, de Hoop, & Özler, 2013) demonstrated the ability of a cash transfer to improve female adolescent mental health outcomes, and the authors concluded these impacts were driven by physical health, increased schooling, and family support for education, as well as higher levels of individual consumption and leisure. The Kenyan Government's Cash Transfer for Orphans and Vulnerable Children program also had positive impacts on mental health; however, impacts were largely found among males (Kilburn, Thirumurthy, Tucker Halpern, Petitfor, & Sudhanshu, 2014). In addition to being an important component of health and well-being, mental health may be an important mediator for other child development outcomes (Handa et al 2013).

¹⁸ Akkar principal, School 3, Halba.

As explained in the section on quantitative instruments, we relied on a combination of highly established and validated psychometric scales administered directly to children ages 10–14 to measure impacts on these aspects of mental well-being, including: the Center for Epidemiological Studies Depression for Children (CESD-C) Scale, the Rosenberg Self-Esteem Scale, the Multidimensional Scale of Social Support, and the Holistic Student Assessment Scale to assess trust, optimism, and assertiveness.

The program has a statistically significant beneficial impact on two subscales of the Holistic Student Assessment: children in pilot governorates feel more optimistic about the future and feel more confident and assertive. There is no indication of a program effect on self-esteem, depression, or social support: 13% of children report low self-esteem, which is the same as the comparison group. Table 17 provides the impact estimates for older children's subjective well-being. There are no differential effects by gender for subjective well-being impacts, as shown in Table D.6 of Appendix D.

Qualitative interviews and focus groups with children, parents, teachers, and principals in pilot governorates provide supporting evidence on the influence of the program on child well-being. Respondents agreed that children's behavior and overall well-being had improved since families started benefitting from the cash transfer program. Specifically, interviewees described positive changes in behavior, happiness, and optimism. Teachers and principals believed that students have adapted to the school environment since they started attending classes; as a result, children are more engaged and disciplined. A principal from Akkar explained that while violence among children was common at his school in the previous years, it has decreased.¹⁹ A teacher from Mount Lebanon shared this sentiment commenting: *"Last year, you used to see chaos in the courtyard but this year, they're calmer, they can sit and talk together, and they respond once you call them, they converse in a better way."*²⁰ According to this quote, children had started exhibiting better behavior at school after getting acclimated to a new environment. Another teacher from Mount Lebanon noted:

¹⁹ Akkar principal, School 3.

²⁰ Mount Lebanon Teacher

"The child is [now] contented and relaxed. He feels he is equal to the other kids. He has his own uniform, his bag, sometimes if his copybook finishes he can buy another one, transportation ... so the child feels more at ease and is not pressured."

Other respondents confirmed that children were happy to be attending school and were proud to receive the cash transfer amount. According to children, they liked coming to school because they got to meet with their friends, they enjoyed learning new things, and they also understood that attending school would improve their prospects for the future. Several female students from Mount Lebanon and several boys from Akkar explained that the happiest point of their day was when they were in school. Caregivers mentioned that receiving the cash transfer made children happy because many parents gave children pocket money from the transfer amount. One caregiver from Akkar noted that while the amount itself isn't very high, it really encouraged his son, stating, *"It has very high value emotionally for the kid."*²¹ Other caregivers agreed with this, mentioning that their children thought of the transfer as their own salary, which gave them pride.

²¹ Mount Lebanon caregivers, males.

Children expressed optimism by describing their hopes and dreams for the future. Students described positive aspirations for the future, including wanting to become doctors, dentists, teachers, and lawyers, among other professions. Many children expressed an interest in achieving a high level of education, including completing secondary school and attending university. However, children also noted several barriers that could potentially derail their educational pursuits, including having to start working to support their family and girls getting married. Other children commented that they might not be eligible to enroll in universities in Lebanon. Regardless of these potential challenges, students still maintained a positive outlook. One boy attending school in Akkar described his feelings about the future by stating, *"It is a white page."* When asked how he felt about his two years ago, the boy continued, *"Black. There was war and sadness while now it's white."* Another boy added, *"We're able to write our own chapters now."*²² These statements demonstrate positive changes in children's aspirations over time.

²² Akkar Boys School 2.

Table 13. ITT Results for Child Psychosocial Well-being Outcomes (Ages 10–14)

Children's Psychosocial Well-being	Impact (1)	Mean value at endline (2)	N (3)
Depression for Children scale (out of 60)	-2.41	21.00	724
Child reporting depression (score >15)	-0.10	0.62	724
Rosenberg Self-Esteem scale (out of 30)	0.52	18.44	739
Child reporting low self-esteem (score <15)	-0.02	0.13	739
Multidimensional Scale of Perceived Social Support (out of 4)	0.06	3.08	721
Holistic Student Assessment score (out of 44)	2.15**	30.74	722
Holistic student assessment–trust score (out of 12)	0.37	7.31	744
Holistic student assessment–optimism score (out of 16)	0.97**	11.43	737
Holistic student assessment–assertiveness score (out of 16)	0.88**	12.10	734

Note: Regressions clustered at the cadaster cluster; ** 5%

Covariates include sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All results come from child survey.

IX.5 School enrollment

Aggregate MEHE figures suggest that formal school enrollment rates of displaced Syrian children increased rapidly across the country from the past (2015–16) to the current school year. Average enrolment in second shift schools increased by 51 percent in NLG/Min Ila pilot areas compared to 41 percent in the rest of the country during the 2016–17 school year (midline), potentially signalling an impact of the cash transfer program on enrolment outcomes. This study also found that schooling rates increased in both pilot and comparison areas, from nearly 60% at baseline to nearly 80% at follow-up. School enrollment increases were particularly pronounced for children ages 5–9, whose school enrollment increased from slightly over 60% to nearly 90%.

The rapidly increased demand to enroll in second-shift school in pilot governorates exceeded the capacity available; more than 50% of the schools in our sample reported being up to capacity at midline. This situation appears to have created a ceiling effect, or limit, as to how much the program can demonstrate its effectiveness. As a result, no impact on enrollment could be detected either at midline or at endline. If supply would have met demand, then perhaps we would have observed even greater enrollment in pilot governorates. The policy of MEHE was to expand supply of second-shift schools by opening afternoon classes in primary school buildings operating first-shift classes, when the decision was made to implement the Min Ila program. However, in practice there were challenges to opening more classes which resulted in limited expansion of supply. The impact estimates on school enrollment for younger and older children are shown in Table 18 and Table 19, respectively.

Table 14. ITT Results for School Enrollment (Ages 5–9)

Children's Education	Impact (1)	Mean value at endline (2)	N (3)
Enrolled in school	0.05	0.91	1,372
Enrolled children in first shift	0.00	0.19	1,372
Enrolled children in second shift	0.00	0.67	1,372

Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All results come from household survey

Table 15. ITT Results for School Enrollment (Ages 10–14)

Children's Education	Impact (1)	Mean value at endline (2)	N (3)
Enrolled in school †	0.03	0.78	748
Enrolled children in first shift †	-0.04	0.12	1,060
Enrolled children in second shift †	0.06	0.54	1,060

Note: Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

† Respondents include all children participating in adolescent survey.

‡ Respondents include all children covered by household survey.

The qualitative interviews corroborate the conclusion that capacity constraints in schools limited program impacts on enrollment. There was almost unanimous agreement from principals, teachers, caregivers, and students that there are **not enough spaces available** for interested Syrian students in Akkar and Mount Lebanon. Teachers and principals in both Mount Lebanon and Akkar expressed their opinions that enrollment in their schools had increased noticeably, particularly in the second shift. They frequently reported increases of over 100 students at their schools. According to one principal in Mount Lebanon, "[Enrollment] has increased too much. I have 516 students this year. The number was 417 last year... The number has increased by 100 students this year." Teachers and principals indicated no real difference in the numbers of new female and male students enrolling and little variation by age or grade level. When asked what prevents Syrian additional students from enrolling, a principal from Mount Lebanon said, "It's too crowded. Between Barja, Naamah, Rmeileh regions, the surroundings, it's full," and added, "There are plenty on the waiting list; the Ministry is working on that!" Relatedly, several students mentioned that their older siblings are not enrolled because higher grade levels are not available. To this end, one female student from Mount Lebanon commented, "There is no higher class here and my father doesn't allow her to go to Saida alone to attend Grade 8 and above."

Although the impact evaluation does not identify a program impact on second-shift school enrollment, some teachers and principals stated that enrollment increased as a direct result of the Min Ila cash transfer. Following similar logic, several respondents also voiced their belief that ending the Min Ila program would reduce enrollment and that families not benefiting from the program are more likely to remove their children from school. According to one caregiver from Akkar, "At the beginning of the year, there were rumors there is no Caritas anymore, so [some people] removed their children." While certainly the minority opinion, one Akkar principal expressed the opinion that the cash transfers have not had much of an impact on enrollment and that motivated parents will send their children to school regardless of whether they are receiving the cash transfer. Finally, several caregivers reported that enrollment has increased not due to Min Ila but rather because other non-accredited schools which had sprung up in areas experiencing large influxes of refugees closed.

While qualitative respondents reported a great deal of enthusiasm for education and widespread interest in enrolling children in school (even in the second shift), they mentioned a number of remaining barriers that cannot be overcome by the cash transfer program alone:



- Respondents referenced several obstacles related to the commute to school that may deter families from enrolling their children. These include long distances between home and school, the perceived danger of commuting to and from school (particularly in the evening and for girls), and limited or inconsistent options for transportation to school. The number of second shift schools increased from 313 to 349 during the 2017-2018 academic year which could reduce the distance to the nearest school.
- Caregivers from Akkar cited the language of instruction (French) as one potential reason Syrian families are not enrolling their children. According to one caregiver, *“Their children are not able to understand the curriculum.”* Another shared, *“My daughters know the English language, so now they’re studying French and they’re barely catching up.”*
- A number of teachers reported that overcrowded classrooms, which are particularly common in the second shift, make it difficult to maintain order and deliver lessons. According to one teacher in Akkar, *“Half of my time is spent on monitoring the class because if the class is not calm you cannot deliver the lesson.”* A fellow teacher from Akkar agreed, adding, *“One of the most important challenges we face is the high number of students in the class.”*



©UNICEFLebanon2014/DavidBrunetti

IX.6 School Attendance

At midline, which took place in the middle of the 2016–17 school year (February–March), Min Ila resulted in a substantial impact on attendance among children enrolled in a second-shift school. Children in comparison areas attended school for about 3.5 days in the week prior to the midline interview. Attendance among children in the pilot areas was 0.5 to 0.7 days higher, an improvement of about 20%.

There was little margin to improve school attendance rates at endline. The quantitative data show that the average enrolled child ages 5–14 years attended school for 4.85 days in the week prior to the endline interview (Table 20). This average is very close to the maximum number of days a child could attend school (5 days). Hence, the endline analysis did not identify statistically significant impacts on school attendance. A likely explanation for the high attendance rates at endline is that interviews were conducted at the start of the (2017–18) school year. Teachers and principals mentioned during key informant interviews that the number of students attending regularly is high at the beginning of the school year and declines over the course of the year. One principal from Mount Lebanon commented, *“We had 417 at the beginning of the school year, they even took books, and after a while, we’re not able to communicate with them and the number was diminishing.”* A teacher from Mount Lebanon echoed this sentiment, saying, *“Yes [enrollment has increased], but I feel they get absent for any slight reason. They’re not so interested, not even their families.”*

Principals from both Akkar and Mount Lebanon suggested that student attendance varies with the agricultural season, and that both rain and harvesting schedules influence attendance patterns. According to a principal from Akkar, *“We have enrolled 650 students this year, attendance was 580 students and now when it started raining, the attendance was 437 students.”* Principals from Mount Lebanon added that attendance is lower during olive-picking season. One principal said, *“Parents wouldn’t send their children to school before they finish picking olives. It’s the season of picking olives now.”* Attendance again declines during fruit-picking season.

Table 16. ITT Results for School Attendance (All Ages)

Children’s Education	Impact (1)	Mean value at endline (2)	N (3)
Number of days of second-shift school attended (last week) ages 5–9	0.10	4.85	904
Number of days of second-shift school attended (last week) ages 10–14	0.13	4.85	748

Note: Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother’s education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All responses from household survey.

IX.7 Educational Aspirations

During the endline interviews, older children were asked whether they planned to complete primary school, secondary school, and university. The program appears to have increased educational aspirations. Older children in pilot governorates

are 11 percentage points more likely to indicate that they plan to complete primary school and 10 percentage points more likely to aspire to complete secondary schools than older children in comparison governorates. Table 21 shows the impact estimates for educational aspirations among children ages 10–14.

Table 17. ITT Results for Educational Aspirations (Ages 10–14)

Children’s Education	Impact (1)	Mean value at endline (2)	N (3)
Plan to complete primary school †	0.11*	0.84	740
Plan to complete secondary school †	0.10*	0.82	731
Plan to complete university †	0.11	0.80	720

Note: Regressions clustered at the cadaster cluster; * 10%.

Covariates include baseline outcome, sex, age, and mother’s education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

† Respondents include all children participating in adolescent survey.

IX.8 Educational Spending

The program increases the amount of money spent on children’s education expenses, on average, by US\$54.23 for younger children and US\$69.01 for older children in the pilot governorates. Data is shown in Table 22. Households report spending, on average, US\$100.43 on educational expenses for

younger children, and US\$107.89 for older children in pilot governorates. The program also impacts the percentage of students using a fee-bearing bus to travel to school by 25 percentage points for younger children and 16 percentage points for older children, with 53% of younger children enrolled in school taking the bus at endline, and 39% of older children enrolled in school taking the fee-bearing bus at endline.

Table 18. ITT Results for Education Spending (All ages)

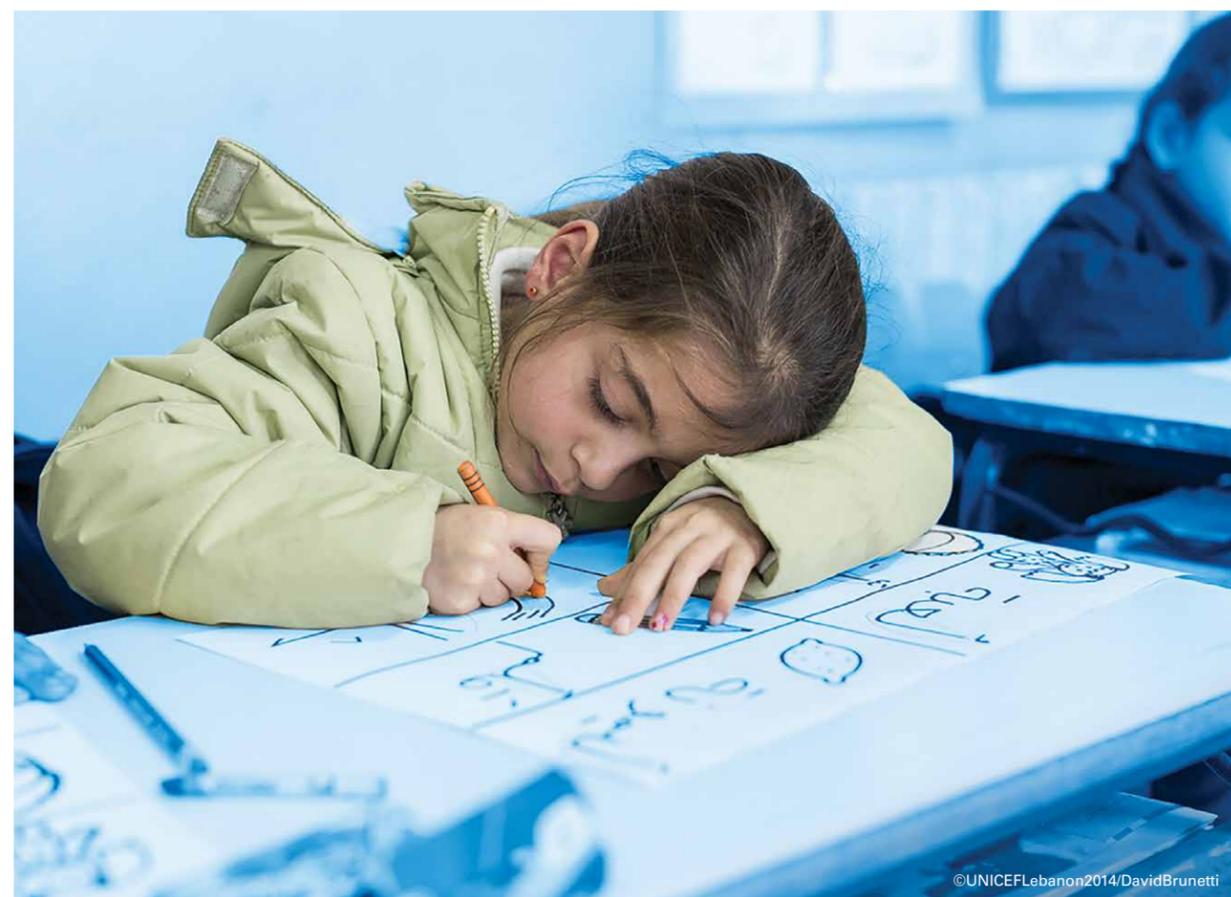
Children's Education	Impact (1)	Mean value at baseline (2)	N (3)
Total expenditures on education (2017–18, USD) ages 5–9	54.23***	100.43	903
Enrolled children using fee-bearing bus transport, ages 5–9	0.25***	0.53	1,372
Total expenditures on education (2017–18, USD), ages 10–14	69.01**	107.89	548
Enrolled children using fee-bearing bus transport, ages 10–14	0.16**	0.39	1,060

Note: Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All results come from household survey.



©UNICEFLebanon2014/DavidBrunetti

IX.9 Household financial well-being and food security

Given the unconditional nature of the NLG/Min Ila program, it is quite possible that the program generates impacts at the household level as well as the child level. Other unconditional cash transfer programs demonstrate that households use the additional funds to invest in productive members in the household to increase income and food consumption. Households might spend more on healthcare to enable productive members to maintain their earnings potential or start a small business (Handa, Seidenfeld, Davis, & Tembo, 2016; Handa, Natali, Seidenfeld, Tembo, & Davis, 2018). We investigate financial well-being

and food consumption at the household level to determine if the program generates wider impacts beyond just for children. Table 23 shows the lack of programmatic effects on household economic well-being. However, it is important to highlight the limitations of this analysis. Unfortunately, this study could not implement the commonly used economic well-being measures that require several pages of additional questions to the survey, due to limited resources and the need to focus on the program's primary goals of improving child education and reducing negative child-level coping mechanisms. The survey is already quite long, so the research team needed to make decisions about what to leave out in order to prevent respondent fatigue, interviewer fatigue, and stay within the budget for data collection.

Table 19. ITT Results for Economic Well-Being Outcomes

Economic Well-being Outcomes	Impact (1)	Mean value at baseline (2)	N (3)
Income per capita (past 30 days, USD)	-11.28	58.06	974
Total debt per capita (past 30 days, USD)	2.06	7.21	974
Cash earnings per capita (past 7 days, USD)	-2.41	6.92	974
In kind earnings per capita (past 7 days, USD)	-0.86	1.76	974

Note: Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

All results come from household survey.

We investigated food consumption at the household level using the World Food Programme (WFP) Food Consumption Scale as well as using a few separate questions targeted at the household-level similar to those included in the child instrument. Unlike the child instrument, we do not find any impacts of the program on household-level food consumption. Table 24 shows the results

of the household-level food consumption analysis. The first four indicators are the same as those included in the child instrument, only the ones in Table 24 are asked to the caregivers instead of to children. The remaining indicators come from the World Food Programme's Food Consumption Scale. We present each item separately, and the scale food consumption score at the end.

Table 20. ITT Results for Household Food Consumption Outcomes

Household Food Consumption Outcomes	Impact (1)	Mean value at endline (2)	N (3)
Worried if food was enough (past week)	0.01	0.55	1,009
Skipped a meal (past week)	-0.06	0.27	1,009
Did not eat for whole day (past week)	-0.01	0.13	1,009
Child skipped a meal (past week)	-0.04	0.20	1,009
No. of days household ate grains (last week)	0.02	4.15	1,010
No. of days household ate beans (last week)	0.00	3.17	1,010
No. of days household ate vegetables (last week)	-0.31	2.35	1,010
No. of days household ate fruits (last week)	0.01	1.07	1,010
No. of days household ate meat (last week)	-0.08	0.79	1,010
No. of days household ate eggs (last week)	0.09	2.45	1,010
No. of days household ate dairy (last week)	-0.25	2.11	1,010
No. of days household ate fats (last week)	0.77*	3.06	1,010
No. of days household ate sweets (last week)	0.27	1.64	1,010
No. of days household ate condiments (last week)	0.76	3.45	1,010
Food Consumption Score®	-1.05	35.19	1,010

Note: Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

All results come from household survey.

®The Food Consumption Score is modeled after the World Food Programme's Food Consumption Score (Berardo 2008), but excludes consumption of eggs from the meats category.



Section X

OPERATIONAL PERFORMANCE

X. OPERATIONAL PERFORMANCE

The NLG/Min Ila cash transfer program had been in operation for more than a year by the time endline data were collected. We used this opportunity to investigate program implementation from the beneficiaries' perspective. Beneficiaries' perceptions, beliefs, and experiences can influence their behavior and ultimately affect the program's ability to achieve stated goals. We investigated three aspects of implementation to better understand beneficiaries' experience with the program, relying both on the quantitative and qualitative endline questionnaire. First, we examined beneficiaries' understanding of eligibility to see their perspective of why they qualify for the program. We then looked at the related issue of how easily beneficiaries accessed the money considering their travel time and cost to reach the location where they withdrew funds. We investigated beneficiaries' perceptions and experience as a NLG/Min Ila recipient in the community, specifically looking into whether the transfer affected their relationship with their neighbors. We concluded with qualitative findings on negative unintended consequences of the program and the perceptions of Lebanese community members. The results from this section can help explain why the program may or may not achieve certain goals. The results also provide useful information on how to improve the implementation of the program. Overall, we conclude that the transfer was successfully implemented. Households understand the general parameters of the transfer, received the money on time, and without substantial problems.

X.1 Quantitative Sample

The endline questionnaire contained a module asking beneficiary households about their understanding and perceptions of the NLG/Min Ila program. This module started with three screening questions: Are you aware of the NLG/Min Ila cash transfer program that is operating in this community?

Has your household ever received payments from the NLG/Min Ila cash transfer program? Are you or any member of your household currently a beneficiary of the NLG/Min Ila program?

The remaining questions in the operational performance module were asked only to households confirming that they benefitted from the NLG/Min Ila program.

According to program administrative data, roughly 60% of households in the study sample living in pilot governorates were program beneficiaries at endline (Table 25). Yet, only 37% of households in pilot governorates indicated that they knew about the NLG/Min Ila program, and even fewer households reported receiving the program. One plausible explanation is that there was some confusion about the screening questions in the study questionnaire and, in particular, the name "Min Ila" used in the screening questions. Another explanation may be that respondents were not eager to discuss their beneficiary status with our data collectors. In interpreting the remaining quantitative findings presented in this section, it is important to keep in mind that they are based on the smaller sample of 169 households that confirmed their participation in the program and responded to the questions.

Common Card for Cash Payments: LOUISE



X.2 Familiarity With the NLG/Min Ila Program

Most respondents indicated through the household survey that NLG/Min Ila is meant to subsidize transportation costs for Syrian children attending school during the second shift, and specifically to pay for bus transport to school. Students in qualitative focus groups were largely familiar with the NLG/Min Ila program and were even aware that the amount was reduced in the 2017–18 school year, although they did not know why. Beneficiaries

reported hearing about the program from friends, the UN (UNICEF especially), or Caritas. Not everyone recognized the program by its official name (Min Ila) and there were some misperceptions about where the money came from with respect to the other cash on their card and who provided the money. Of the respondents we spoke to qualitatively, principals and supervisors seemed to be the least familiar with the details of the program.

Table 21. Understanding of program eligibility (quantitative data)

(Perceptions About Eligibility (NLG/Min Ila Governorates	Mean (1)	N (2)
Enrolled in NLG/Min Ila based on administrative data*	0.60	705
Respondent knows NLG/Min Ila cash transfer occurs in community	0.37	705
Household reports having received NLG/Min Ila transfers	0.25	705
Household reports currently receiving NLG/Min Ila transfers	0.23	705

Note: Mean values are proportions unless otherwise noted in outcome definition. Responses come from eligible households in treatment governorates.

*These data do not come from survey responses but from separate UN registration records.

X.3 Perceptions About Program Selection

Some confusion existed among respondents regarding the eligibility criteria of the program. Figure 6 shows less than 20% of households understood that they must have a child enrolled in a second-shift class. Instead, nearly 60% of households believed that poverty was a necessary condition to receive the transfer. Even though being poor is correlated with being displaced from Syria, poverty was not an actual eligibility criterion. Respondents believed quite strongly that program selection is clear, despite this mismatch between actual selection criteria and perceived selection criteria. More than 90% of households agreed or strongly agreed that the selection criteria were clear (Figure 7).

X.4 Perceived Conditionality

Qualitatively, respondents largely reported their belief that receiving NLG/Min Ila is contingent on both enrollment and regular attendance at school. Caregivers from Akkar and Mount Lebanon indicated their understanding that regular attendance is required to benefit from Min Ila, with one parent from Akkar saying, "If the child misses school on a regular basis, he will be removed from the beneficiaries list." Others caregivers agreed, saying that if children miss more than 10 consecutive days they are removed from the program. The majority of children, teachers, and principals shared this belief as well, and one principal reported using the cash transfer as leverage to manage children's behavior: "When they misbehave, I just tell them: we will tell UNICEF to stop all benefits."

Figure 6. Perceptions About Selection

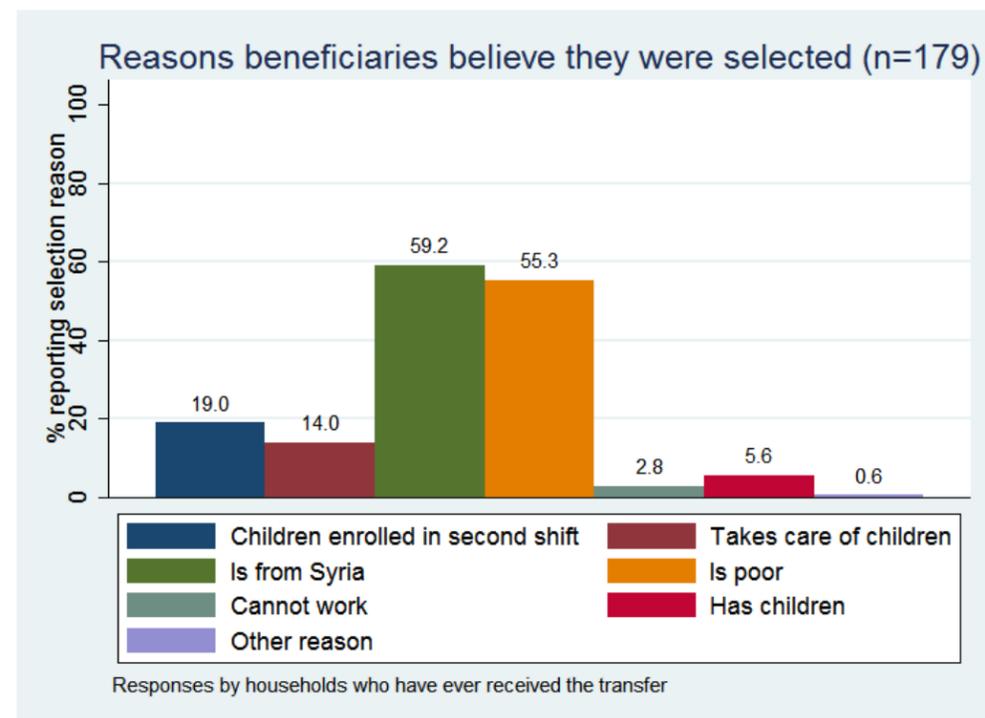
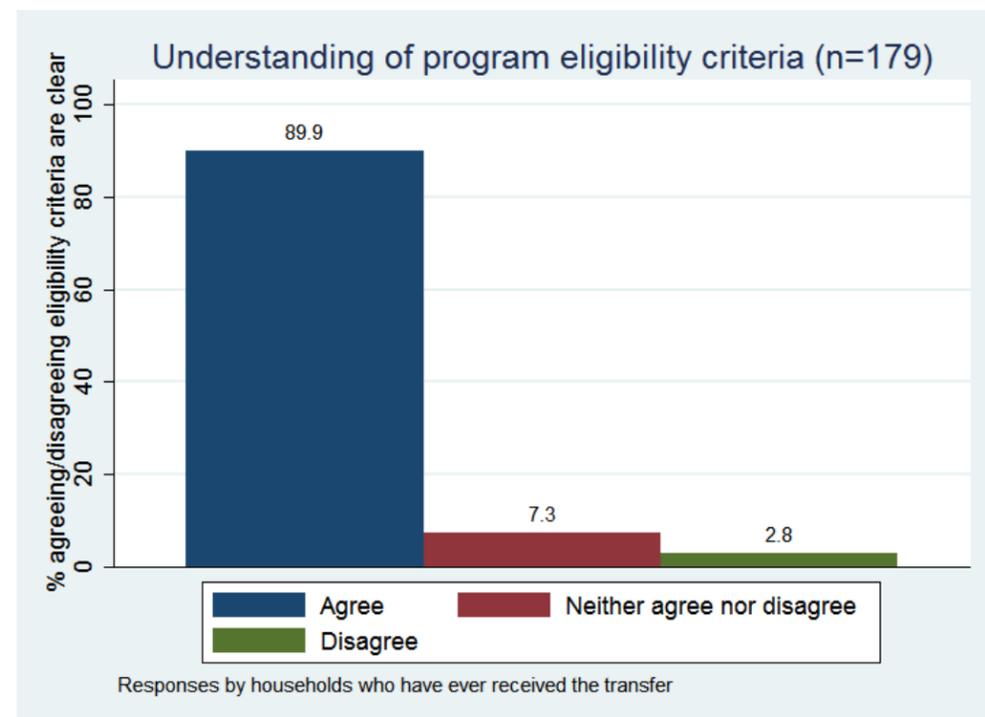


Figure 7. Perceived Clarity of Eligibility Criteria



X.5 Accessing Payment

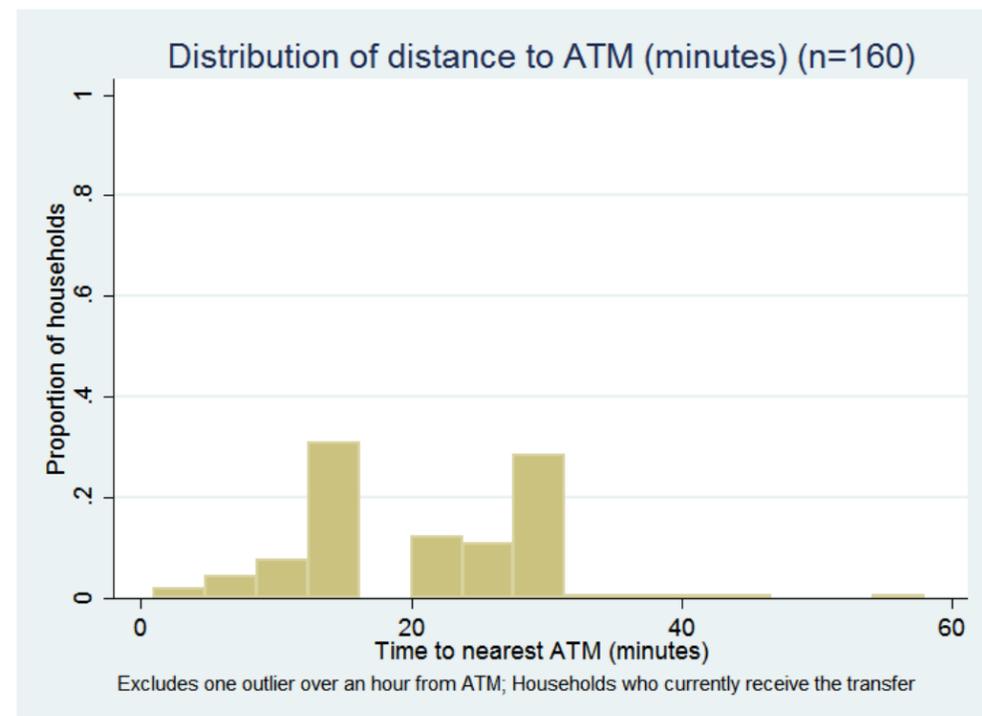
In the quantitative data, beneficiaries reported not experiencing challenges to access their payment. However, a majority of them pay for transport to reach the ATM to access the cash transfer. Table 26 shows that the average beneficiary would have to travel 22 minutes to get to the distribution point. Eighty percent of households reported being 15–30 minutes away. Figure 8 shows the distribution of households’ distance to an ATM. While we do not have data on the mode of transportation used to get to the ATM, it appears respondents used taxis, buses, or a similar form, as 76% of households reported paying for transportation to the ATM. That being said, no respondent indicated that distance or cost was a challenge for them, and a small 1% of respondents said they faced any other kind of challenge in withdrawing the transfers. Twenty percent reported missing a transfer, but more than half of those 20% eventually received it, meaning that less than 10% missed a cash transfer permanently.

Qualitative interviews and focus groups found results consistent with the survey. Beneficiaries expressed very few complaints about the payment process itself, which included receiving a message on their mobile phone that the funds had been transferred to their cards and then withdrawing funds from the nearest ATM. A few beneficiaries complained that they did not always receive the message that the money has been transferred, and others indicated that at first they were not sure how to withdraw the money; for the most part, however, beneficiaries seemed content with the process. Most beneficiaries indicated that ATMs are readily accessible, although a minority complained of long distances to the ATM that required paying for a taxi. In both Mount Lebanon and Akkar, there were a few reports by caregivers of being enrolled in Min Ila but not receiving the transfer.

Table 22. Beneficiaries’ Access to ATMs

Accessing Payment	Mean (1)	Standard Deviation (2)	N (3)
Respondent is household member who usually withdraws money	0.81	0.39	169
Time to nearest ATM (in minutes)	22.08	12.33	169
Pays for transportation to ATM	0.76	0.43	169
Experiences challenges going to ATM	0.01	0.11	169
Missed transfer	0.21	0.41	169
Eventually received missing transfer	0.62	0.49	169

Note: Mean values are proportions unless otherwise noted in outcome definition. Responses come from all households currently receiving Min Ila transfers.

Figure 8. Distance to ATM

X.6 Challenges With Second Shift

In both Akkar and Mount Lebanon, caregivers and students participating in the qualitative interviews shared the belief that the morning shifts and fee-charging private schools are preferable to the second shift during the qualitative interviews. Caregivers believed the curriculum and teaching are better in the morning and that the timing is better for children's routines. Caregivers expressed particular concerns over children returning home in the evening after dark, with some from Akkar parents saying, "They reach home after night prayer" and "We really get worried" and "People are really afraid for their girls at night!" This concern was especially pronounced during the winter months when it gets dark earlier. For their part, students themselves preferred the timing of the morning shift and wished more activities (arts and sports) were offered in the second shift. Female students from Akkar shared that they would much prefer to be in the morning shift: "You can be at home at 2 p.m. You still have time to study and play." Male students from Akkar voiced similar complaints, saying it is too dark for them to play after school.

Teachers and principals had a more positive view of the second shift, with some saying that it was difficult at first but they had adjusted to it. They mentioned, however, that activities available in the morning shift were not available in the second shift. One supervisor from Akkar stated, "In the morning shift school there are classes for drawing, arts, theatre, and sports. While the Syrian children have 5 hours of studying." Teachers also indicated that students in the second shift were more prone to falling asleep during class, and that they themselves get very tired after teaching two shifts. Last, teachers shared that second-shift students often have unique learning and psychosocial needs that require greater effort on their part. To this end, one teacher from Akkar commented, "Students [are] new, displaced, they have many problems, psychological problems... many students can overcome that and work fine with you, while others need more effort to receive the information and feel calm." A principal from Mount Lebanon added that the age of students in the second shift and their limited exposure to education and French language presented additional challenges for teachers: "We're having 7 and 10 year olds

in Grade 1 or Grade 2. They barely know how to hold a pen. We have students coming directly from Syria with a low level of education. It's totally different in Lebanon. Our classes are in French. Math and science are in French, it's an essential language here, same as the Arabic language, so there is a difference."

Unfortunately, there appears to be a negative stigma associated with the second shift that is perpetuated by some principals and teachers. One principal commented, "In the morning shift, it's totally different. Syrians who study in the morning are already born here. However, the students who come for the afternoon shift are careless; parents don't teach them at home, they never pay attention

to them. ... No attention, no care, no proper appearance, no hygiene, they just wear their clothes and leave, just to collect this \$20 at the end of the month." A teacher in Mount Lebanon reported only using certain equipment during the morning shift because using it again in the second shift would risk damaging it. Some Syrian caregivers appear to be picking up on this stigma, and thus feel their children are being discriminated against. For example, a mother from Mount Lebanon stated, "I have one complaint. Why do they put Lebanese students in morning shift and Syrian students in the afternoon? The teachers are differentiating between the Lebanese and Syrian students, they are humiliating them a lot and subjecting them to curses... [the] afternoon shift is not learning."



XI. CONCLUSION AND RECOMMENDATIONS

The impact evaluation highlights both the potential for programs like NLG/Min Ila to improve school enrollment and attendance, and the challenges of improving schooling outcomes in settings of massive displacement. Since the start of the NLG/Min Ila program, school enrollment of displaced Syrian children has increased rapidly as well as in governorates not implementing the NLG/Min Ila program. The increase in school enrollment has put pressure on the public education system. Many second-shift schools are up to capacity and cannot incorporate more children, thus limiting the potential of NLG/Min Ila to improve enrollment rates. Accordingly, the impact evaluation does not find that NLG/Min Ila improved school enrollment. It does find that NLG/Min Ila improved regular school attendance among children enrolled in second-shift schools during the 2016–17 school year. By the start of the 2017–18 school year, moreover, the program improved the conditions for children’s performance in school such as better food security; less work around the house; and improved subjective well-being, including optimism and assertiveness. Households in pilot governorates were spending more on education. Children living in pilot governorates were more likely to travel to school by fee-bearing

bus and to indicate that school attendance was a positive experience. They were also more likely to say that they were planning to finish primary school. As cited throughout this report, many studies demonstrate the causal link between these domains and child educational outcomes. Therefore, in addition to improving the well-being of children (a primary goal of the program), NLG/Min Ila also makes positive gains for indicators along the causal pathway in the theory of change to improved educational outcomes.

The many positive impacts generated by the NLG/Min Ila program also demonstrate the ability of stakeholders to successfully implement the cash transfer program in challenging refugee settings. After one full year of implementation, the program reached an increasing number of beneficiaries with frequent and regular payments. The stakeholders also ambitiously set out to learn about the program through a rigorous impact evaluation, one of the first of its kind in a challenging set of forced displacement. Thus, this study represents a meaningful contribution to the literature on the effectiveness of cash transfers to help assist refugee families send their children to school.

Section XI

CONCLUSION AND RECOMMENDATIONS



XI.1 Results on Program Objectives

This study had 5 objectives mentioned in the introduction. We review these objectives here and discuss how the evaluation fared in meeting them:

Immediate schooling effects:

The study included a rapid follow-up assessment of the program's effects on attendance and enrollment after several months of program implementation to learn about the immediate effects of the program on schooling. The study found positive effects on attendance and no impact on enrollment potentially due to capacity constraints in the study areas.

Schooling effects after the first school year:

The study also investigated the effects on children's attendance, enrollment, and education spending at the beginning of the 2017–18 school year, after one year of program delivery. The study did not find any impact of the program on attendance or enrollment, but did find positive impacts on educational spending, for instance on bus transport to school. As discussed in the limitations section, capacity constraints to enroll new children in school and the timing of the data collection might have limited the ability of the program to demonstrate an impact on enrollment.

Broader effects on children's lives.

The study gives a comprehensive overview of the effects on negative coping strategies harmful to children, including engagement in child work, accessing healthcare, and mental well-being, such as depression, self-esteem, and optimism for the future. The study finds that the program has a range of impacts on children's lives beyond education, including improved child food consumption and health, reduced child work, and improved subjective well-being.

Broader effects on children's households

The study investigated food consumption and economic well-being at the household level, but does not find any impacts on these areas as a result of the program.

Age and Gender Differences.

The study investigated differential impacts by gender and age when an overall impact of the program was found for an indicator. We present and discuss the areas where differences were found within each domain. Differences in program effects between sub-groups tend to be minor and the broad thrust of the observed program impacts is similar across groups.

The evidence generated from this study should prove useful for policymakers and funders to make informed decisions on how to allocate scarce resources for refugees in low- and middle-income countries. There are similar cash transfer programs that aim to assist refugees in countries neighboring Syria (e.g., Jordan and Turkey) in jointly supporting hundreds of thousands of Syrian children. Few have been rigorously evaluated, leaving an important gap in our knowledge about which programs work to help refugees. The authors hope this present study will help inform policy decisions in Lebanon and in comparable settings of forced displacement.



©UNICEFLebanon2014/DavidBrunetti

XI.2 Recommendations

This study is an impact evaluation with primary objectives to provide evidence on the effectiveness of the program that can both feed into broader policy discussions and global learning, and not necessarily to provide recommendations about program implementation. However, the authors worked collaboratively with UNICEF Lebanon and WFP to generate several recommendations based on the results of the study. UNICEF Lebanon country office requested that one recommendation relates to the design of the program to target stakeholders and policymakers who design and implement programs in Lebanon, while another targets people who procure or conduct research in Lebanon and relates to future research. The last two recommendations result from the operational performance piece of the evaluation.

1. The primary objective of the NLG/Min Ila program was to improve education-related outcomes, namely enrolment and attendance. Although the program only affected attendance at midline and neither attendance nor enrolment at endline, the programme demonstrated significant improvement in other child well-being aspects that are related to education. The program generated effects for children across important domains such as health, food consumption, child work, and subjective well-being. These domains are important in and of themselves for healthy child development and wellbeing. Given these important results, we recommend that the program revisit the primary objective to move towards a more holistic improvement of a child's well-being with the focus of covering multiple needs, not just education.
2. We cite many studies throughout this report that show the connection between education outcomes and health, food consumption, child work, and subjective well-being and explain how these are important steps along the pathway to affecting education outcomes. However, all of these studies occurred outside of Lebanon and in different contexts, mostly being poverty
3. Although we did not find program impacts on enrolment in school, the evidence suggests that demand for school went up but that supply was not able to respond quickly enough. Many parents who wanted to enroll their children in school were unable to do so due to insufficient capacity. Given that the cash transfer program aimed to increase school enrolment and attendance, we recommend continued advocacy for expanding school supply in areas where public schools have reached capacity. A more general recommendation for humanitarian agencies, particularly those operating in settings of massive displacement, is that close coordination between demand and supply side policies is critical for programs to realize their full potential and maximize their effectiveness.
4. When investigating the operational performance of the program, as described in more detail below, we learned that recipients of the program may have misunderstood key aspects that might affect their behavior. For example, recipients did not clearly understand why they were eligible to receive the program and what are the selection criteria. Similarly, they may have falsely believed that there are conditions to continue receiving the program, thinking that they cannot miss days of school. Teachers and school administrators also perceived this conditionality. This misunderstanding might prevent or dissuade other eligible households from participating in the program, fearing that they are not eligible or cannot meet the perceived conditions. Clear communication about the program to the community and school administrators may improve program operations and increase the number of participants in the program.

programs and not programs for refugees. Thus, we recommend conducting research into the connections between these important domains for child well-being within Lebanon and especially within the refugee context, in order to strengthen and understand the child from a holistic point of view.

Appendices

APPENDIX A

APPENDIX A: REFERENCES

Ahmed, A. U. (2004). *Impact of feeding children in school: Evidence from Bangladesh*. Washington, DC: International Food Policy Research Institute.

Alderman, H., Behrman, J. R., Victory, L., & Menon, R. (2001). Child health and school enrollment: a longitudinal analysis. *Journal of Human Resources*, 36, 185–205.

Attah, R., Barca, V., Kardan, K., MacAuslan, I., Merttens, F., & Pellerano, L. (2016). Can social protection affect psychosocial well-being and why does this matter? Lessons from cash transfers in sub-Saharan Africa. *Journal of Development Studies*, 52(8). Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/00220388.2015.1134777>

Ayyash–Abdo, H., Nohra, J., Okawa, S., & Sasagawa, S. (2016). Depressive symptoms among adolescents in Lebanon: A confirmatory factor analytic study of the Center for Epidemiological Studies depression for children. *Acta Psychopathologica*, 2(6). Retrieved from <https://psychopathology.imedpub.com/depressive-symptoms-among-adolescents-in-lebanon-a-confirmatory-factor-analytic-study-of-the-center-for-epidemiological-studies-de.pdf>

Baird, S., Ferreira, F. H. G., Özler, B., & Woolcock, M. (2014). Conditional, unconditional and everything in between: A systematic review of the effects of cash transfer programs on schooling outcomes. *Journal of Development Effectiveness*, 6(1), 1–43.

Baird, S., de Hoop, J., and Özler, B. (2013). Income shocks and adolescent mental health. *Journal of Human Resources*, 48(2), 370–403.

Battistin, F. (2016). Impact Evaluation of the Multipurpose Cash Assistance Programme. Retrieved from <http://www.cashlearning.org/downloads/lcc-impact-evaluation-for-mca-final-version.pdf>

Bhalla, Handa, Angeles, & Seidenfeld. (2018). The effect of cash transfers and household vulnerability on food security in Zimbabwe. *Food Policy* (74): 82-99.

Bobonis, G. J., Miguel, E., & Puri-Sharma, C. (2006). Anemia and school participation. *Journal of Human Resources*, XLI(4), 692–721. doi:10.3368/jhr.xli.4.692

Burde, D., Guven, O., Kelcey, J., Lahmann, H., & Al-Abbadi, K. (2015). *What works to promote children's educational access, quality of learning, and well-being in crisis-affected contexts*. London, UK: Department for International Development.

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Hopewell, NJ: Houghton Mifflin.

Dammert, A. (2010). Siblings, child labor, and schooling in Nicaragua and Guatemala. *Journal of Population Economics*, 23(1), 199–224. Retrieved from <http://www.jstor.org/stable/20685311>

De Groot, R., Handa, S., Ragno, L. P., & Spadafora, T. (2017). Child malnutrition, consumption growth, maternal care and price shocks: new evidence from Northern Ghana. (UNICEF Office of Research–Innocenti Working Paper WP-2017-01). Florence, Italy: UNICEF Office of Research.

De Hoop J., & Rosati, F. C. (2014). Cash transfers and child labor. *World Bank Research Observer*, 29(2), 202–234.

De Hoop, J., Morrey, M., & Seidenfeld, D. (2017). “Evaluation of No Lost Generation/“Min Ila,” a UNICEF and WFP cash transfer program for displaced Syrian children in Lebanon. Rapid Follow-up Report.”

Doocy, S., Tappis, H., & Lyles, E. (2016). Are cash-based interventions a feasible approach for expanding humanitarian assistance in Syria? *Journal of International Humanitarian Action*, 1, 1–13.

Drake, L., Woolnough, A., Burbano, C., & Bundy, D. (2016). *Global school feeding sourcebook: Lessons from 14 countries*. London: Imperial College Press.

Fisher E., Attah R., Barca V., O’Brien C., Brook S., Holland J., Kardan A., Pavanello S., & Pozarny, P. (2017). The livelihood impacts of cash transfers in Sub-Saharan Africa: Beneficiary perspectives from six countries. *World Development*, 99, 299–319. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0305750X17301821>

Fiszbein, A., & Schady, N. R. (2009). *Conditional cash transfers: Reducing present and future poverty*. Washington, DC: World Bank Publications.

Faulstich, M. E., Carey, M. P., Ruggiero, L., Enyart, P., & Gresham, F. (1986). Assessment of depression in childhood and adolescence: An evaluation of the Center for Epidemiological Studies Depression Scale for Children (CES–DC). *American Journal of Psychiatry*, 143(8), 1024–1027. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/3728717>

Glewwe, P., Jacoby, H. G., & King, E. M. (2001). Early childhood nutrition and academic achievement: A longitudinal analysis. *Journal of Public Economics*, 81: 345–368.

Government of Lebanon and the United Nations. (2014). *Lebanon Crisis Response Plan 2015-2016*. Retrieved from https://www.unocha.org/sites/dms/CAP/2015-2016_Lebanon_CRP_Brochure_EN.pdf

Government of Lebanon and the United Nations (2018). Lebanon Crisis Response Plan (2018 update).

Retrieved from https://reliefweb.int/sites/reliefweb.int/files/resources/LCRP2018_EN_Full_180122.pdf

Handa, S., Natali, L., Seidenfeld, D., & Tembo G. (2016). The impact of Zambia’s unconditional child grant on schooling and work: Results from a large-scale social experiment. *Journal of Development Effectiveness*, 8(3), 346–367. doi:10.1080/19439342.2016.1206605

Handa, S., Natali, L., Seidenfeld, D., Tembo, G., & Davis, B. (2018). Can unconditional cash transfers raise long-term living standards? Evidence from Zambia. *Journal of Development Economics*, 133, 42–65. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0304387818300105>

Handa, S., Palermo, T., Rosenberg, M., Pettifor, A., Tucker Halpern, C., Thirumurthy, H. (2013). *How does a national poverty program influence sexual debut among Kenyan adolescents?* University of North Carolina.

Handa, S., Seidenfeld, D., Davis, B. & Tembo G. (2016). The social and productive impacts of Zambia’s Child Grant. *Journal of Policy Analysis and Management*, 35(2), 357–387.

Handa S, Daidone S, Peterman A, Davis B, Pereira A, Palermo T and Yablonski J. (2017). Myth-busting? Confronting six common perceptions about unconditional cash transfers as a poverty reduction strategy in Africa. Innocenti Working Papers no. 2017-11, UNICEF Office of Research - Innocenti, Florence.

Hamad, B. A., Jones, N., Samuels, F., Gercama, I., Presler–Marshall, E., Plank, G., Essaid, A., ... Sadjji, J. (2017). A promise for tomorrow: *The effects of UNHCR and UNICEF cash assistance on Syrian refugees in Jordan*. London, UK: ODI.

Hirvonen, K., Bossuyt, A., & Pigois, R. (2017). Complementarities between social protection and health sector policies: evidence from productive safety net program in Ethiopia. (IFPRI Strategy Support Program Working Paper 112). Washington, DC: International Food Policy Research Institute, and Addis Ababa, Ethiopia: Ethiopian Development Research Institute. Retrieved from <http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/131446/file/131657.pdf>

Huang, C., Singh, K., Handa, S., Halpern, C., Pettifor, A., & Thirumurthy H. (2017). Investments in children’s health and the Kenyan cash transfer for orphans and vulnerable children: evidence from an unconditional cash transfer scheme. *Health Policy and Planning*, 32(7), 945–955. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/28431108>

Jacoby, E., Cueto, S., & Pollitt, E. (1996). Benefits of a school breakfast programme among Andean children in Huaraz, Peru. *Food Nutrition Bulletin*, 17, 54–64.

Khanam, R., & Ross, R. (2011). Is child work a deterrent to school attendance and school attainment? *International Journal of Social Economics*, 38(8), 692–713. doi:10.1108/03068291111143901

Kilburn K., Handa S., Angeles G., Mvula P., & Tsoka M. (2017). Short-term impacts of an unconditional cash transfer program on child schooling: Experimental evidence from Malawi. *Economics of Education Review*, 59, 63–80. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0272775716305416>

Kilburn, K., Thirumurthy, H., Tucker Halpern, C., Petitfor, A. & Sudhanshu, H. (2014). *Effects of a large-scale unconditional cash transfer program on mental health outcomes of young people in Kenya: A cluster randomized trial*. Chapel Hill, NC: University of North Carolina at Chapel Hill.

Kleinman, R. E., Hall, S., Green, H., Korzec-Ramirez, D., Patton, K., Pagano, M. E., & Murphy, J. M. (2002). Diet, breakfast, and academic performance in children. *Annals of Nutrition & Metabolism*, 46(0 1), 24–30.

Kookana, R. S., Maheshwari, B., Dillon, P., Dave, S. H., Soni, P., Bohra, H., . . . Patel, A. (2016). Groundwater scarcity impact on inclusiveness and women empowerment: Insights from school absenteeism of female students in two watersheds in India. *International Journal of Inclusive Education*, 20(11), 1155–1171. doi:10.1080/13603116.2016.1155664

Lehmann, C., & Masterson, D. (2014). *Emergency economies: The impact of cash assistance in Lebanon, an impact evaluation of the 2013–14 winter cash assistance program for Syrian refugees in Lebanon*. New York, NY: International Rescue Committee. Retrieved from <https://rescue.org/sites/default/files/document/631/emergencyeconomiesevaluationreport-lebanon2014.pdf>

Malti, T., Zuffianò, A., & Noam, G. G. (2018). Knowing every child: Validation of the Holistic Student Assessment (HSA) as a measure of social-emotional development. *Prevention Science*, (19)3, 306–317. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/28480494>

Merhi, R., & Kazarian, S. S. (2012). Validation of the Arab translation of the Multidimensional Scale of Perceived Social Support (Arabic–MSPSS) in a Lebanese community sample. *Arab Journal of Psychiatry*, 23(2). Retrieved from <http://arabpsynet.com/Journals/AJP/ajp23.2.pdf>

Miguel, E., & Kremer, M. (2004). Worms: Identifying impacts on education and health in the presence of treatment externalities. *Econometrica*, 72(1), 159–217. doi:10.1111/j.1468-0262.2004.00481.x

Nonoyama-Tarumi, Y., Loaiza, E., & Engle, P. (2010). Late entry into primary school in developing societies: Findings from cross-national household surveys. *International Review of Education/Internationale Zeitschrift Für Erziehungswissenschaft/Revue Internationale De L'Éducation*, 56(1), 103–125. Retrieved from <https://link.springer.com/article/10.1007%2Fs11159-010-9151-2>

Pappas G., Agha A., Rafique, G., Khan, K. S., Badruddin, S. H., & Peermohamed, H. (2008). Community-based approaches to combating malnutrition and poor education among girls in resource-poor settings: Report of a large-scale intervention in Pakistan. *Rural and Remote Health* 8(3). Retrieved from www.rrh.org.au/journal/article/820

Powell, C. A., Walker, S. P., Chang, S. M., & Grantham-McGregor, S. M. (1998). Nutrition and education: A randomized trial of the effects of breakfast in rural primary school children. *American Journal of Clinical Nutrition*, 68(4), 873–879. doi:10.1093/ajcn/68.4.873

Prifti, Estruch, Daidone, Davids, Van Ufford, Michelo, Handa, Seidenfeld, & Tembo.

Puri, J., Aladysheva, A., Iversen, V., Ghorpade, Y., & Brück, T. (2014). *What methods may be used in impact evaluations of humanitarian assistance?* (3ie Working Paper, Nr. 22). New Delhi, India: International Initiative for Impact Evaluation. Retrieved from http://www.3ieimpact.org/media/filer_public/2014/12/08/wp_22_humanitarian_methods_working_paper-top.pdf

Rosenberg, Morris (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Saavedra, J. E., & Garcia, S. 2012. *Impacts of conditional cash transfers on educational outcomes in developing countries: A meta-analysis*. (RAND Working Paper 921-1). Santa Monica, CA: RAND Corporation. Retrieved from https://www.rand.org/content/dam/rand/pubs/working_papers/2012/RAND_WR921-1.pdf

Saps, M., Velasco-Benitez, C. A., Blom, P. J., Benninga, M. A., & Nichols-Vinueza, D. X. (2018). Prospective study of gastrointestinal symptoms in school children of South America. *Journal of Pediatric Gastroenterology and Nutrition*, 66(3), 391–394. doi:10.1097/mpg.0000000000001720

Simeon, D. T. (1998). School feeding in Jamaica: A review of its evaluation. *American Journal of Clinical Nutrition*, 67(4), 790S–794S. doi:10.1093/ajcn/67.4

Tamiru, D., & Belachew, T. (2017). The association of food insecurity and school absenteeism: Systematic review. *Agriculture & Food Security*, 6(1). doi:10.1186/s40066-016-0083-3

Trinies, V., Chang, H. H., Garn, J. V., & Freeman, M. C. (2016). The impact of a school-based water, sanitation, and hygiene program on absenteeism, diarrhea, and respiratory infection: A matched-control trial in Mali. *American Journal of Tropical Medicine and Hygiene*, 94(6), 1418–1425. doi:10.4269/ajtmh.15-0757

White, H. (2009). Theory-based impact evaluation: principles and practice. *Journal of Development Effectiveness*, 1(3), 271–284. doi: [10.1080/19439340903114628](https://doi.org/10.1080/19439340903114628)

World Health Organization. [cited 2014 5 December]; Available from: http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_R8-en.pdf?ua=1

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. 2010. The Multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52(1). Retrieved from https://www.tandfonline.com/doi/abs/10.1207/s15327752jpa5201_2

Appendices

APPENDIX B

APPENDIX B: TECHNICAL EXPLANATION OF IDENTIFICATION STRATEGY, GEOGRAPHICAL REGRESSION DISCONTINUITY DESIGN

We identify the effect of the NLG/Min Ila cash pilot program using a geographical regression discontinuity design (RDD).²³ RDDs can be used to identify program effects when programs are allocated based on an assignment variable. Well-known RDD examples include allocations of scholarships based on test scores or of health programs based on the age of the beneficiary. The intuition behind the RDD is that those who are just below the threshold to receive a program (e.g., test scores too low to get a scholarship or too young to enter a health program) are very similar in all respects to those who are just above the threshold; therefore, they serve as a valid comparison group. RDDs rely on relatively “mild assumptions” to identify credible program impacts.²⁴

In our setting, distance to the pilot governorate border can be interpreted as the assignment variable. Households and children who live just outside the pilot governorate border are likely to be similar to those who live just inside the pilot border, and thus can potentially serve as a credible comparison group.²⁵

The geographical RDD^{26, 27} is valid when the following assumptions hold:

1. The program allocation is discontinuous at the border.
2. The outcomes, covariates, and unobserved characteristics are continuous and similar in value at the border prior to program implementation.
3. The households and individuals do not adjust their location based on the transfer program.
4. The relationship between the assignment variable and the outcome variables is approximated accurately.

Assumption 1 holds as demonstrated by the program implementation graph. Assumption 2 holds as shown in both the baseline report (when discussing the balance between Treatment and Comparison), and in this report when discussing how balance is maintained after attrition. Assumption 3 holds because comparison households at baseline did not move across the border at follow-up, as demonstrated by the attrition analysis. The regression specification is stated below to address Assumption 4.

23 Gertler, P. J., Martinez, S., Premand, P., Rawlings, L. B., & Vermeersch, C. M. J. (2010). *Impact evaluation in practice: Ancillary material*. Washington, DC: The World Bank.

24 Lee, D., & T. Lemieux. (2010). “Regression discontinuity designs in economics.” *Journal of Economic Literature*, 48(2), 281–355.

25 Importantly, this geographical RDD identifies the effect of the program on those households and children living close to the border (the so-called local treatment effect), which may or may not be identical to the effect of the program on the full sample in the pilot governorate. Because within-governorate differences in the characteristics of Syrian refugees tend to be limited, this issue appears to be of secondary concern.

26 Keele, L., Lorch, S., Passarella, M., Small, D., & Titiunik, R. (2016). An overview of geographically discontinuous treatment assignments with an application to children’s health insurance. *Advances in Econometrics*, 38, 147–194.

27 Galiani, S., McEwan, P. J., & Quistorff, B. (2016). *External and internal validity of a geographic quasi-experiment embedded in cluster-randomized experiment* (No. w22468). Cambridge, MA: National Bureau of Economic Research.

Regression Specification

The following regression specification was used to estimate the intent to treat effect of the program on the outcome variables of interest:

$$y_{ihst} = \beta_0 + \beta_1 D_g + f(\text{distance}_{ihsg0}) + \beta_2' X_{ihsg0} + \delta_1 \cdot (\text{pair}_g) + \varepsilon_{ihsgt} \quad (1)$$

where y_{ihst} is the outcome variable for child i in household h living in the vicinity of school t in governorate g at time t . D_g is an indicator for receiving the transfer, distance_{ihsg0} is the assignment variable measuring distance to the border (negative outside the pilot districts and positive inside), X_{ihsg0} is a vector of baseline covariates that include: child age, child gender, parental education, total income per capita. We cluster errors at the cadaster cluster level to allow for correlation of the error term \sum_{ihsgt} within a cluster, meaning $\text{Cov}(\sum_{ihsgt}, \sum_{jhsjt}) \neq 0$ for i and j in the same cadaster cluster.

The term pair_g deserves additional explanation. The RDD in this context relies on households that are located along one of two borders: Akkar and North Lebanon (north) and Mt. Lebanon and Nabatieh (south). The term pair_g represents a fixed effect to account for differences between households located near the two borders (i.e., pair_g takes the value 1 for the governorates of Akkar and North Lebanon and 0 otherwise). By including a border fixed effect in all estimating equations, we essentially treat the sample as though all households are located near a single border.

We examined the RDD’s sensitivity to functional form by running several different models: linear models, higher order polynomial models, and models with interaction terms. Furthermore, the relationship between distance and outcomes may be different on each side of the border. We, therefore, allowed separate functional forms on each side of the border. Based on visual inspection of standard RDD graphs and the Akaike criterion, we currently prefer to rely on a relatively simple linear functional form, the results of which we present in this report.

We conducted heterogeneity analyses to understand how the transfer affected people in different ways by adding interaction terms to Equation (1). An important dimension of heterogeneity is how the program affected boys versus girls and younger versus older children. However, it is important to be aware that our sample size for heterogeneity analysis is small, so it may be impossible to detect the differential impact. The minimum detectable effect size will increase from 0.254 to 0.401.

APPENDIX C: FULL ATTRITION ANALYSIS

In the main text, we investigated overall attrition by comparing the baseline characteristics of households at endline with the full sample from baseline; and we investigated differential attrition by comparing the baseline characteristics of households and children from pilot governorates that remained in the sample at endline to those of households and children in comparison governorates that remained at endline. In the main text, we only showed the indicators for overall and differential attrition that are statistically significant. In this section, we present the analysis for all of the indicators that we tested. We first present the results for tests for overall attrition followed by differential attrition. We used t-tests with cluster robust standard errors to test for differences in overall attrition. For differential attrition, we used the same RDD model used to assess impact estimates, only here we estimated the effect of attrition on differences in baseline equivalence

between the pilot and comparison households. The tables should be read as follows for overall attrition: the first column presents the observed baseline mean of the original sample, followed by the sample size. The third column presents the baseline mean for the sample that remained at endline, followed by the sample size. The fifth column (titled Diff) is the observed difference in means between the two samples. The sixth column (SE) is the standard error for the mean difference, and the seventh column is the p-value for the test of the statistical difference between the two observed means. The last column, SD, is the standardized difference between the two observed means. The standardized difference tells us the magnitude of the observed difference to examine whether statistically significant differences also represent meaningful differences. That is, the SD will help us determine if the size of the difference is something that we should care about.

Overall Attrition

Table C.1. Overall Attrition at Endline

Variables	Original sample		Remaining sample		Balance test			SD
	Mean	N1	Mean	N2	Diff	SE	p-value	
Household demographic characteristics								
Household Size	6.17	1,456	6.17	1,284	0.00	0.01	0.92	0.00
% Elderly (65+)	0.01	8,967	0.01	7,922	-0.00	0.00	0.80	-0.00
Children (ages 0–14) per household	3.42	1,456	3.42	1,284	0.00	0.01	0.80	0.00
Young children (ages 5–9) per household	1.44	1,456	1.45	1,284	0.02	0.01	0.12	0.02
Older children (ages 10–14) per household	1.13	1,456	1.11	1,284	-0.01	0.01	0.29	-0.01
Time displaced (in years)	4.70	1,454	4.73	1,282	0.02	0.02	0.27	0.00
Distance to border (in kilometers)	14.74	1,456	14.86	1,284	-0.02	0.14	0.90	-0.00
Single parent household	0.08	1,371	0.07	1,213	-0.01	0.00	0.02	-0.03

Variables	Original sample		Remaining sample		Balance test			SD
	Mean	N1	Mean	N2	Diff	SE	p-value	
Child (ages 0–17) with mother deceased	0.01	5,410	0.01	4,789	0.00	0.00	0.87	0.00
Child (ages 0–17) with father deceased	0.03	5,366	0.03	4,748	-0.00	0.00	0.34	-0.01
Housing								
Dwelling: crowded location	0.39	1,456	0.38	1,287	-0.00	0.01	0.89	-0.00
Dwelling: poor conditions	0.11	1,456	0.11	1,287	-0.00	0.00	0.43	-0.01
Dwelling: physical dangers	0.04	1,456	0.04	1,287	-0.00	0.00	0.68	-0.00
Dwelling: dangerous conditions	0.04	1,456	0.04	1,287	-0.00	0.00	0.69	-0.00
Dwelling: urgent repairs	0.09	1,456	0.09	1,287	-0.00	0.00	0.71	-0.00
Legal/electric energy source	0.88	1,452	0.88	1,283	0.00	0.00	0.93	0.00
Number of rooms	2.46	1,456	2.47	1,287	-0.01	0.01	0.48	-0.01
Access to pumped water	0.38	1,456	0.39	1,287	0.01	0.00	0.29	0.01
Rent (USD monthly)	173.43	1,415	174.59	1,250	0.14	1.08	0.90	0.00
Economic Well-being								
Household cash earnings PC USD (past 7 days)	8.96	1,456	9.08	1,284	-0.06	0.11	0.62	-0.00
Household in-kind earnings PC USD (past 7 days)	1.17	1,456	1.08	1,284	-0.11	0.07	0.10	-0.02
Total income USD (past 30 days)	320.49	1,456	326.36	1,284	1.96	2.35	0.41	0.01
Total income PC USD (past 30 days)	53.13	1,456	54.09	1,284	0.33	0.34	0.34	0.01
Total debt PC USD (past 30 days)	25.38	1,456	25.86	1,284	0.12	0.39	0.76	0.00
Total debt USD	236.78	1,456	238.49	1,284	0.68	4.38	0.88	0.00
Total debt PC USD	41.47	1,456	41.89	1,284	0.26	0.79	0.74	0.00
Not enough food	0.43	1,455	0.42	1,286	-0.00	0.01	0.37	-0.01
Skipped meal	0.27	1,455	0.26	1,286	-0.00	0.00	0.66	-0.00
Adult spent day without food	0.07	1,455	0.07	1,286	-0.00	0.00	0.40	-0.01
Children skipped meal	0.08	1,455	0.08	1,286	-0.00	0.00	0.27	-0.01
Any assistance	0.99	1,393	0.99	1,237	0.00	0.00	0.59	0.01

Variables	Original sample		Remaining sample		Balance test			SD
	Mean	N1	Mean	N2	Diff	SE	p-value	
Adults' characteristics (Ages 17+)								
Female	0.51	3,997	0.51	3,532	-0.00	0.00	0.29	-0.00
Age	32.99	3,991	33.06	3,526	0.08	0.06	0.22	0.01
Married	0.69	3,943	0.70	3,487	0.00	0.00	0.50	0.01
Literate	0.84	3,978	0.84	3,512	-0.00	0.00	0.53	-0.00
Attended middle school	0.46	3,373	0.46	2,975	0.00	0.00	0.90	0.00
Male graduated	0.46	1,745	0.46	1,545	0.00	0.00	0.59	0.00
Female graduated	0.46	1,628	0.46	1,430	-0.00	0.01	0.79	-0.00
Employed (last 7 days)	0.25	3,730	0.26	3,300	-0.00	0.00	0.99	-0.00
Hours worked (last 7 days)	31.87	914	32.15	823	0.07	0.25	0.78	0.00
Employed (in Syria)	0.35	3,323	0.35	2,932	-0.00	0.00	0.89	-0.00
Good health	0.71	3,971	0.72	3,507	0.00	0.00	0.24	0.01
Able to walk	0.56	3,971	0.57	3,507	-0.00	0.00	0.84	-0.00
Able to sweep	0.62	3,968	0.61	3,504	-0.00	0.00	0.43	-0.01
Younger children's characteristics (Age 5–9)								
Female	0.49	2,093	0.49	1,871	-0.00	0.00	0.45	-0.01
Age	7.04	2,093	7.03	1,871	-0.01	0.01	0.26	-0.01
Orphaned	0.00	2,093	0.00	1,871	0.00	0.00	0.11	0.00
Attended school 2015–16	0.66	2,029	0.67	1,812	0.00	0.01	0.89	0.00
Out of school due to cost	0.46	684	0.46	605	0.01	0.01	0.38	0.01
Time to school (in minutes)	21.33	1,342	21.61	1,204	0.30	0.19	0.11	0.02
Education expenses	93.26	1,410	94.79	1,267	-0.89	1.02	0.39	-0.01
Child labor	0.00	1,893	0.00	1,697	0.00	0.00	0.09	0.00
Working and out of school	0.01	649	0.00	575	-0.01	0.01	0.34	-0.05
Working and in school	0.01	1,290	0.01	1,164	0.00	0.00	0.15	0.01
Time collecting firewood/water (in minutes)	37.25	2,001	37.42	1,795	0.23	0.70	0.74	0.00
Time providing care (in minutes)	77.66	2,001	77.79	1,795	0.82	1.47	0.58	0.00
Time doing chores (in minutes)	82.26	2,002	82.86	1,796	1.24	1.48	0.40	0.00
Job: carries heavy loads	0.01	508	0.01	448	0.00	0.00	0.58	0.00

Variables	Original sample		Remaining sample		Balance test			SD
	Mean	N1	Mean	N2	Diff	SE	p-value	
Job: works with dangerous tools	0.01	505	0.00	445	-0.00	0.00	0.43	-0.02
Job: exposed to fumes	0.01	507	0.01	447	0.00	0.00	0.18	0.01
Job: exposed to extreme temperature	0.02	505	0.02	445	0.00	0.00	0.12	0.02
Job: exposed to loud noise/vibrations	0.02	509	0.02	449	0.00	0.00	0.16	0.02
Job: exposed to bullying/violence	0.00	509	0.00	450	-0.00	0.00	0.67	-0.00
Owns shoes	0.91	2,035	0.91	1,818	-0.00	0.00	0.49	-0.01
Owns winter clothes	0.80	2,035	0.80	1,818	0.00	0.00	0.44	0.01
Older children's characteristics (Ages 10–14)								
Female	0.46	1,638	0.47	1,434	0.00	0.00	0.76	0.00
Age	11.89	1,638	11.88	1,434	-0.01	0.01	0.31	-0.01
Orphaned	0.01	1,638	0.01	1,434	0.00	0.00	0.73	0.00
Literate	0.78	1,619	0.78	1,417	-0.00	0.01	0.79	-0.00
Attended school 2015–16	0.64	1,584	0.64	1,389	0.00	0.01	0.43	0.01
Out of school due to cost	0.64	578	0.63	499	-0.00	0.01	0.73	-0.01
Time to school (in minutes)	21.00	1,008	21.54	893	0.56	0.21	0.01	0.04
Education expenses	85.64	1,063	87.34	938	-0.50	1.12	0.66	-0.00
Child labor	0.05	1,511	0.05	1,328	-0.00	0.00	0.15	-0.01
Working and out of school	0.09	579	0.10	499	-0.00	0.00	0.72	-0.01
Working and in school	0.04	975	0.04	864	-0.00	0.00	0.16	-0.02
Hours working	25.69	73	26.16	63	0.17	0.96	0.86	0.01
Time collecting firewood/water (in minutes)	42.03	1,601	42.13	1,405	0.41	0.97	0.68	0.00
Time providing care (in minutes)	89.46	1,601	90.33	1,405	1.81	2.04	0.38	0.01
Time doing chores (in minutes)	86.93	1,601	86.09	1,405	-0.01	2.11	0.99	-0.00
Job: carries heavy loads	0.09	465	0.08	403	-0.00	0.01	0.67	-0.01
Job: works with dangerous tools	0.07	466	0.07	404	0.00	0.00	0.94	0.00

Variables	Original sample		Remaining sample		Balance test			SD
	Mean	N1	Mean	N2	Diff	SE	p-value	
Job: exposed to fumes	0.08	463	0.08	401	-0.00	0.00	0.83	-0.00
Job: exposed to extreme temperature	0.10	467	0.10	405	-0.00	0.00	0.65	-0.01
Job: exposed to loud noise/vibrations	0.05	458	0.05	398	-0.00	0.00	0.53	-0.01
Job: exposed to bullying/violence	0.02	466	0.02	404	-0.00	0.00	0.76	-0.01
Owns shoes	0.94	1,607	0.94	1,406	0.00	0.00	0.16	0.02
Owns winter clothes	0.82	1,607	0.83	1,406	0.01	0.00	0.02	0.03

Note: Standard errors are robust to heteroscedasticity and clustered at the cadaster cluster level. Sample is restricted to households that remain in the sample. "PC" stands for per capita.

Differential Attrition

Table C.2. Differential Attrition

Variables	Comparison		Pilot		Balance test			SD
	Mean	N1	Mean	N2	Diff	SE	p-value	
Household demographic characteristics								
Household Size	6.06	580	6.26	704	0.05	0.21	0.79	0.03
% Elderly (65+)	0.01	3,522	0.01	4,400	0.00	0.00	0.21	0.05
Children (age 0–14) per household	3.37	580	3.46	704	0.17	0.16	0.29	0.11
Young children (age 5–9) per household	1.46	580	1.45	704	0.05	0.10	0.60	0.06
Older children (age 10–14) per household	1.04	580	1.17	704	0.12	0.13	0.38	0.12
Time displaced (in years)	4.74	578	4.71	704	0.45	0.56	0.42	0.09
Distance to border (in kilometers)	19.27	580	11.22	704	6.52	3.88	0.10	0.56
Single parent Household	0.08	555	0.07	658	0.01	0.03	0.84	0.02
Child (ages 0–17) with mother deceased	0.01	2,146	0.01	2,643	-0.01	0.01	0.28	-0.09
Child (ages 0–17) with father deceased	0.02	2,118	0.04	2,630	0.01	0.01	0.55	0.05
Housing								
Dwelling: crowded location	0.46	582	0.31	705	-0.10	0.08	0.20	-0.22
Dwelling: poor conditions	0.11	582	0.10	705	-0.08	0.07	0.27	-0.25
Dwelling: physical dangers	0.04	582	0.04	705	-0.04	0.03	0.24	-0.19
Dwelling: dangerous conditions	0.03	582	0.05	705	0.03	0.02	0.17	0.17
Dwelling: urgent repairs	0.05	582	0.11	705	0.02	0.04	0.64	0.06
Legal/electric energy source	0.83	580	0.93	703	0.04	0.06	0.50	0.13
Number of rooms	2.47	582	2.47	705	-0.15	0.19	0.41	-0.14
Access to pumped water	0.41	582	0.38	705	-0.05	0.08	0.52	-0.10
Rent (USD monthly)	181.79	550	168.92	700	-49.13	16.17	0.00	-0.49
Economic Well-being								

Variables	Comparison		Pilot		Balance test			SD
	Mean	N1	Mean	N2	Diff	SE	p-value	
Household cash earnings PC USD (past 7 days)	10.11	580	8.23	704	-4.06	1.83	0.03	-0.29
Household in-kind earnings PC USD (past 7 days)	0.53	580	1.54	704	0.51	0.46	0.27	0.12
Total income USD (past 30 days)	344.90	580	311.09	704	-35.53	37.89	0.35	-0.13
Total income PC USD (past 30 days)	57.20	580	51.53	704	-6.46	5.75	0.26	-0.14
Total debt PC USD (past 30 days)	23.93	580	27.45	704	0.86	4.91	0.86	0.02
Total debt USD	176.86	580	289.27	704	104.31	48.94	0.04	0.27
Total debt PC USD	31.88	580	50.13	704	20.24	9.94	0.05	0.29
Not enough food	0.31	581	0.51	705	0.11	0.07	0.13	0.22
Skipped meal	0.11	581	0.39	705	0.18	0.06	0.00	0.42
Adult spent day without food	0.03	581	0.10	705	0.01	0.03	0.81	0.03
Children skipped meal	0.02	581	0.13	705	0.01	0.03	0.84	0.02
Any assistance	0.98	579	1.00	658	0.00	0.02	0.84	0.03
Adults' characteristics (Ages 17+)								
Female	0.51	3,327	0.51	4,202	-0.00	0.02	0.80	-0.01
Age	32.86	3,327	33.15	4,190	0.69	0.53	0.20	0.06
Married	0.70	3,299	0.69	4,131	0.02	0.03	0.44	0.05
Literate	0.85	3,324	0.83	4,166	-0.09	0.04	0.02	-0.26
Attended middle school	0.46	2,858	0.46	3,490	-0.07	0.05	0.19	-0.14
Employed (last 7 days)	0.25	3,325	0.25	3,705	-0.05	0.05	0.27	-0.12
Hours working (last 7 days)	35.59	818	28.82	919	-5.47	3.02	0.07	-0.30
Employed (in Syria)	0.34	2,759	0.36	3,496	-0.03	0.04	0.40	-0.06
Good health	0.82	3,316	0.63	4,162	-0.09	0.06	0.12	-0.19
Able to walk	0.63	3,316	0.51	4,162	-0.06	0.07	0.37	-0.13
Able to sweep	0.64	3,316	0.60	4,156	0.01	0.06	0.92	0.01
Younger children's characteristics (Age 5–9)								
Female	0.50	849	0.48	1,022	0.02	0.04	0.62	0.04

Variables	Comparison		Pilot		Balance test			SD
	Mean	N1	Mean	N2	Diff	SE	p-value	
Age	7.00	849	7.06	1,022	0.03	0.09	0.76	0.02
Orphaned	0.00	849	0.00	1,022	-0.00	0.00	0.34	-0.08
Attended school 2015–6	0.66	823	0.67	989	0.01	0.06	0.93	0.01
Out of school due to cost	0.51	282	0.42	323	-0.06	0.10	0.57	-0.11
Time to school (in minutes)	20.64	539	22.40	665	2.36	1.96	0.23	0.14
Education expenses	98.39	567	91.87	700	-23.94	17.96	0.19	-0.16
Child labor	0.00	829	0.00	868	0.00	0.00	0.45	0.05
Working and out of school	0.00	298	0.00	277	-0.00	0.00	0.36	-0.07
Working and in school	0.00	551	0.01	613	0.03	0.02	0.21	0.19
Time collecting firewood/water (in minutes)	35.50	829	39.07	966	19.12	13.17	0.15	0.23
Time providing care (in minutes)	116.40	829	44.65	966	-54.31	27.54	0.05	-0.23
Time doing chores (in minutes)	132.11	829	40.63	967	-73.91	30.63	0.02	-0.29
Job: carries heavy loads	0.00	219	0.01	229	0.02	0.02	0.35	0.18
Job: works with dangerous tools	0.00	218	0.00	227	0.02	0.01	0.14	0.30
Job: exposed to fumes	0.01	219	0.00	228	0.01	0.03	0.81	0.07
Job: exposed to extreme temperature	0.03	216	0.01	229	-0.06	0.05	0.18	-0.45
Job: exposed to loud noise/vibrations	0.03	219	0.00	230	-0.09	0.05	0.07	-0.68
Job: exposed to bullying/violence	0.00	220	0.01	230	-0.01	0.01	0.64	-0.08
Owns shoes	0.90	822	0.92	996	0.10	0.05	0.05	0.35
Owns winter clothes	0.80	822	0.80	996	0.12	0.06	0.06	0.29
Older children's characteristics (Ages 10–14)								
Female	0.48	608	0.46	826	-0.03	0.05	0.49	-0.06
Age	11.96	608	11.83	826	-0.14	0.10	0.16	-0.10
Orphaned	0.01	608	0.00	826	-0.01	0.01	0.29	-0.12
Literate	0.77	606	0.78	811	-0.11	0.06	0.08	-0.27
Attended school 2015–16	0.60	591	0.67	798	0.10	0.08	0.20	0.20

Variables	Comparison		Pilot		Balance test			SD
	Mean	N1	Mean	N2	Diff	SE	p-value	
Out of school due to cost	0.63	235	0.63	264	0.07	0.14	0.63	0.14
Time to school (in minutes)	21.12	357	21.83	536	1.15	2.55	0.65	0.08
Education expenses	88.94	374	86.27	564	-37.15	23.24	0.11	-0.27
Child labor	0.05	605	0.05	723	-0.03	0.02	0.11	-0.15
Working and out of school	0.08	249	0.12	250	-0.03	0.04	0.49	-0.10
Working and in school	0.04	371	0.04	493	-0.01	0.03	0.72	-0.04
Hours working	33.48	29	19.92	34	-4.56	9.10	0.62	-0.24
Time collecting firewood/water (in minutes)	39.54	605	44.08	800	14.11	12.94	0.28	0.17
Time providing care (in minutes)	126.11	605	63.27	800	-25.45	27.70	0.36	-0.11
Time doing chores (in minutes)	134.51	605	49.47	800	-52.25	29.82	0.08	-0.21
Job: carries heavy loads	0.10	196	0.07	207	-0.01	0.05	0.88	-0.03
Job: works with dangerous tools	0.10	194	0.05	210	0.06	0.06	0.28	0.24
Job: exposed to fumes	0.09	195	0.07	206	0.07	0.06	0.25	0.27
Job: exposed to extreme temperature	0.12	195	0.09	210	-0.04	0.04	0.40	-0.12
Job: exposed to loud noise/vibrations	0.06	191	0.03	207	-0.02	0.06	0.71	-0.11
Job: exposed to bullying/violence	0.02	195	0.02	209	-0.04	0.03	0.17	-0.28
Owns shoes	0.93	594	0.94	812	0.12	0.09	0.17	0.50
Owns winter clothes	0.82	594	0.83	812	0.14	0.09	0.12	0.38

Note: Standard errors are robust to heteroscedasticity and clustered at the cadaster cluster level. "PC" stands for per capita.

APPENDIX D: DIFFERENTIAL IMPACTS BETWEEN GIRLS AND BOYS

This appendix contains tables that test for differential program impacts between boys and girls for all of the outcomes analyzed in this study. One objective of the study and research question is to determine if the program generates different effects for beneficiary girls as compared with beneficiary boys. We ran a statistical test to determine if the estimated impact for girls is different than the estimated impact for boys. We present the results from all of the statistical tests in the same order that they are presented in the main text of the report, and divided by age. Each table presents the observed difference in the impact estimates between girls and boys (column 1), the mean value for girls in NLG/Min Ila areas at endline (column 2), and the sample size for each test (column 3).

There are no differential impacts between girls and boys for indicators where we find impacts overall. Thus, there are no differential impacts of the program by gender. We find five statistically significant differences in impacts between girls and boys after testing 64 indicators, but these five are not for indicators where we find an overall impact. We do not believe that these five differences are meaningful because there is no consistency as to which gender benefits more (sometimes girls benefit more, sometimes boys benefit more). Moreover, there is no common trend as to where we see the differential impacts between boys and girls. They are spread across domains and ages, making it seem more likely that we observed them by chance.

Table D.1. ITT Differential Gender Test for Health Outcomes (Ages 5–9)

Children's Health Outcomes	Difference in impact (1)	Girls' mean value at endline (2)	N (3)
Child in good health	-0.06	0.84	1,160
Able to walk 5 kilometers	-0.01	0.72	1,160
Able to sweep floor	-0.01	0.77	1,160
Spending on healthcare (past 30 days, USD) ⁰	-2.14	8.12	754

Note. The Difference in impact column provides the differential impact for girls.

Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

⁰ Spending on healthcare restricted to those who had out-of-pocket expenses.

All results come from household survey.

Table D.2. ITT Differential Gender Test for Health Outcomes (Ages 10–14)

Children's Health Outcomes	Difference in impact (1)	Girls' mean value at endline (2)	N (3)
Child in good health	-0.04	0.87	1,083
Able to walk 5 kilometers	-0.09*	0.75	1,083
Able to sweep floor	-0.04	0.83	1,083
Spending on healthcare (past 30 days, USD) ⁰	-3.62	6.44	733

Note: The Difference in impact column provides the differential impact for girls.

Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

⁰ Spending on healthcare restricted to those who had out-of-pocket expenses.

All results come from household survey.

Table D.3. ITT Differential Gender Test for Food Consumption Outcomes (Ages 10–14)

Children's Food Consumption Outcomes	Difference in impact (1)	Girls' mean value at endline (2)	N (3)
Skipped a meal (yesterday)	-0.05	0.12	743
Ate breakfast (yesterday)	0.05	0.73	743
Went to bed hungry (yesterday)	-0.04	0.08	744

Note: The Difference in impact column provides the differential impact for girls.

Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All households come from child survey.

Time Use

Table D.4. ITT Differential Gender Test for Time Use Outcomes (Ages 5–9)

Children's Time Use	Difference in impact (1)	Girls' mean value at endline (2)	N (3)
Performed any chore	0.05	0.51	1,358
Fetches firewood/water (yesterday)	-0.01	0.24	1,357
Time collecting firewood/water (in hours) (ages 5–14)	0.01	0.21	1,357
Cared for family member (yesterday)	0.05	0.38	1,357
Time caring for family (hours) (ages 5–14)	0.06	0.74	1,357
Performed cleaning, cooking, washing, shopping task (yesterday)	0.03	0.39	1,358
Time performing cleaning, cooking, washing, shopping (hour) (ages 5–14)	-0.03	0.77	1,358

Note: The Difference in impact column provides the differential impact for girls.

Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All results come from household survey.

Table D.5. ITT Differential Gender Test for Time Use Outcomes (Ages 10–14)

Children's Time Use	Difference in impact (1)	Girls' mean value at endline (2)	N (3)
Performed any chore	0.03	0.47	748
Fetches firewood/water (yesterday)	-0.07	0.16	738
Time collecting firewood/water (in hours) [‡]	-0.07	0.14	1,067
Cared for family member (yesterday)	0.00	0.27	745
Time caring for family (in hours) [‡]	-0.04	0.52	1,067
Performed cleaning, cooking, washing, shopping task (yesterday)	0.04	0.36	744
Time performing cleaning, cooking, washing, shopping (in hours) [‡]	0.36*	1.04	1,067
Played with other children (yesterday)	0.02	0.17	706

Note: The Difference in impact column provides the differential impact for girls.

Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include sex, age, and mother's education.

[‡] Results derived from household survey; others from child survey.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

Psychosocial Well-Being

Table D.6. ITT Differential Gender Test for Child Psychosocial Well-being Outcomes (Ages 10–14)

Children's Psychosocial Well-being	Difference in impact (1)	Girls' mean value at endline (2)	N (3)
Depression for Children scale (out of 60)	-0.82	20.58	724
Child reporting depression (score >15)	-0.05	0.60	724
Rosenberg Self-Esteem scale (out of 30)	-0.38	18.55	739
Child reporting low self-esteem (score <15)	0.09*	0.13	739
Multidimensional Scale of Perceived Social Support (out of 4)	-0.06	3.07	721
Holistic Student Assessment score (out of 44)	0.56	30.86	722
Holistic Student Assessment: trust score (out of 12)	0.16	7.34	744
Holistic Student Assessment: optimism score (out of 16)	0.24	11.55	737
Holistic Student Assessment: assertiveness score (out of 16)	0.20	12.07	734

Note. The Difference in impact column provides the differential impact for girls. Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%. Covariates include sex, age, and mother's education. Impact estimates are percentage point estimates unless otherwise noted in outcome definition. All results come from child survey.

Education

Table D.7. ITT Differential Gender Test for Education Outcomes (Ages 5–9)

Children's Education	Difference in impact (1)	Girls' mean value at endline (2)	N (3)
Enrolled children in second shift	-0.10**	0.64	1372
Attending any public school	0.03	0.95	859
Out of school due to cost	0.00	0.10	81
No. of days of school attended (last week)	-0.18	4.31	1427
No. of days of first shift attended (last week)	-0.05	4.91	302
No. of days of second shift attended (last week)	-0.07	4.81	904
Total expenditures on education (2017–18, USD)	-21.83	97.18	903
Enrolled children using bus transport	0.00	0.52	1372
No. of hours studying outside school (last week)	-0.22	8.77	1427

Note. The Difference in impact column provides the differential impact for girls. Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%

Covariates include baseline outcome, sex, age, and mother's education.

Outcome is cross sectional and not longitudinal.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All results come from household survey.

Table D.8. ITT Differential Gender Test for Education Outcomes (Ages 10–14)

Children's Education	Difference in impact (1)	Girls' mean value at endline (2)	N (3)
Plan to complete primary school †	0.00	0.87	740
Plan to complete secondary school †	0.00	0.87	731
Plan to complete university †	0.01	0.86	720
Enrolled children in second shift ‡	-0.03	0.55	1060
Out of school who say they plan to enroll †	-0.05	0.17	187
Out of school due to cost ‡	0.01	0.02	159
No. of days of second shift attended (last week) ‡	-0.43**	4.80	522
Total expenditures on education (2017–18, USD) ‡	6.69	112.15	548
Enrolled children using bus transport ‡	0.03	0.42	1060
No. of hours studying outside school (last week) ‡	0.13	8.17	909
School environment scale (out of 16) †	-0.26	13.84	562

Note: The Impact column provides the differential impact for girls.

Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

† Respondents include all children participating in adolescent survey.

‡ Respondents include all children covered by household survey.

Appendices

APPENDIX E

APPENDIX E: TREATMENT ON THE TREATED REGRESSION RESULTS

The main text of the report focused on the intent to treat (ITT) effect of the program. From a policy perspective, the ITT analysis is most useful because it shows the impact of the program as it actually occurs in the world. In other words, it shows the impact of the program given the conditions of the world that occur at the time of the study; thus, the ITT analysis includes children that chose to enroll in first shift school or wanted to enroll in second-shift school but could not. These are the results presented in the main body of this report. However, here we present the treatment on the treated (TOT) analysis as a triangulation and robustness check on our findings. Treatment on the treated analysis estimates the impact of the program only for children who attend second-shift school or would have attended second-shift school if they could. The problem with this analysis is that there is a bit of statistical estimation to determine who these children are likely to be since, in the real world, not all of them enrolled in second-shift school. In other words, TOT analysis is a way to estimate the effects of the program in an ideal situation in which all eligible children actually enroll in the second shift and receive the program.

This appendix presents the effect of TOT—the effect of actually receiving the NLG/Min Ila cash transfer. The approach is a fuzzy RDD using the

indicator for living in a pilot governorate as an instrument for take-up of the NLG/Min Ila program. The TOT estimates are likely to provide larger estimates of transfer impacts because the effects of the transfer are likely concentrated among enrolled children rather than eligible but unenrolled children. We again present results for the TOT analysis in the same order that they are found in the main body of the report for ITT analysis.

Overall, we found the program impacts the same indicators between the ITT analysis and the TOT analysis and the impacts are in the same direction. However, as expected, the magnitude of the impacts is bigger for the TOT analysis because it attempts to recreate an ideal scenario in which all children who should receive the program actually do. The problem with the estimates below is that they introduce some possible selection bias because they focus on children enrolled in second-shift schools, but we know that there are eligible children who did not enroll in second-shift schools. There might be something different about the children who are eligible but do not enroll in the second shift schools from children who receive the program, causing the program to have a different effect on the unenrolled children (if they were to receive the program).

Health/Food Consumption

Table E.1. TOT Results for Health Outcomes (Ages 5–9)

Children's Health Outcomes	Impact (1)	Mean value at baseline (2)	N (3)
Child in good health	0.15**	0.86	1,160
Able to walk 5 kilometers	0.18*	0.75	1,160
Able to sweep floor	0.18**	0.77	1,160
Spending on healthcare (past 30 days, USD) ⁰	18.06***	6.57	754

Note. Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

Spending on healthcare restricted to those who had out-of-pocket expenses,

All results come from household survey.

Mean values refer to all children in NLG/Min Ila registered households.

Table E.2. TOT Results for Health Outcomes (Ages 10–14)

Children's Health Outcomes	Impact (1)	Mean value at baseline (2)	N (3)
Child in good health	0.09	0.89	1,083
Able to walk 5 kilometers	0.01	0.82	1,083
Able to sweep floor	0.10	0.85	1,083
Spending on healthcare (past 30 days, USD) ⁰	11.00	7.20	733

Note. Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

Spending on healthcare restricted to those who had out-of-pocket expenses.

All results come from household survey.

Mean values refer to all children in NLG/Min Ila registered households.

Table E.3. TOT Results for Food Consumption Outcomes (Ages 10–14)

Children's Food Consumption Outcomes	Impact (1)	Mean value at baseline (2)	N (3)
Skipped a meal (yesterday)	-0.19*	0.14	743
Ate breakfast (yesterday)	0.28**	0.67	743
Went to bed hungry (yesterday)	-0.20*	0.11	744

Note. Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All households come from child survey.

Mean values refer to all children in NLG/Min Ila registered households.

Time Use

Table E.4. TOT Results for Time Use Outcomes (Ages 5–9)

Children's Time Use	Impact (1)	Mean value at baseline (2)	N (3)
Performed any chore	-0.08	0.45	1,358
Fetches firewood/water (yesterday)	-0.08	0.21	1,357
Time collecting firewood/water (in hours) (ages 5–14)	-0.25	0.17	1,357
Cared for family member (yesterday)	-0.18*	0.33	1,357
Time caring for family (in hours) (ages 5–14)	-0.87***	0.68	1,357
Performed cleaning, cooking, washing, shopping task (yesterday)	-0.08	0.35	1,358
Time performing cleaning, cooking, washing, shopping (hour) (ages 5–14)	-0.44	0.75	1,358

Note. Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All results come from household survey.

Mean values refer to all children in NLG/Min Ila registered households.

Table E.5. TOT Results for Time Use Outcomes (Ages 10–14)

Children's Time Use	Impact (1)	Mean value at baseline (2)	N (3)
Performed any chore	-0.14	0.44	748
Fetches firewood/water (yesterday)	-0.16	0.12	738
Time collecting firewood/water (in hours) †	-0.36**	0.14	1,067
Cared for family member (yesterday)	-0.27**	0.25	745
Time caring for family (in hours) †	-0.81***	0.42	1,067
Performed cleaning, cooking, washing, shopping task (yesterday)	-0.17	0.32	744
Time performing cleaning, cooking, washing, shopping (hour) †	0.03	0.74	1,067
Played with other children (yesterday)	0.04	0.18	706

Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include sex, age, and mother's education.

† Results derived from household survey; others from child survey.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

Mean values refer to all children in NLG/Min Ila registered households.

Psychosocial Well-being

Table E.6. TOT Results for Child Psychosocial Well-being Outcomes (Ages 10–14)

Children's Psychosocial Well-being	Impact (1)	Mean value at baseline (2)	N (3)
Depression for Children scale (out of 60)	-3.48	21.53	724
Child reporting depression (score >15)	-0.15	0.65	724
Rosenberg Self-Esteem scale (out of 30)	0.76	18.37	739
Child reporting low self-esteem (score <15)	-0.03	0.13	739
Multidimensional Scale of Perceived Social Support (out of 4)	0.09	3.10	721
Holistic Student Assessment score (out of 44)	3.19**	30.87	722
Holistic Student Assessment: trust score (out of 12)	0.55	7.34	744
Holistic Student Assessment: optimism score (out of 16)	1.42**	11.55	737
Holistic Student Assessment: assertiveness score (out of 16)	1.29**	12.11	734

Note. Regressions clustered at the cadaster cluster; * 10%, ** 5%,.

Covariates include sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All results come from child survey.

Mean values refer to all children in NLG/Min Ila registered households.

Education

Table E.7. TOT Results for Education Outcomes (Ages 5–9)

Children's Education	Impact (1)	Mean value at baseline (2)	N (3)
Enrolled in school	0.08	0.91	1,372
Out of school due to cost	-0.26	0.09	81
No. of days of school attended (last week)	0.52	4.69	1,427
Total expenditures on education (2017–18, USD)	87.15**	100.43	903
Enrolled children using bus transport	0.41***	0.53	1,372
No. of hours studying outside school (last week)	-0.24	9.33	1,427

Note. Regressions clustered at the cadaster cluster; ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

All results come from household survey.

Mean values refer to all children in NLG/Min Ila registered households.

Table E.8. TOT Results for Education Outcomes (Ages 10–14)

Children's Education	Impact (1)	Mean value at baseline (2)	N (3)
Plan to complete primary school †	0.15*	0.87	740
Plan to complete secondary school †	0.15*	0.84	731
Plan to complete university †	0.16	0.82	720
Enrolled in school †	0.05	0.83	748
Out of school who say they plan to enroll †	0.20**	0.15	187
Out of school due to cost †	0.07**	0.03	159
# days of school attended (last week) †	0.19	4.10	748
Total expenditures on education (2017–18, USD) †	101.85**	83.59	548
Enrolled children using bus transport †	0.25**	0.52	1,060
# hours studying outside school (last week) †	-0.73	8.09	909
School environment scale (out of 16) †	1.22*	13.49	562

Note. Regressions clustered at the cadaster cluster; * 10%, ** 5%.

Covariates include baseline outcome, sex, age, and mother's education.

Impact estimates are percentage point estimates unless otherwise noted in outcome definition.

† Respondents include all children participating in adolescent survey.

‡ Respondents include all children covered by household survey.

Mean values refer to all children in NLG/Min Ila registered households.

Household-Level Impacts

Household Economic Well-being

Table E.9. TOT Results for Economic Well-being Outcomes

Economic Well-being Outcomes	Impact (1)	Mean value at endline (2)	N (3)
Income per capita (past 30 days, USD)	-20.58	59.17	972
Total debt per capita (past 30 days, USD)	3.50	5.69	972
Total earnings per capita (past 7 days, USD)	-5.40*	7.72	972

Note. Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

All results come from household survey.

Mean values refer to all households in NLG/Min Ila registered households.

Household Food Consumption

Table E.10. TOT Results for Household Food Consumption Outcomes

Household Food Consumption Outcomes	Impact (1)	Mean value at endline (2)	N (3)
Worried if food was enough (past week)	0.02	0.53	1,007
Skipped a meal (past week)	-0.10	0.25	1,007
Did not eat for whole day (past week)	-0.03	0.14	1,007
No. of days household ate grains (last week)	0.02	4.05	1,008
No. of days household ate beans (last week)	-0.01	3.25	1,008
No. of days household ate vegetables (last week)	-0.54	2.34	1,008
No. of days household ate fruits (last week)	0.01	1.09	1,008
No. of days household ate meat (last week)	-0.14	0.77	1,008
No. of days household ate eggs (last week)	0.15	2.51	1,008
No. of days household ate dairy (last week)	-0.44	2.01	1,008
No. of days household ate fats (last week)	1.32*	2.97	1,008
No. of days household ate sweets (last week)	0.46	1.64	1,008
No. of days household ate condiments (last week)	1.31	3.24	1,008
Food Consumption Score®	-1.93	34.69	1,008

Note. Regressions clustered at the cadaster cluster; * 10%, ** 5%, *** 1%.

Covariates include baseline outcome, sex, age, and mother's education.

All results come from household survey.

®The Food Consumption Score is modeled after the World Food Programme's Food Consumption Score (Berardo 2008), but excludes consumption of eggs from the meats category.

Mean values refer to all households in NLG/Min Ila registered households.

Appendices

APPENDIX F

APPENDIX F: RDD GRAPHS

This section contains regression discontinuity design (RDD) graphs for the outcomes investigated in this report. RDD graphs are a way to visualize the data given the study design. Recall that the geographic RDD of this study compared households on one side of a border with households of similar distance to the other side of the same border. Only households on one side of the border are eligible to receive the Min Ila program, thus the treatment and comparison groups are separated by the border. The graphs in this section can be viewed partially as a map. Dots represent clusters of households, with larger dots representing more households. The red line represents the geographic border, so the further a dot is from the red line, the further it is from the border, regardless of the vertical distance between the dot and the X axis (bottom of the graph). The vertical distance between the dot and the bottom of the graph represents the score for that household for the variable presented in the graph, as measured by the Y axis (vertical line).

Without the program, the dots on the left and right side of the border (red line) would be aligned in a mirror image of themselves with the left side looking exactly like the right side, but flipped at the red line. This configuration means that there is no difference between treatment and comparison households. If the program has an impact, then at endline we will see a shift between the treatment and comparison groups at the border and the two lines might also have different slopes. The distance between the two lines (the shift) represents the impact of the program.

For example, Figure F.1 depicts program enrollment. The vertical line represents the proportion of households in a cluster that enrolled in the program. The red line in the middle of the graph represents the border. The dots to the left of the graph represent households in comparison governorates. Notice how all of the dots are at the 0 line for proportion of households that received the program. This means that households in comparison governorates did not enroll in the program, which makes sense because the program was not offered where they live. The right side of the red line shows most of the dots are slightly more than half way up the chart and sitting around 60%. This means just over half of the households enrolled in the program. All of the households on the right side of the red line had the potential to enroll, but as discussed in the report, there are several reasons why a household that lived in a treatment area might not enroll in the program. The biggest take away from this graph, though, is that the RDD assumption that there is a discontinuous program implementation at the border holds because only households to the right of the border received the program.

The graphs in this section are organized by the domain of the outcome. In order, the graphs cover child health and nutrition, children's time use, adolescent mental wellbeing, children's education, household-level measures of economic wellbeing, household-level measures of food consumption.

Figure F.1. RDD Graph—Min Ila Registration

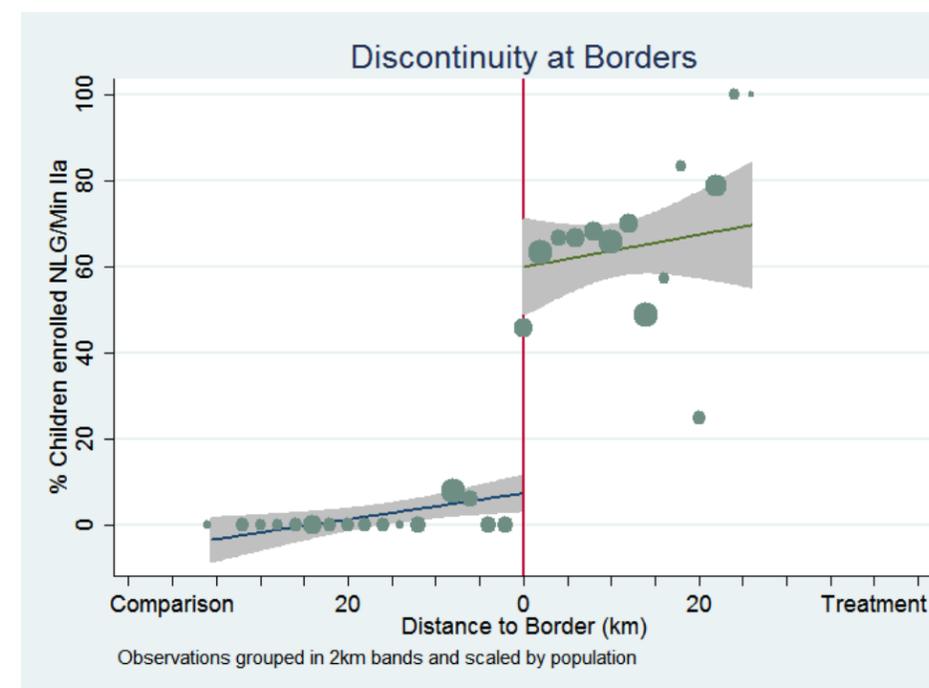


Figure F.2: Regression Discontinuity Graph – Endline Overall Health (Age 5-9)

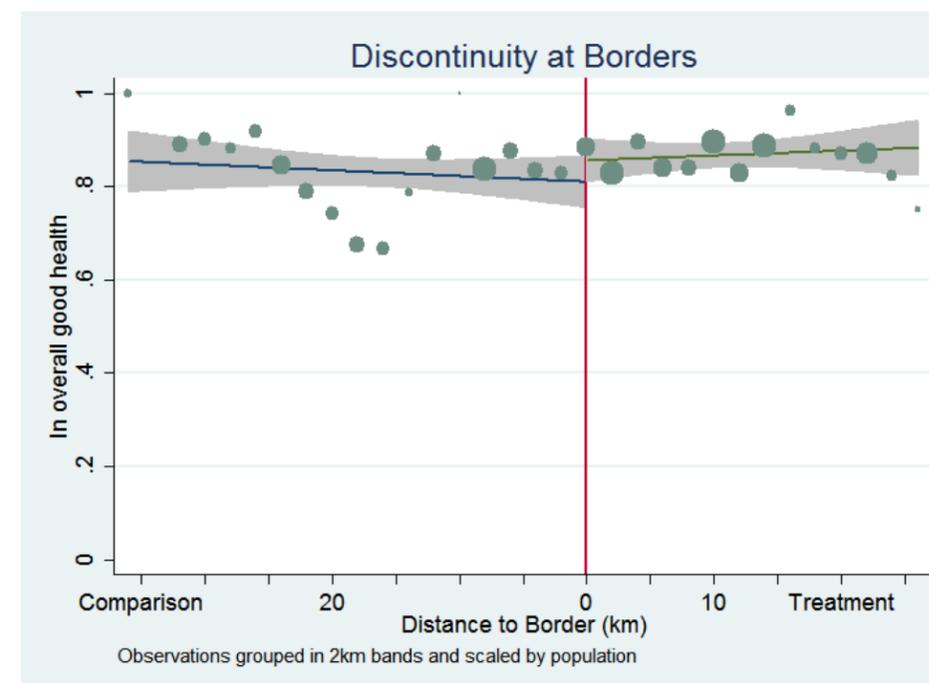


Figure F3: Regression Discontinuity Graph – Endline Ability to Walk (Age 5-9)

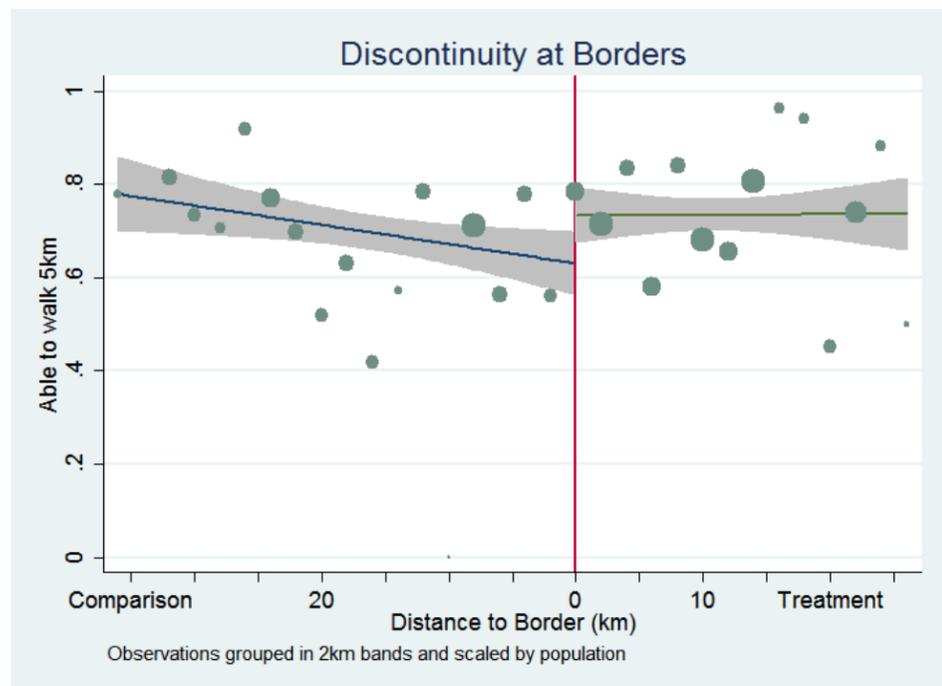


Figure F5: Regression Discontinuity Graph – Endline Healthcare Spending (Age 5-9)

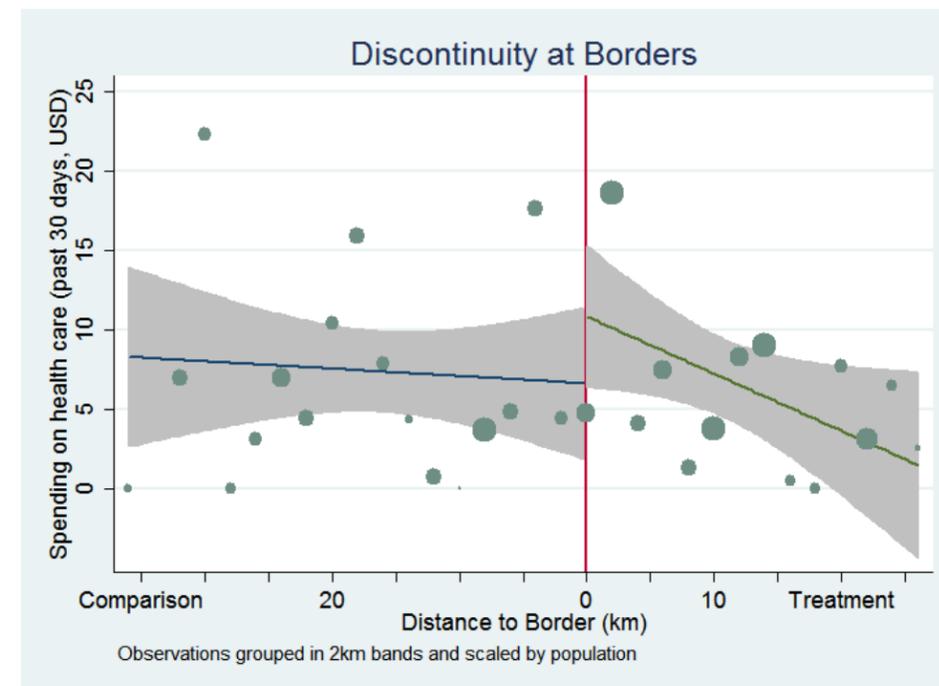


Figure F4: Regression Discontinuity Graph – Endline Ability to Sweep (Age 5-9)

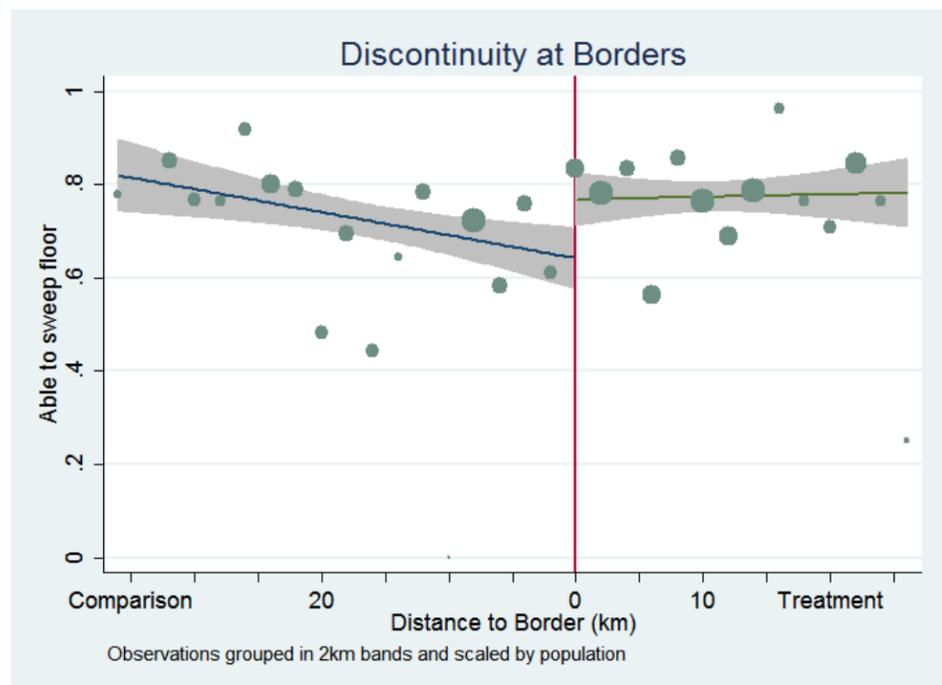


Figure F6: Regression Discontinuity Graph – Endline Overall Health (Age 10-14)

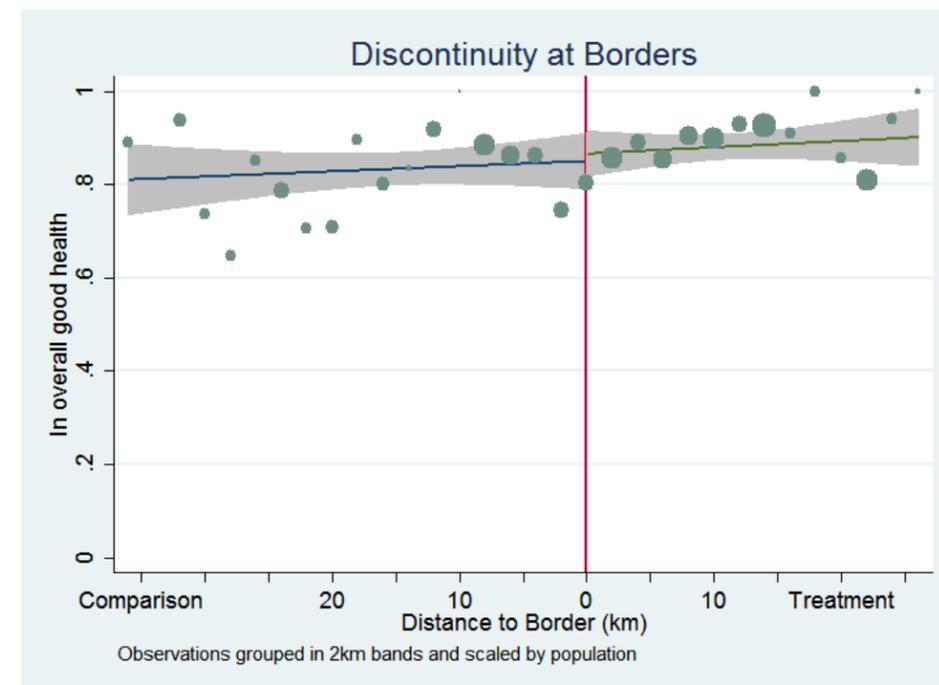


Figure F.7: Regression Discontinuity Graph – Endline Ability to Walk (Age 10-14)

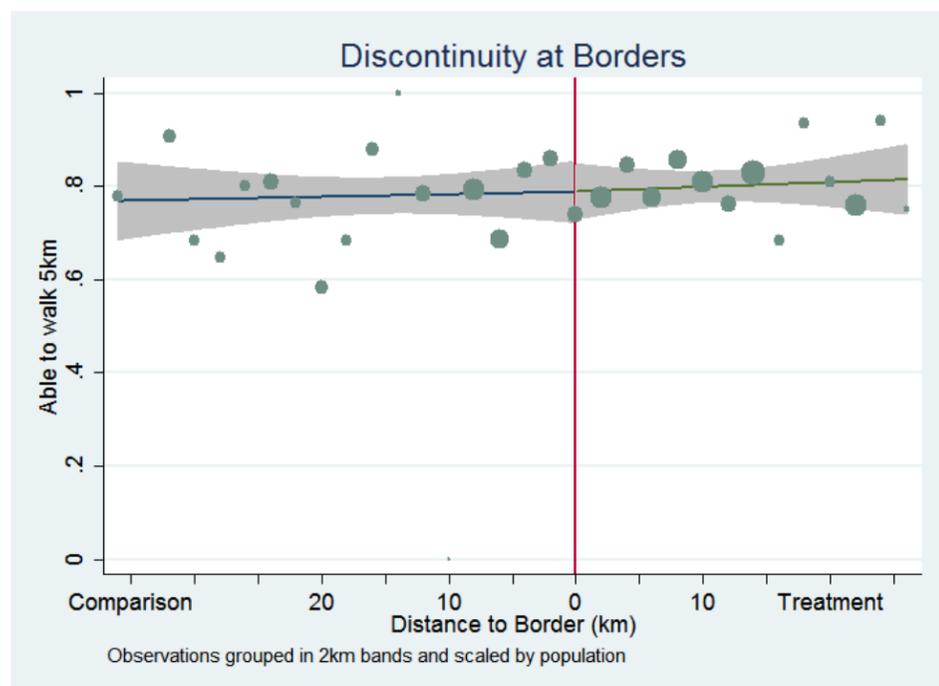


Figure F.9: Regression Discontinuity Graph – Endline Healthcare Spending (Age 10-14)

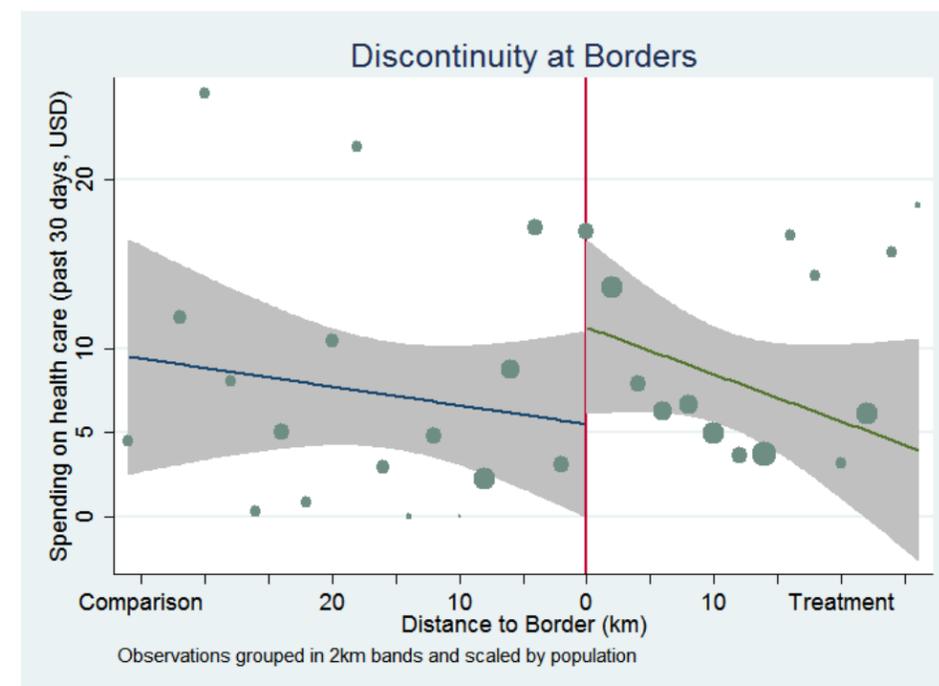


Figure F.8: Regression Discontinuity Graph – Endline Ability to Sweep (Age 10-14)

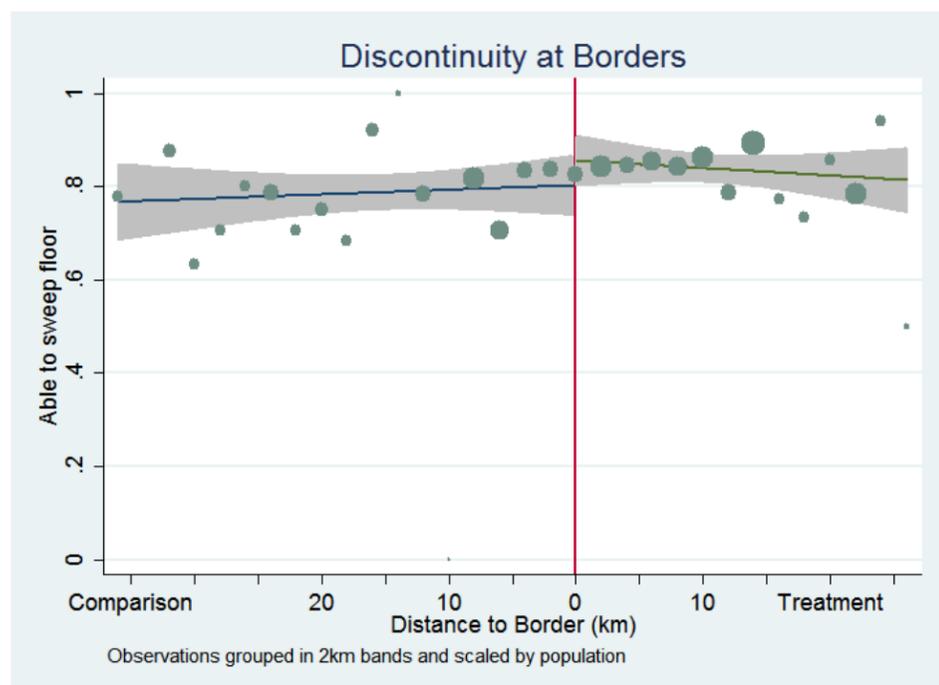


Figure F.10: RD Graph – Endline Skipped a Meal (Age 10-14)

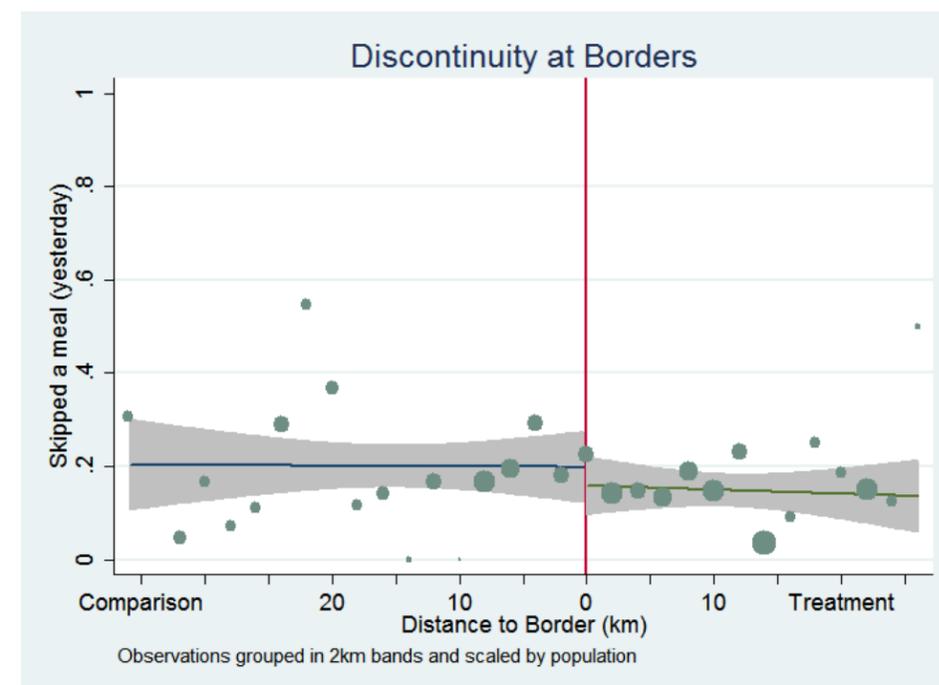


Figure F.11: Regression Discontinuity Graph – Endline Ate Breakfast (Age 10-14)

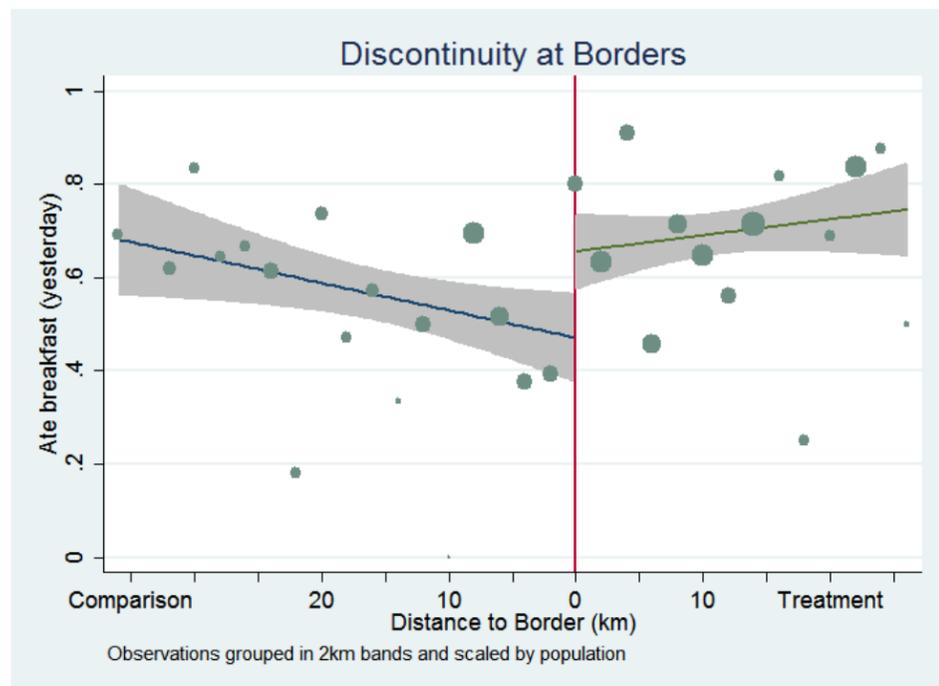


Figure F.13: Regression Discontinuity Graph – Endline Did Any Chore (Age 5-9)

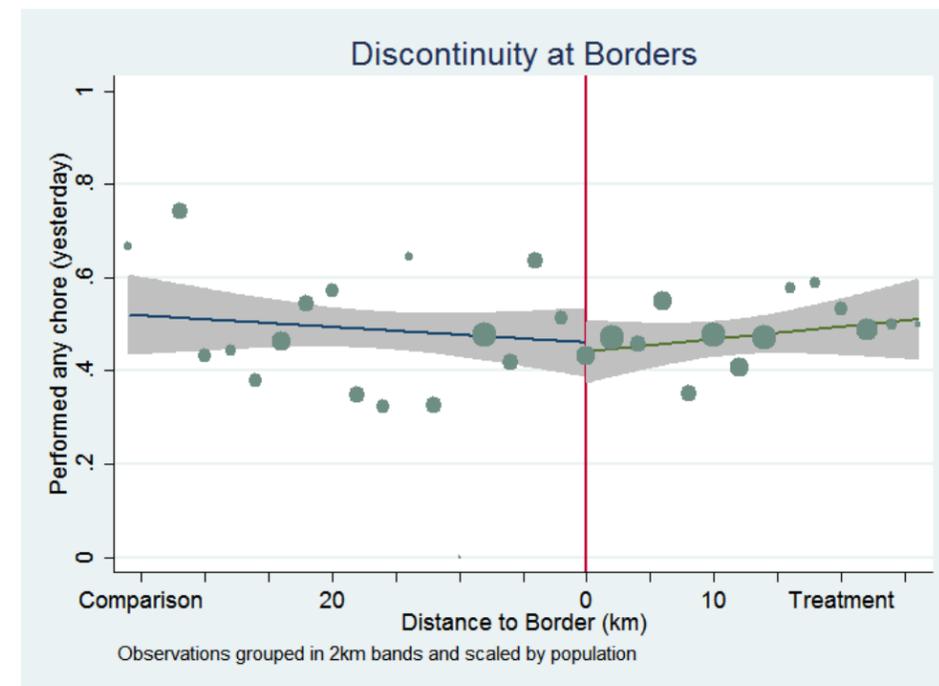


Figure F.12: RD Graph – Endline Went to Bed Hungry (Age 10-14)

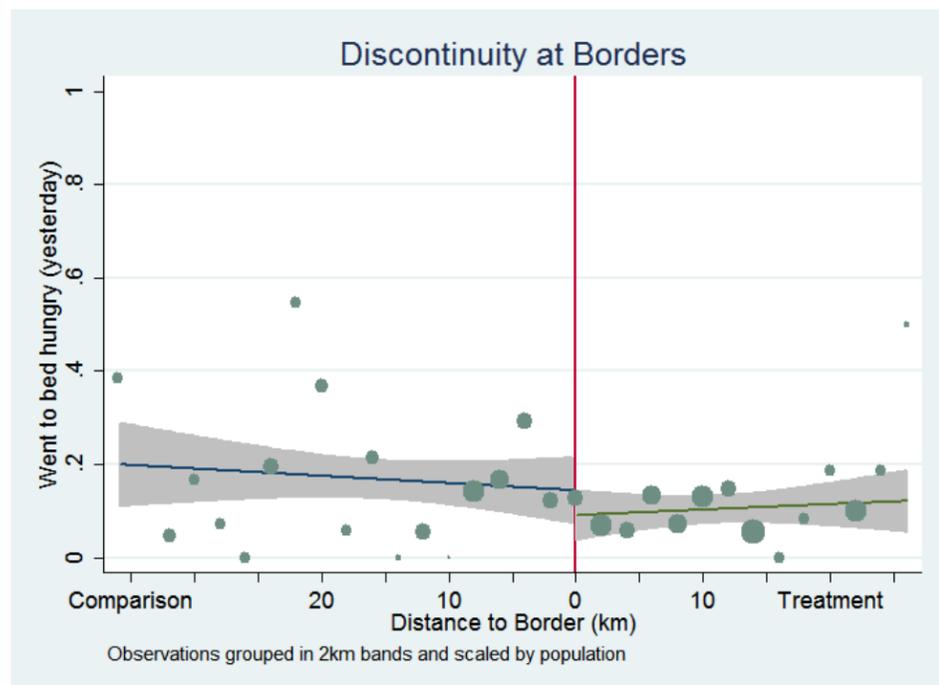


Figure F.14: RD Graph – Endline Fetched Firewood (Age 5-9)

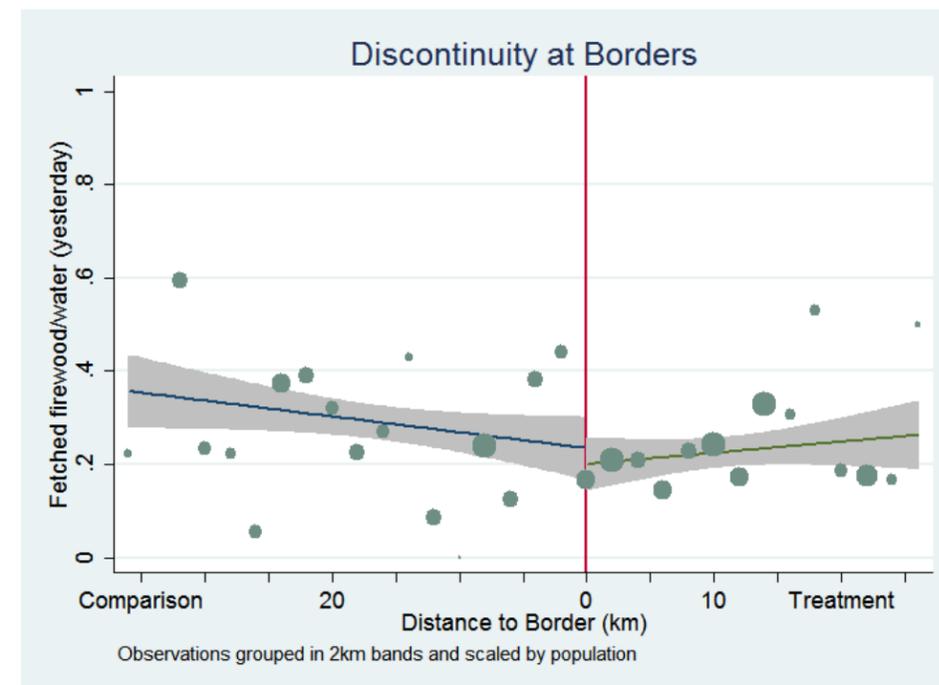


Figure F.15: RD Graph – Endline Time Collecting Firewood/Water (Age 5-9)

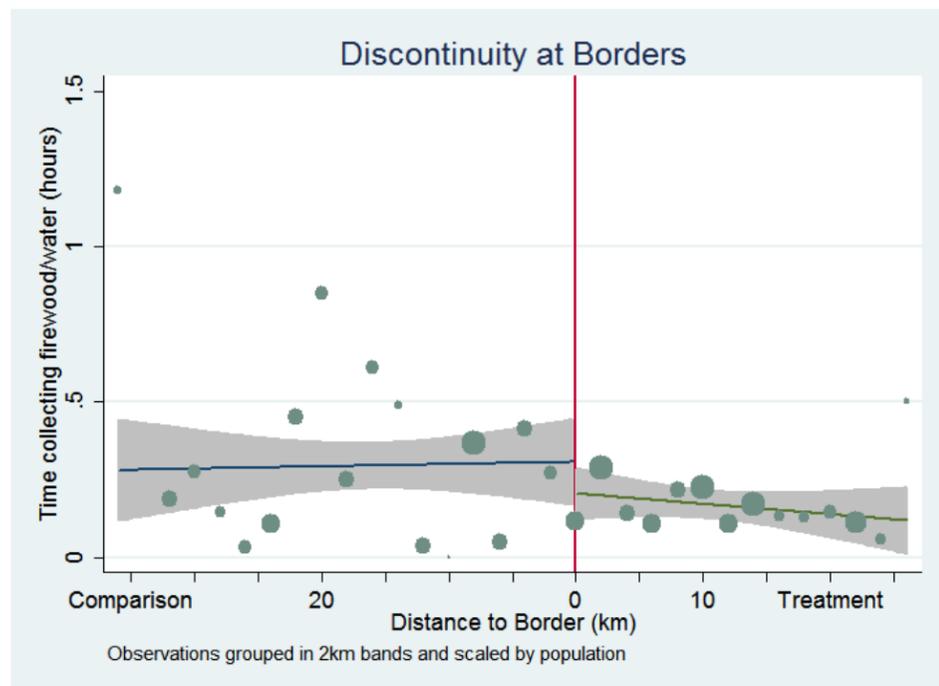


Figure F.17: RD Graph Endline Time Providing Family Care (Age 5-9)

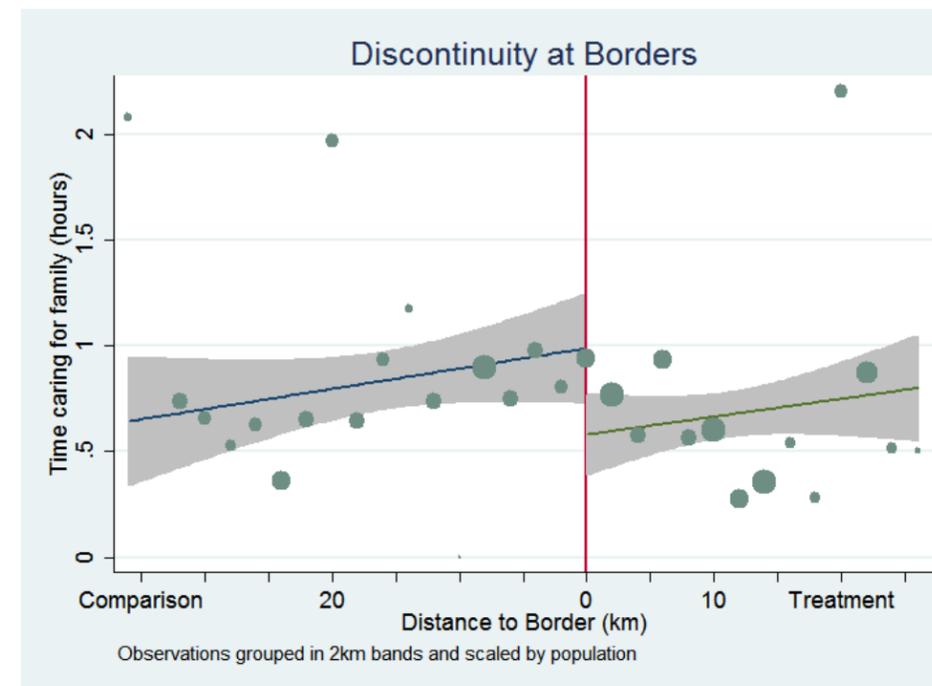


Figure F.16: RD Graph – Endline Provided Family Care (Age 5-9)

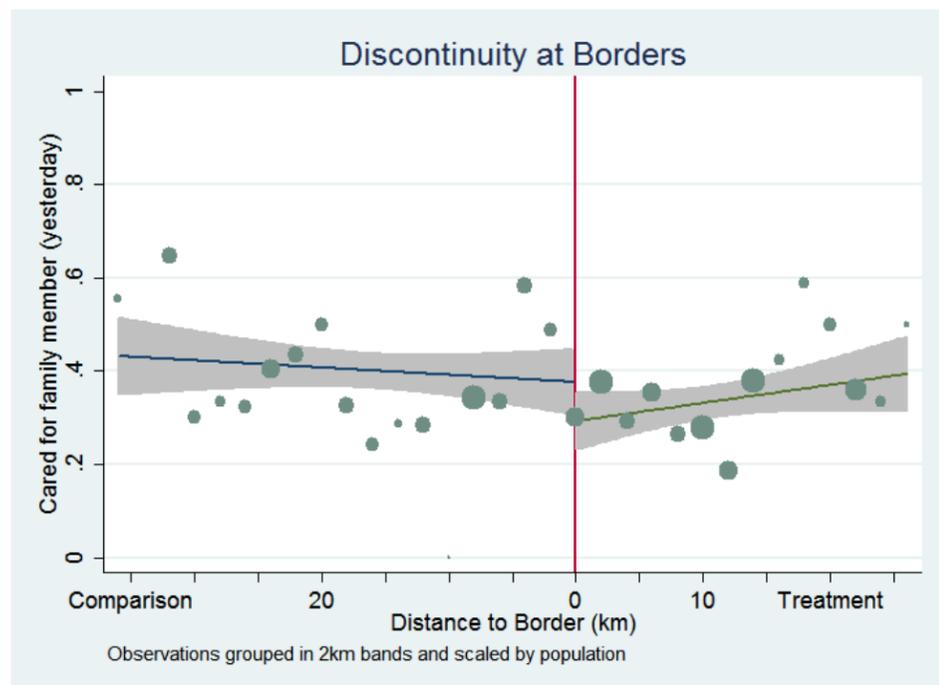


Figure F.18: RD Graph –Endline Performed Other Chores (Age 5-9)

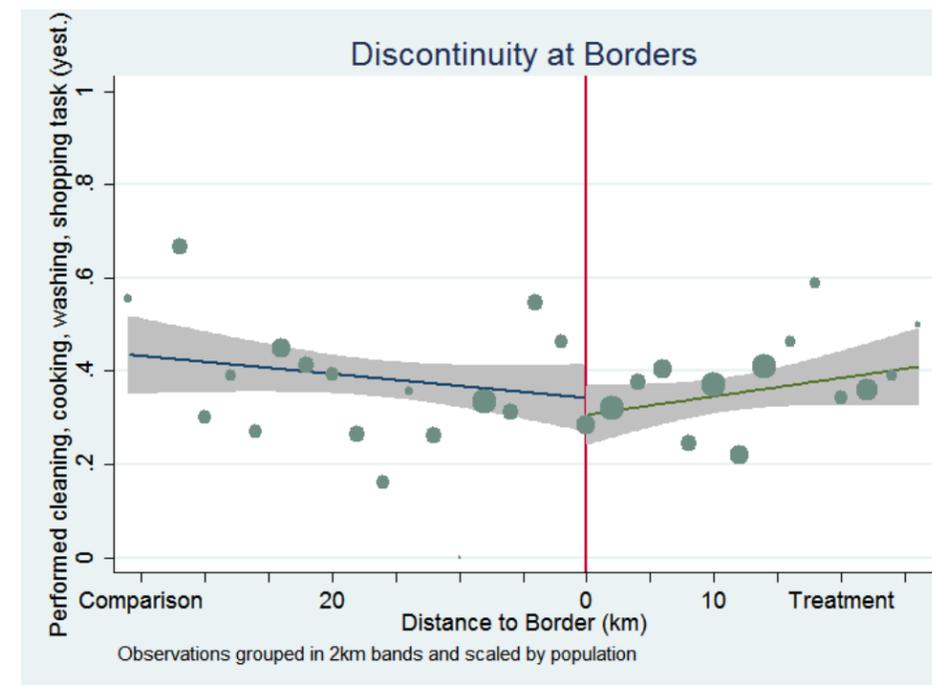


Figure F.19: RD Graph – Endline Time Doing Other Chores (Age 5-9)

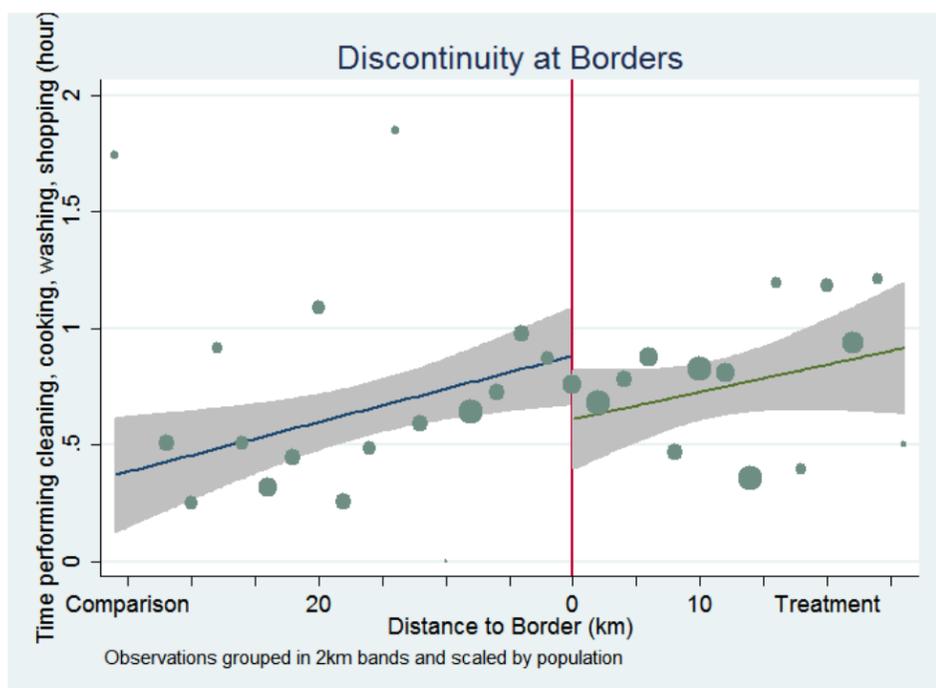


Figure F.21: RD Graph – Endline Fetched Firewood (Age 10-14)

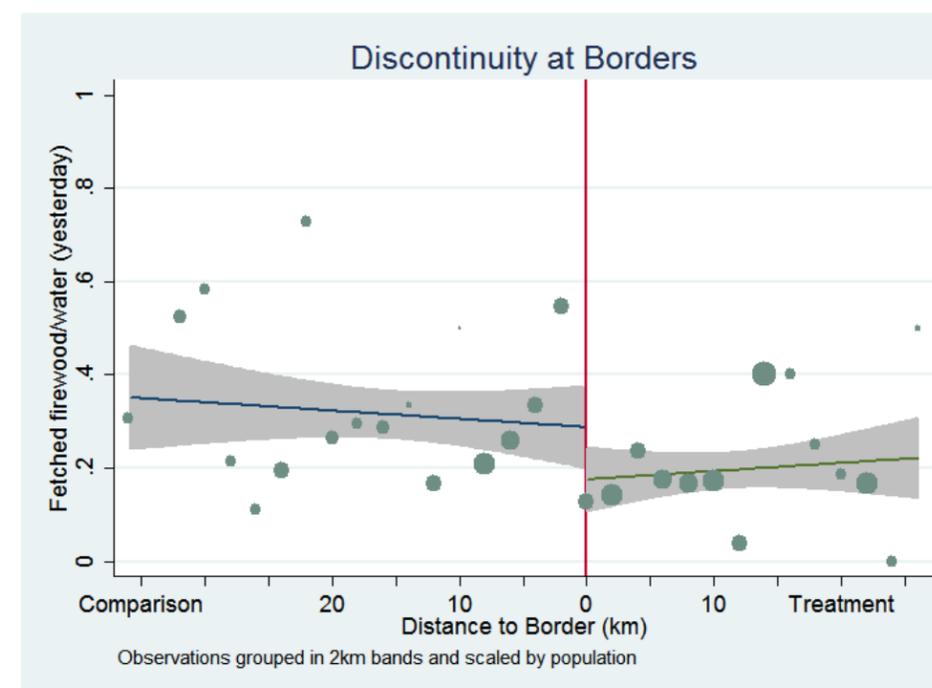


Figure F.20: RD Graph – Endline Did Any Chore (Age 10-14)

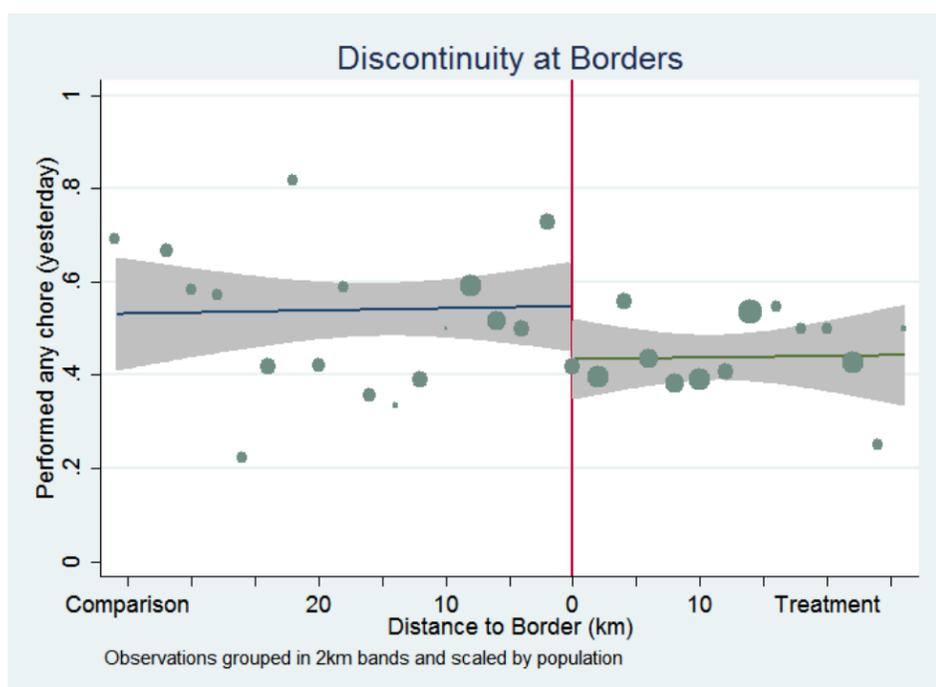


Figure F.22: RDGraph – Endline Time Collecting Firewood (Age 10-14)

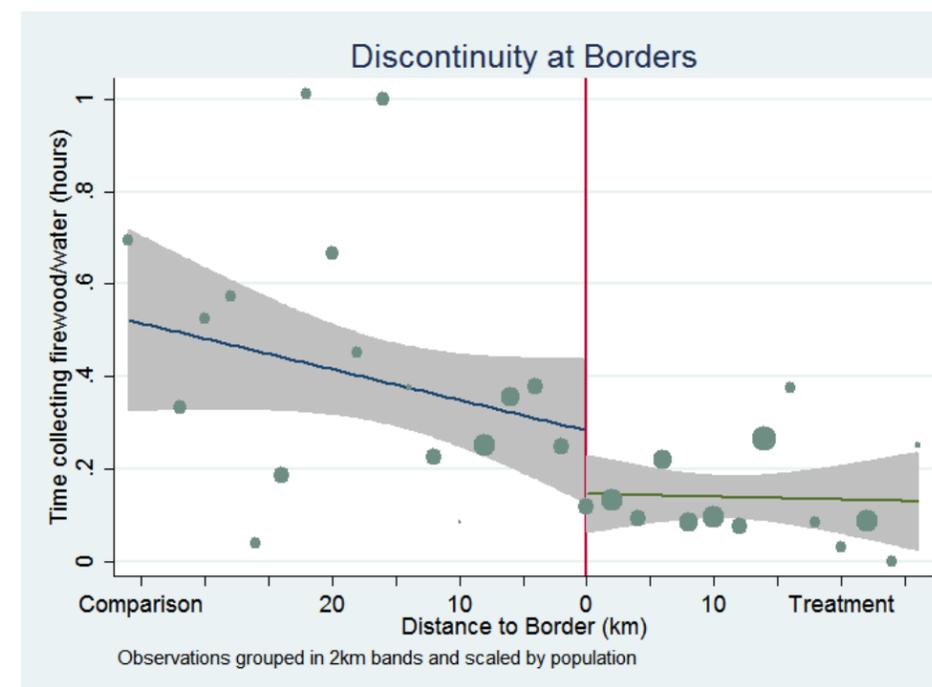


Figure F.23: RD Graph – Endline Provided Family Care (Age 10-14)

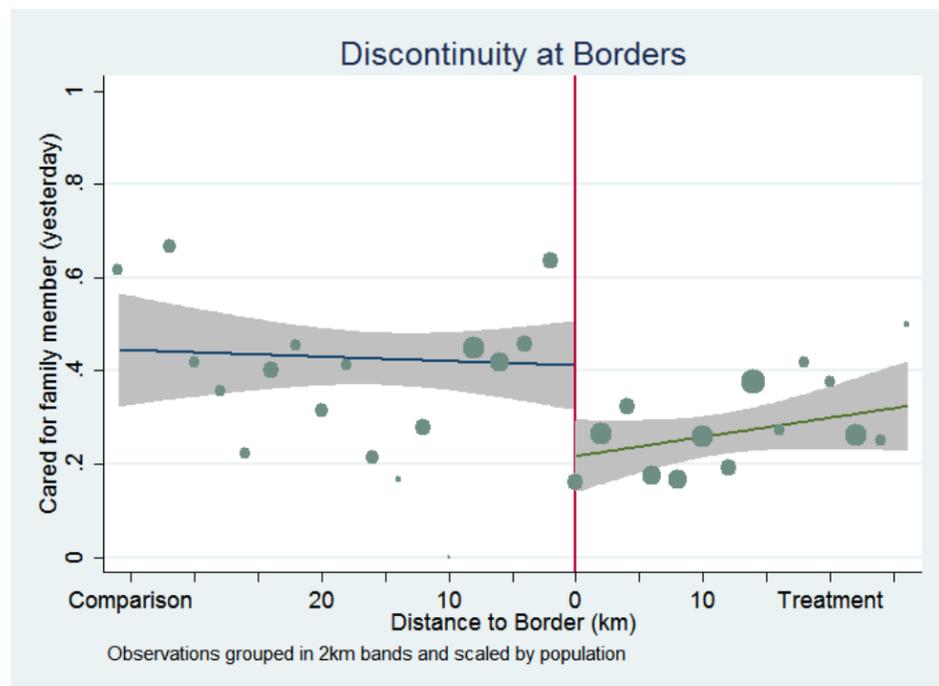


Figure F.25: RD Graph – Endline Performed Other Chores (Age 10-14)

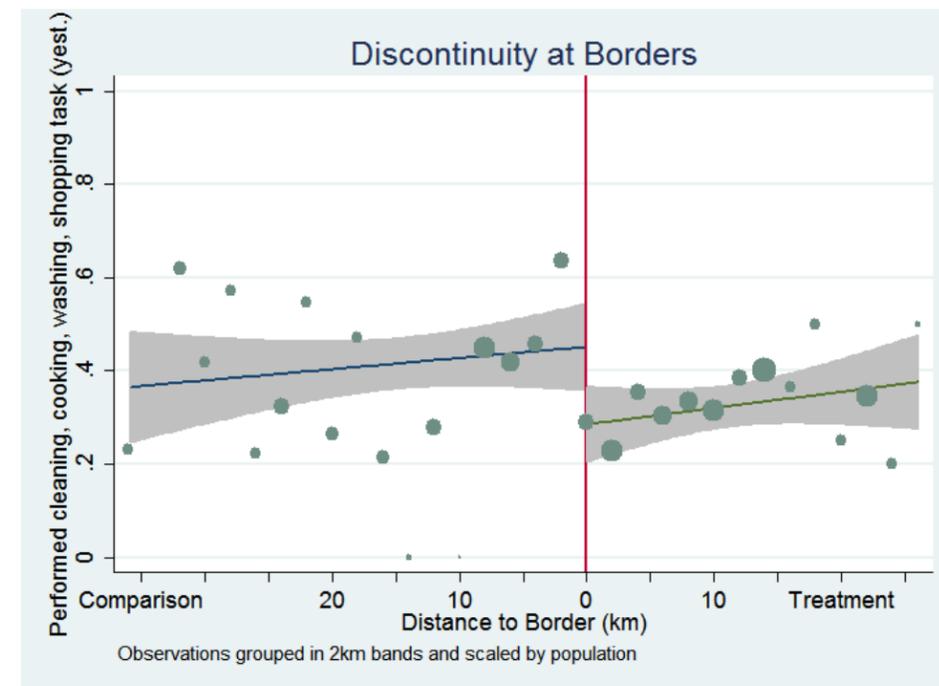


Figure F.24: RD Graph – Endline Time Providing Family Care (Age 10-14)

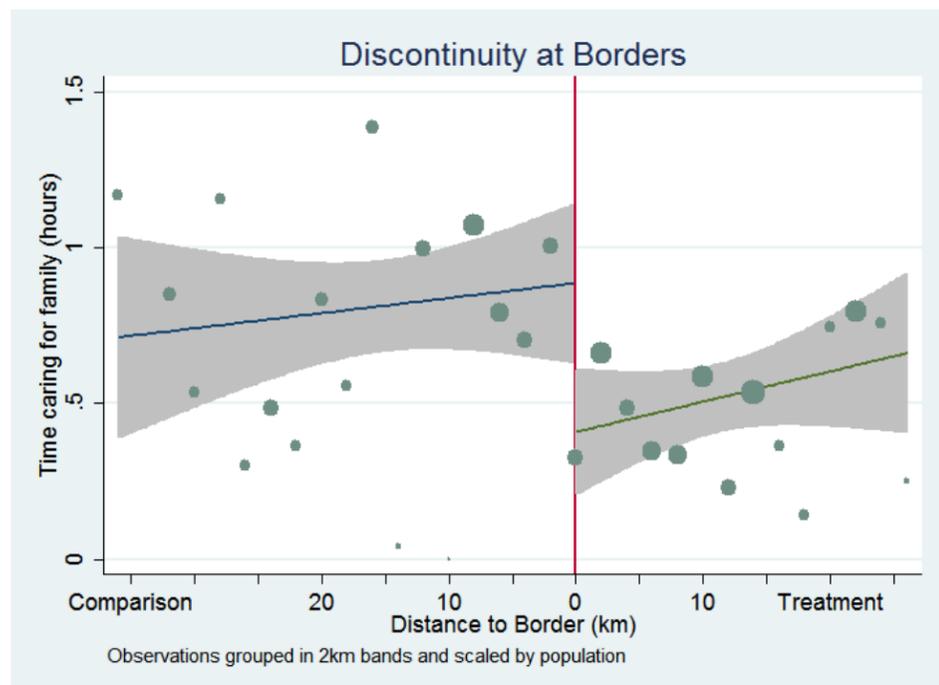


Figure F.26: RD Graph – Endline Time Doing Other Chores (Age 10-14)

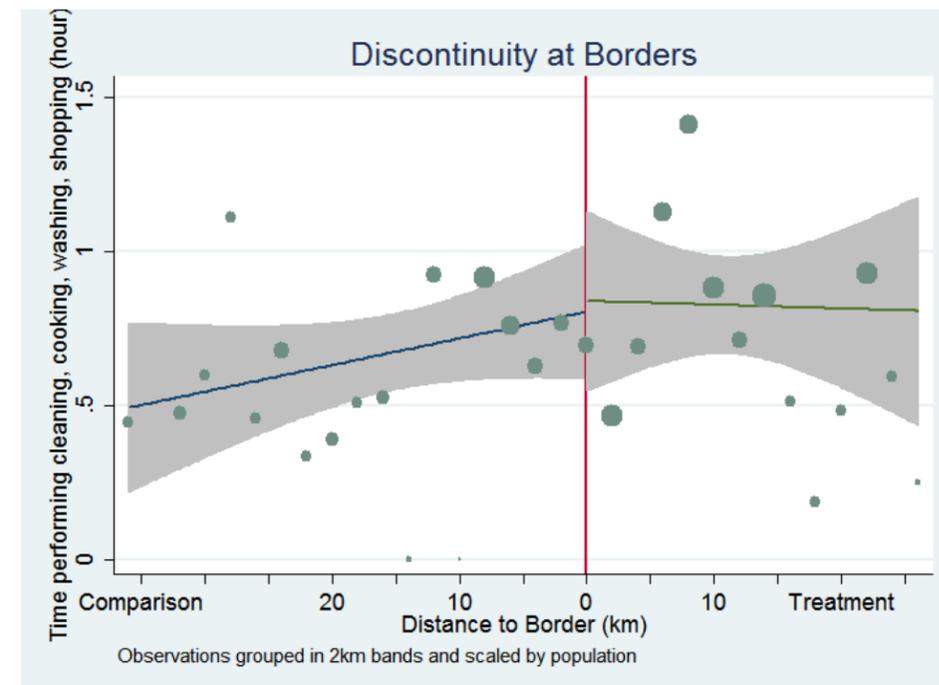


Figure F.27: Regression Discontinuity Graph – Endline Played with Other Children (Age 10-14)

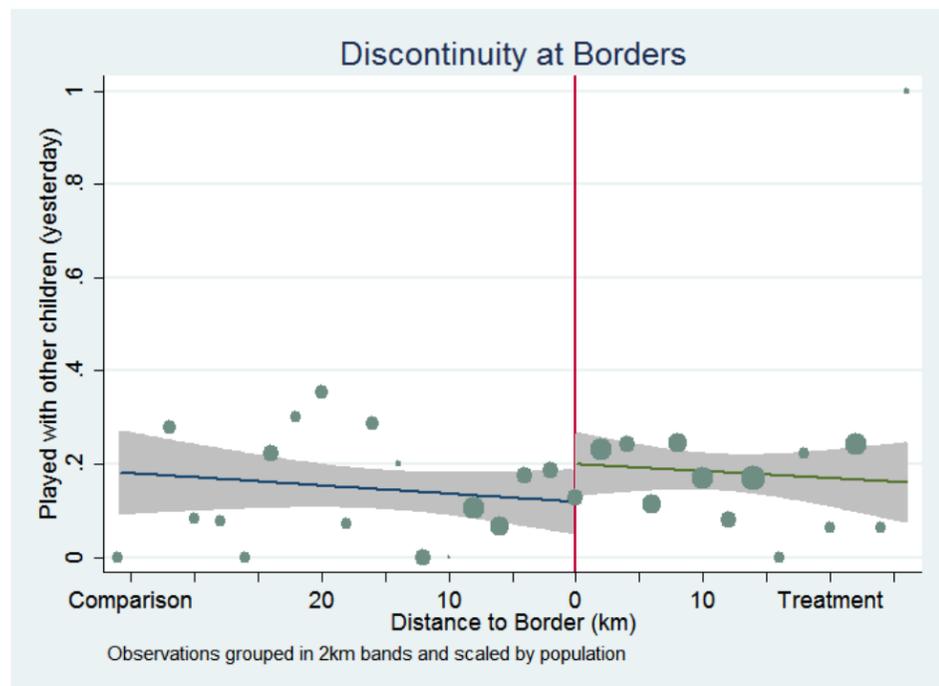


Figure F.29: Regression Discontinuity Graph – Endline Depressed (Age 10-14)

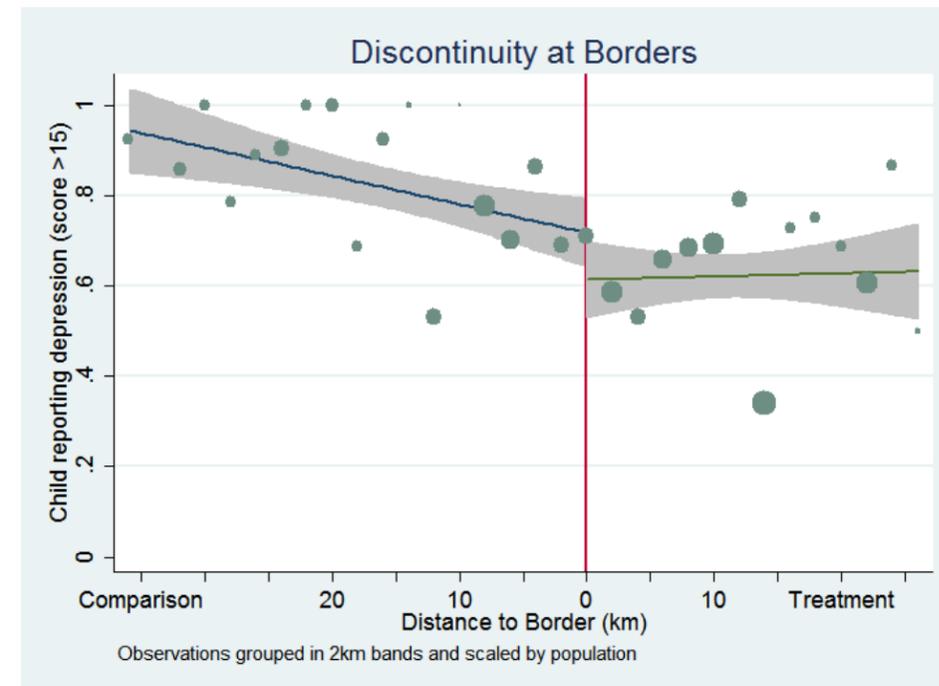


Figure F.28: RD Graph – Endline Depression Scale (Age 10-14)

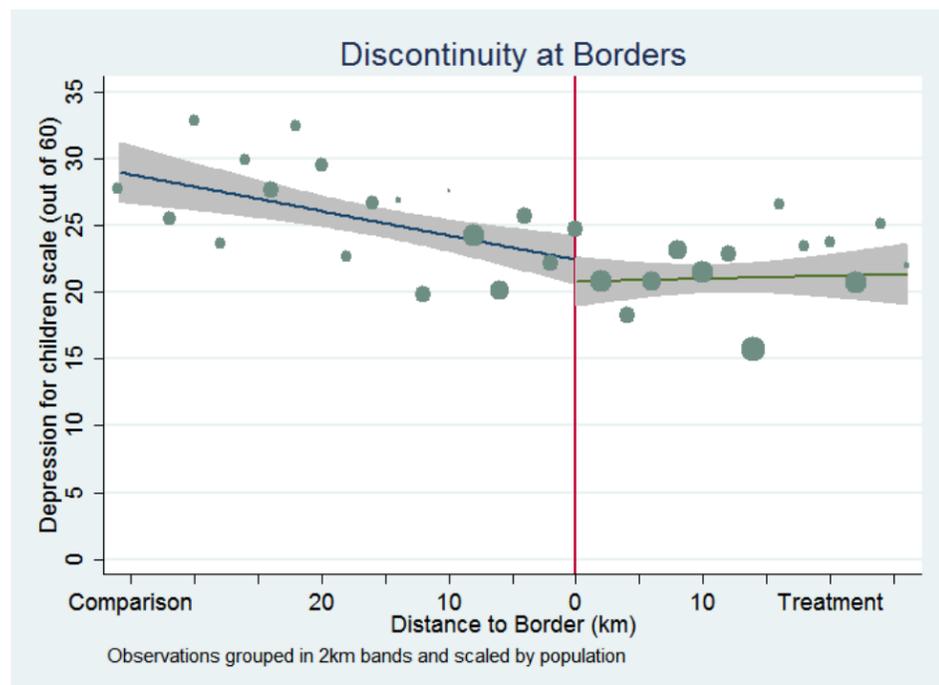


Figure F.30: RD Graph – Endline Self-Esteem Scale (Age 10-14)

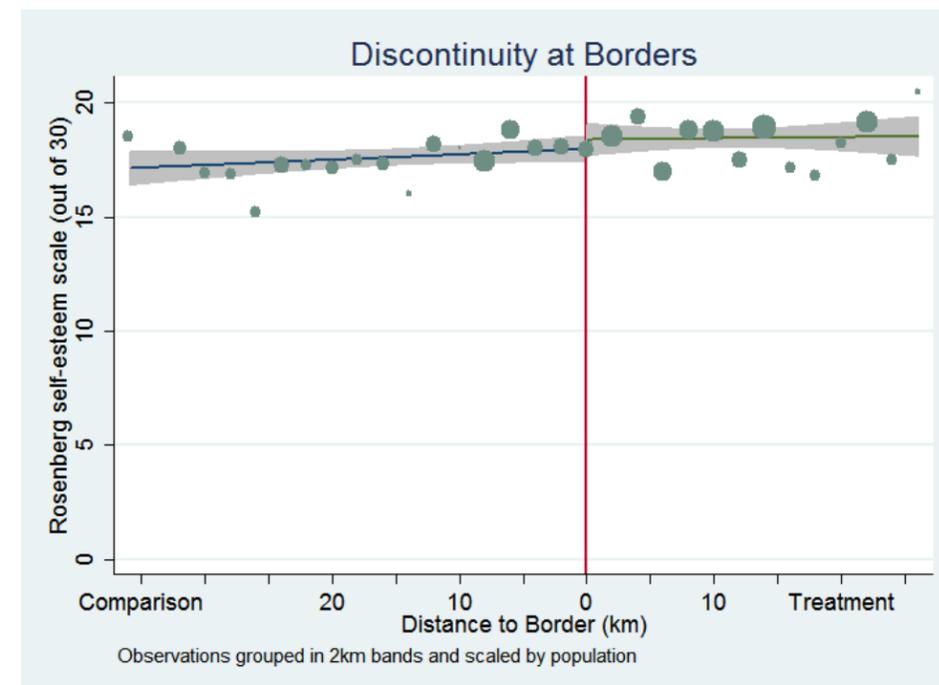


Figure F31: Regression Discontinuity Graph – Endline Low Self-Esteem (Age 10-14)

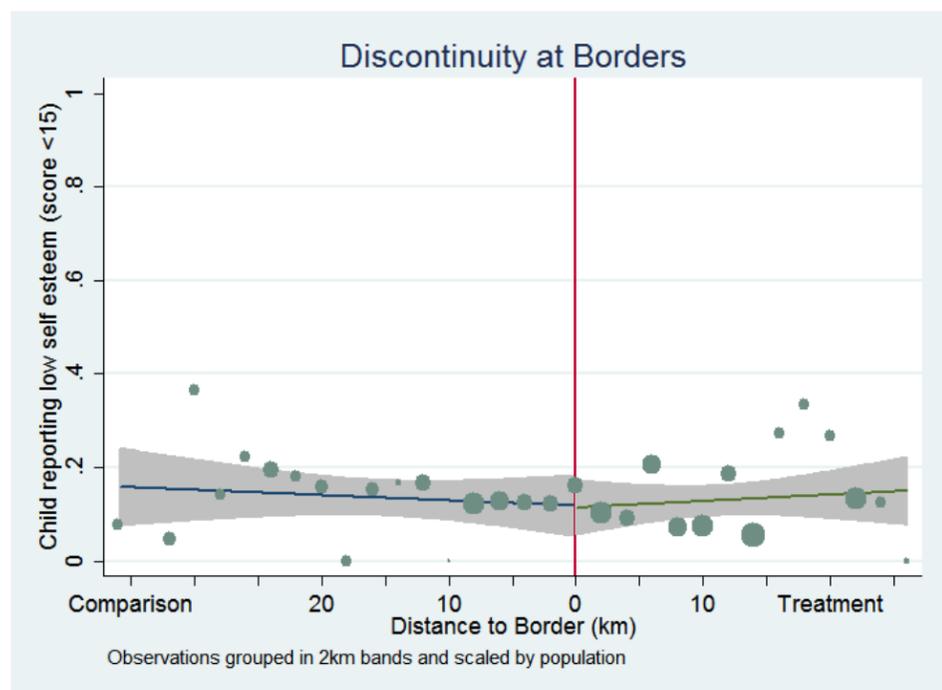


Figure F33: RD Graph – Endline Holistic Student Assessment (Age 10-14)

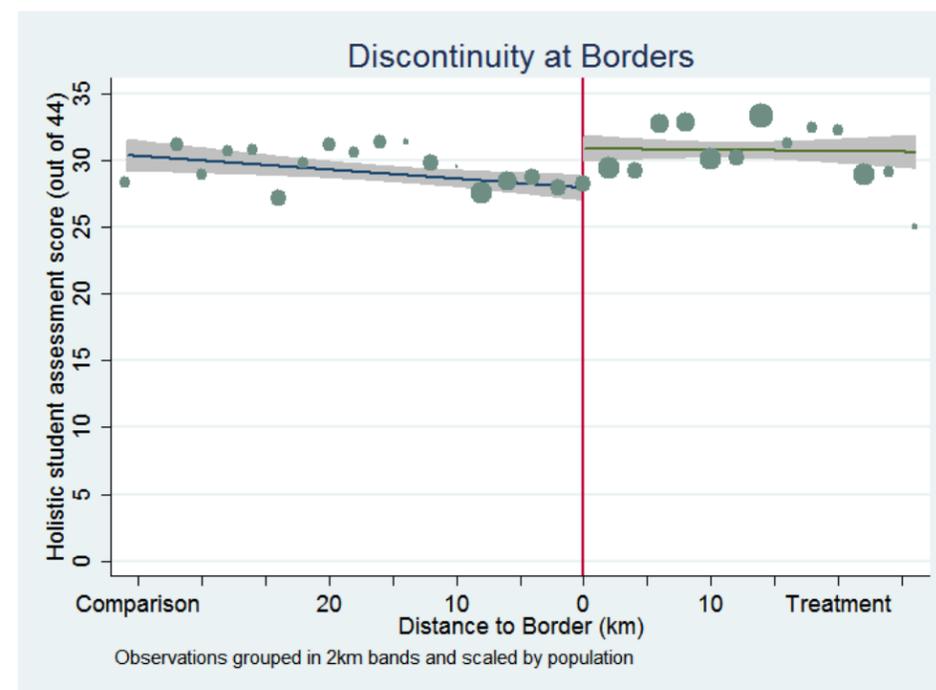


Figure F32: RD Graph – Endline Social Support Scale (Age 10-14)

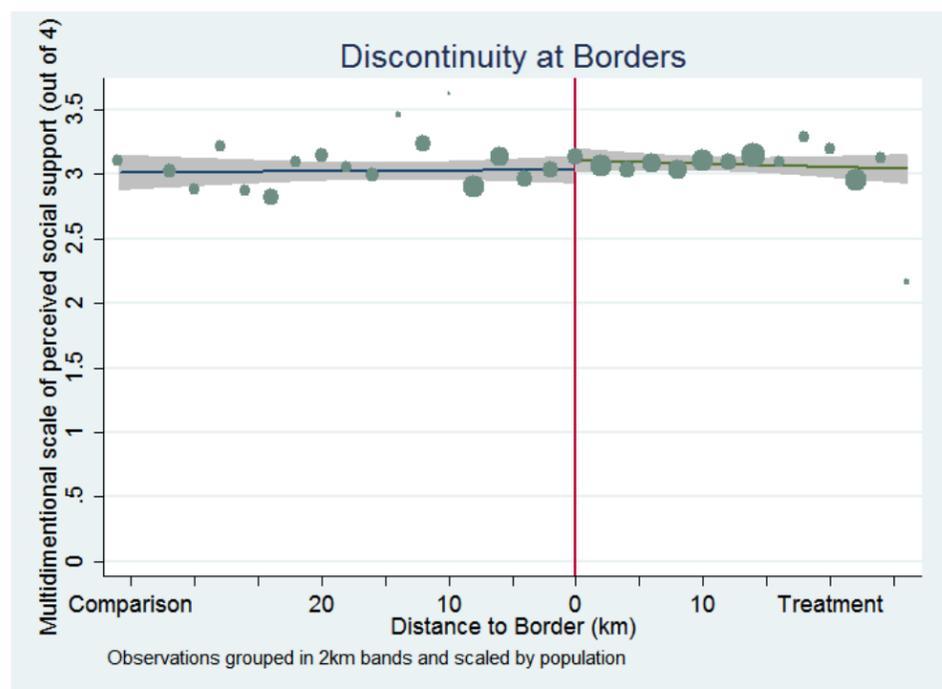


Figure F34: Regression Discontinuity Graph – Endline Trust (Age 10-14)

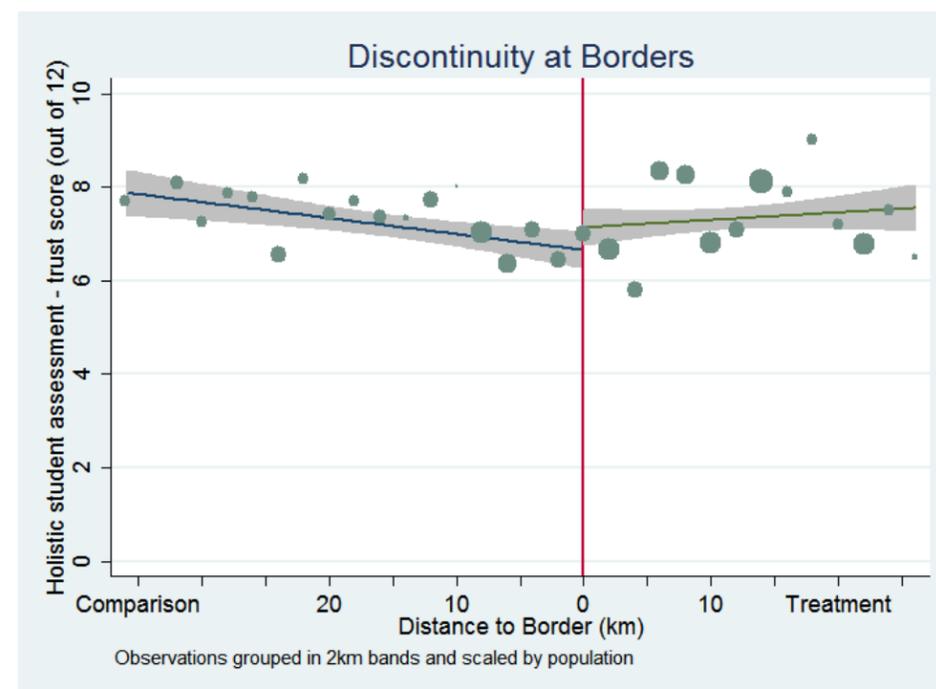


Figure F.35: Regression Discontinuity Graph – Endline Optimism (Age 10-14)

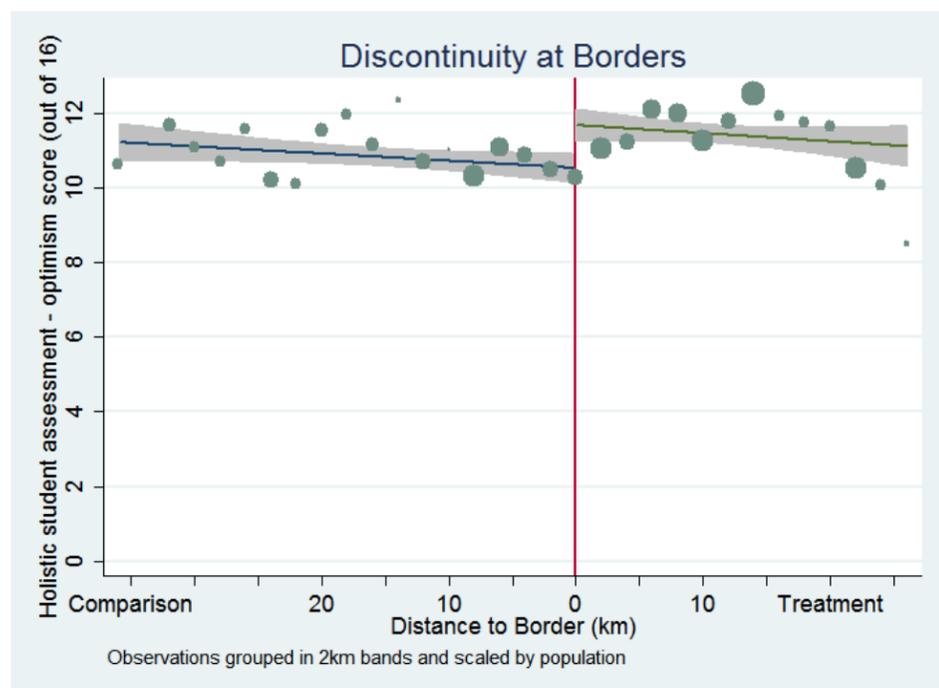


Figure F.37: Regression Discontinuity Graph – Endline 2nd Shift Enrollment (Age 5-9)

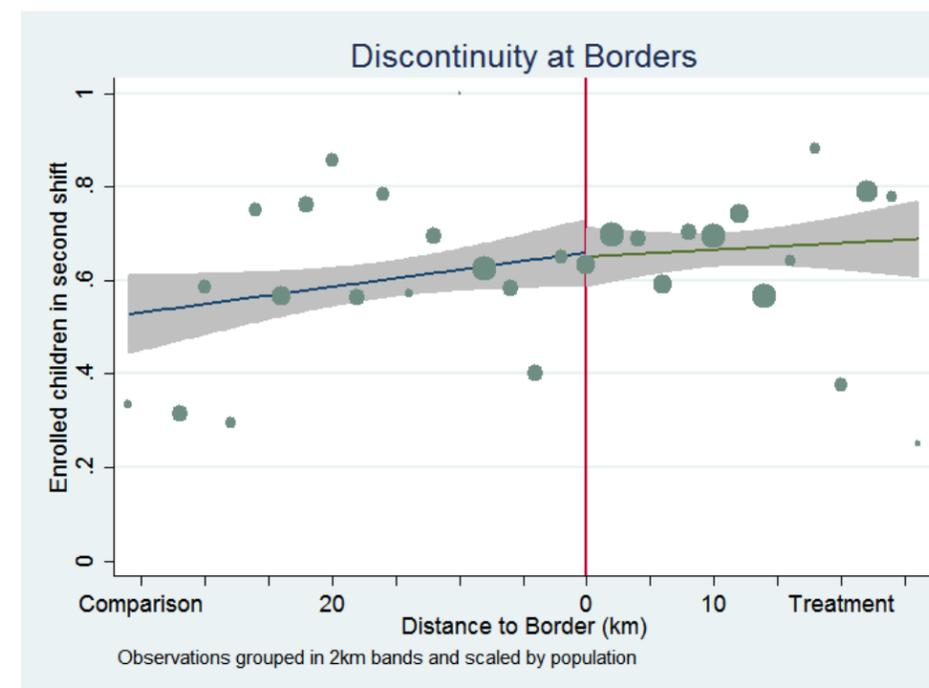


Figure F.36: Regression Discontinuity Graph – Endline Assertiveness (Age 10-14)

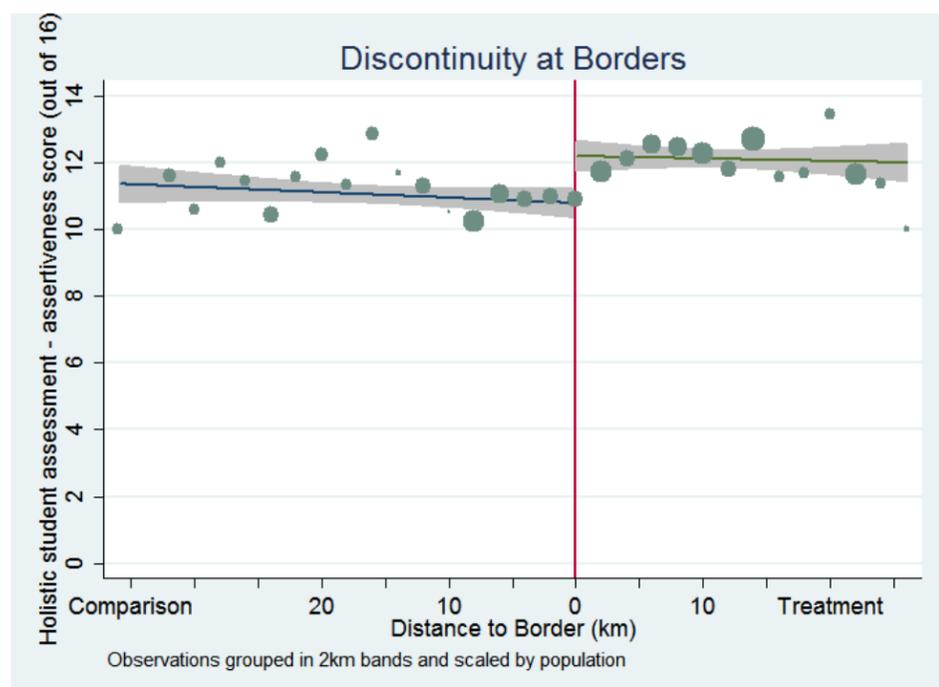


Figure F.38: RD Graph – Endline Attends Public School (Age 5-9)

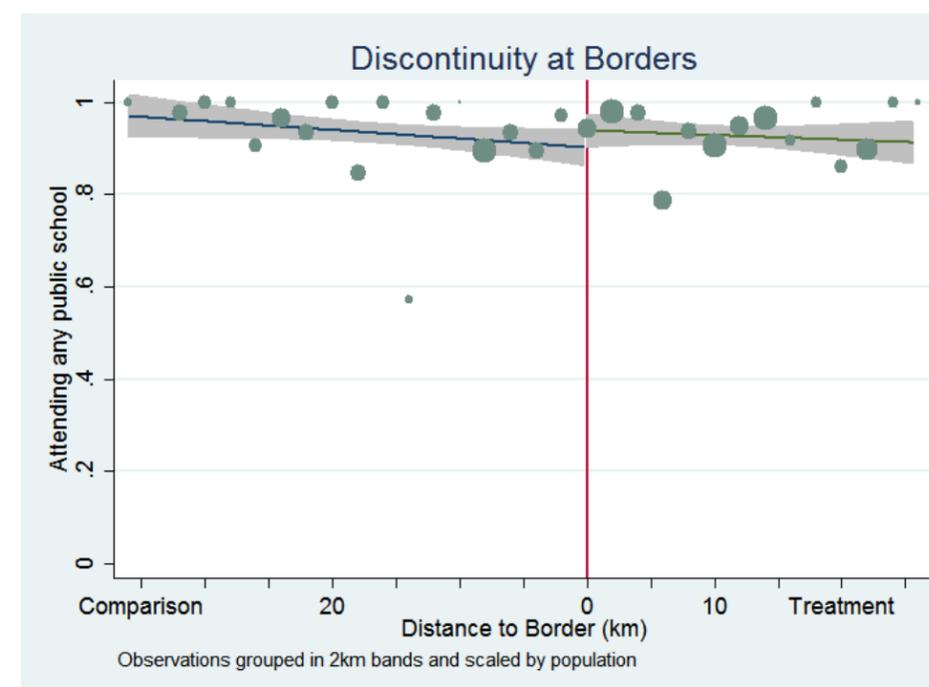


Figure F39: RD Graph – Endline Out of School Due to Cost (Age 5-9)

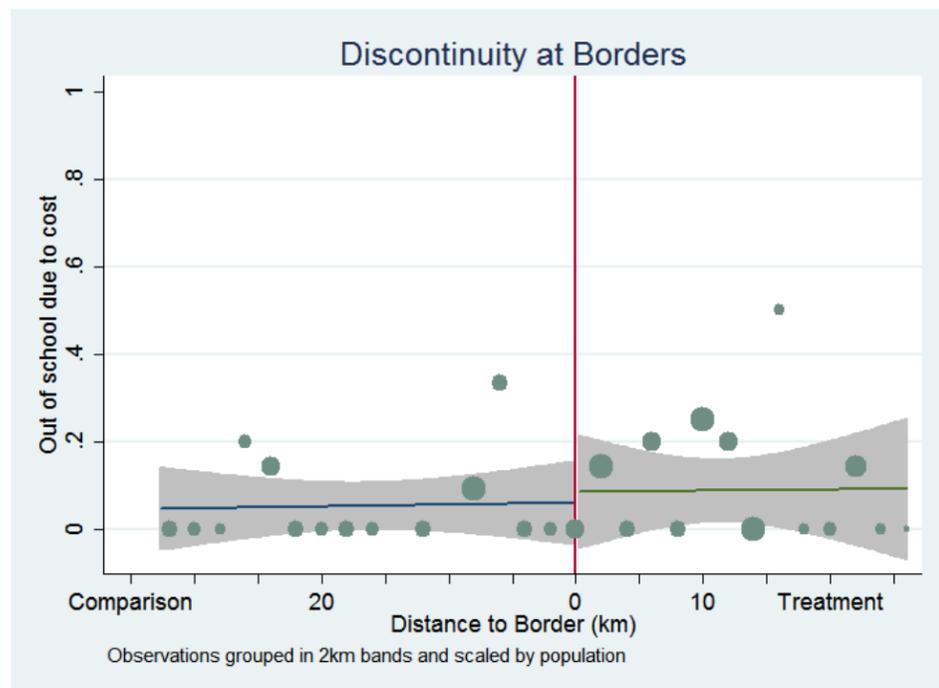


Figure F41: RD Graph – Endline Education Spending (Age 5-9)

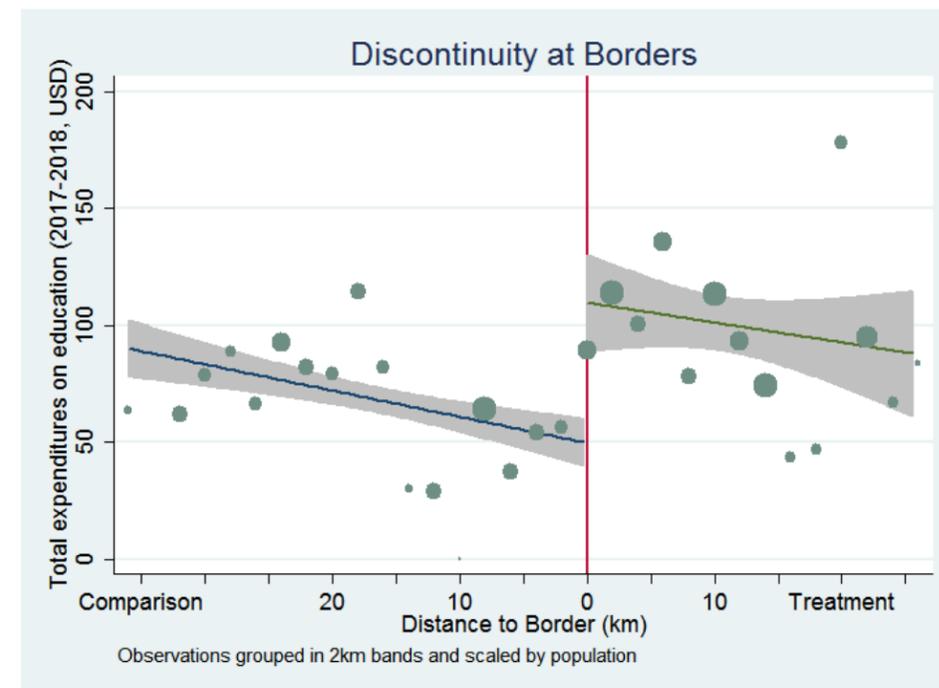


Figure F40: RD Graph – Endline Days of 2nd Shift Attended (Age 5-9)

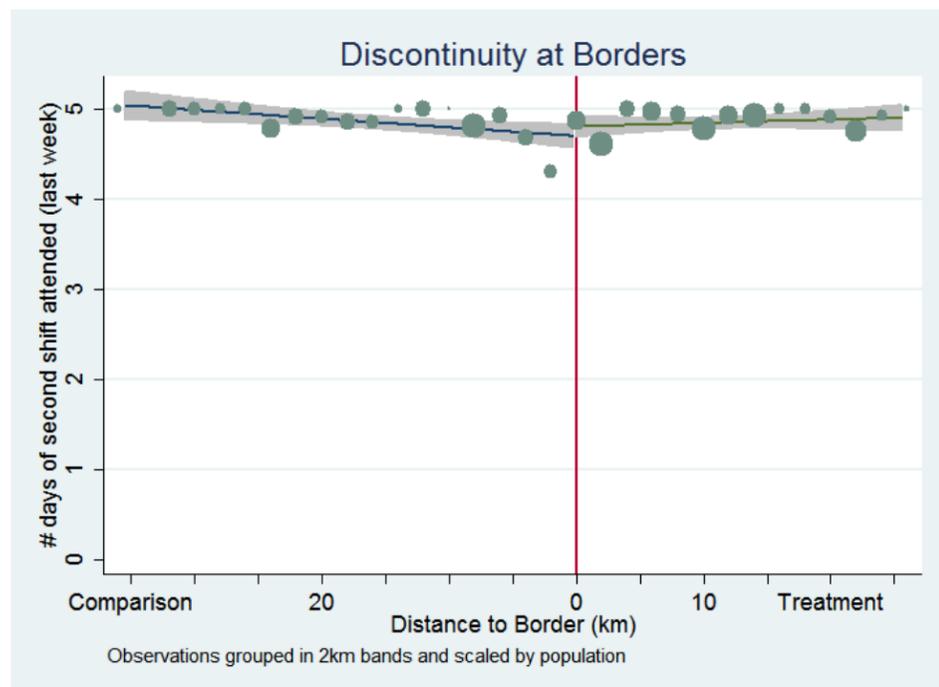


Figure F42: RD Graph – Endline Fee Based Bus Transport (Age 5-9)

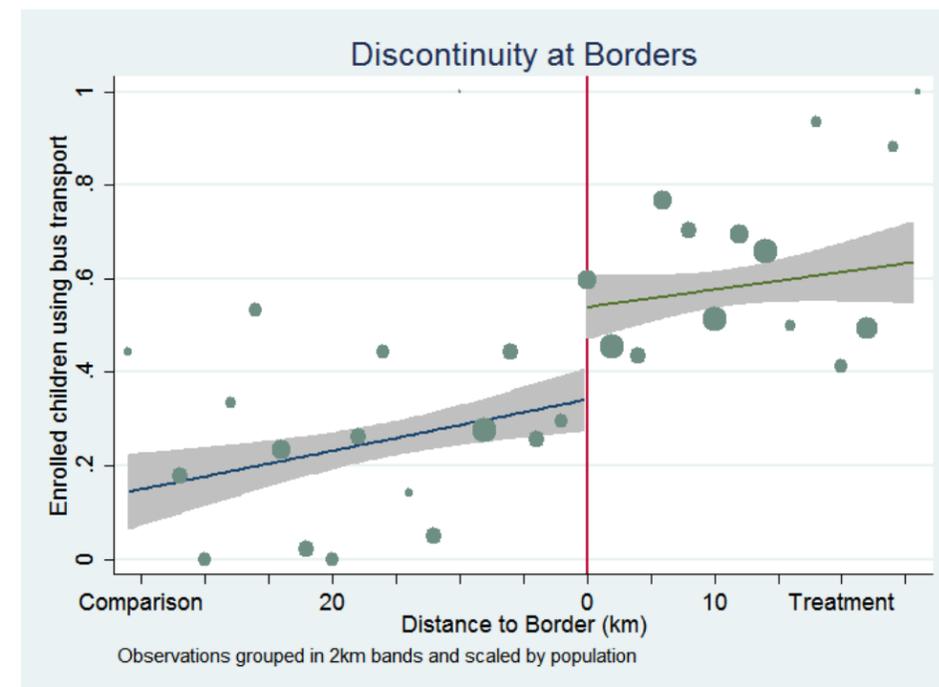


Figure F43: Regression Discontinuity Graph – Endline Hours Studying (Age 5-9)

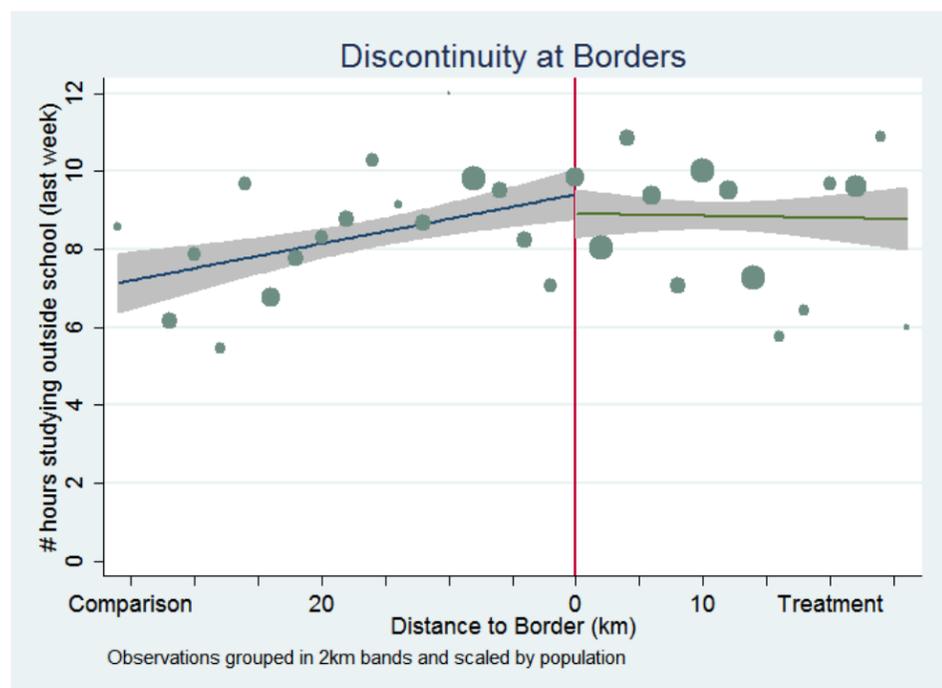


Figure F45: RD Graph – Endline Plans to Complete Secondary (Age 10-14)

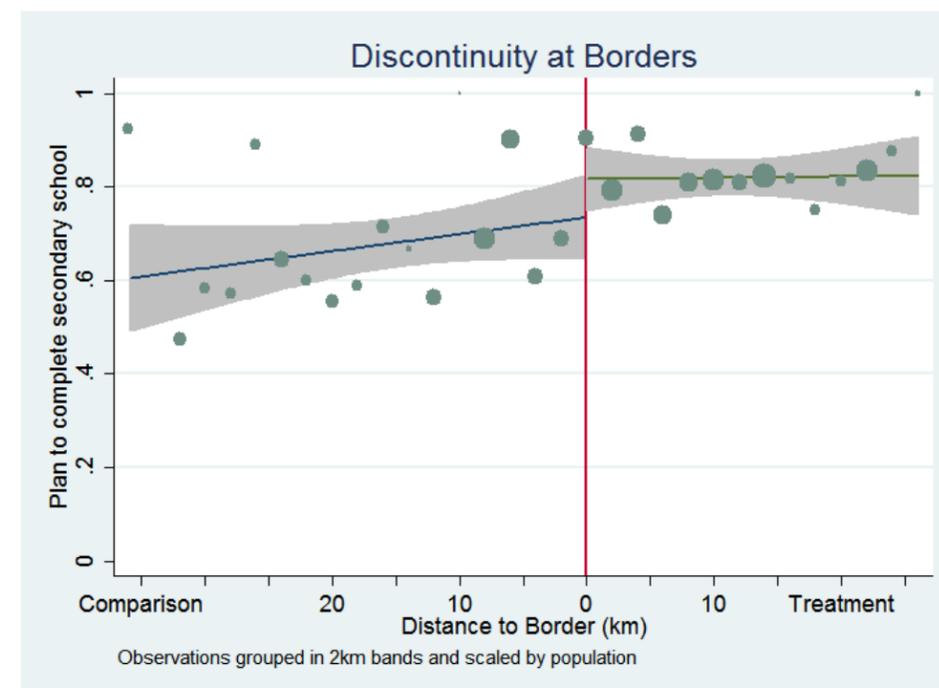


Figure F44: RD Graph – Endline Plans to Complete Primary (Age 10-14)

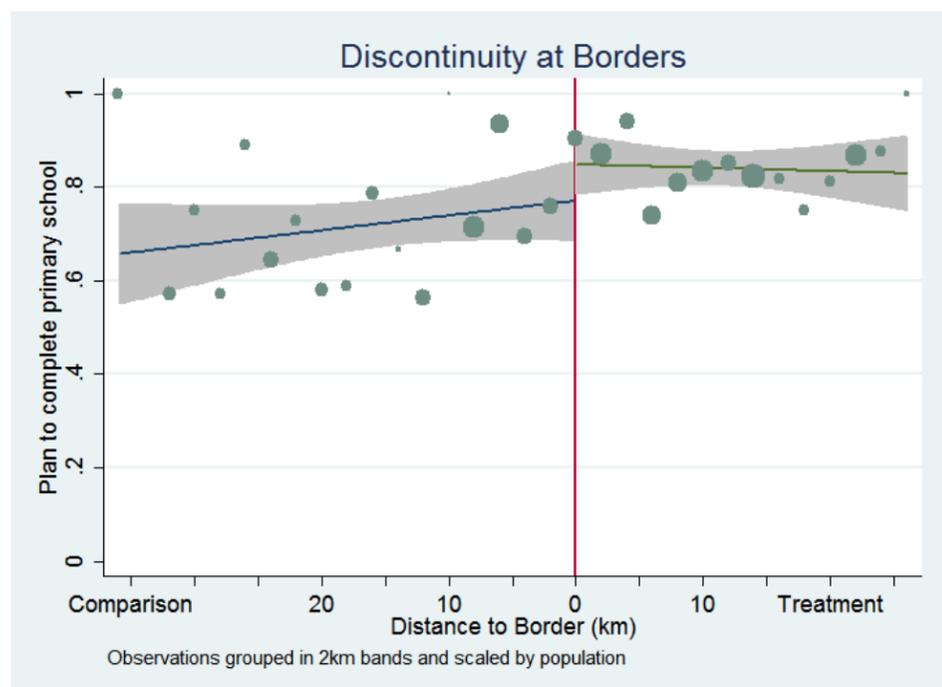


Figure F46: Regression Discontinuity Graph – Endline Plans to Complete University (Age 10-14)

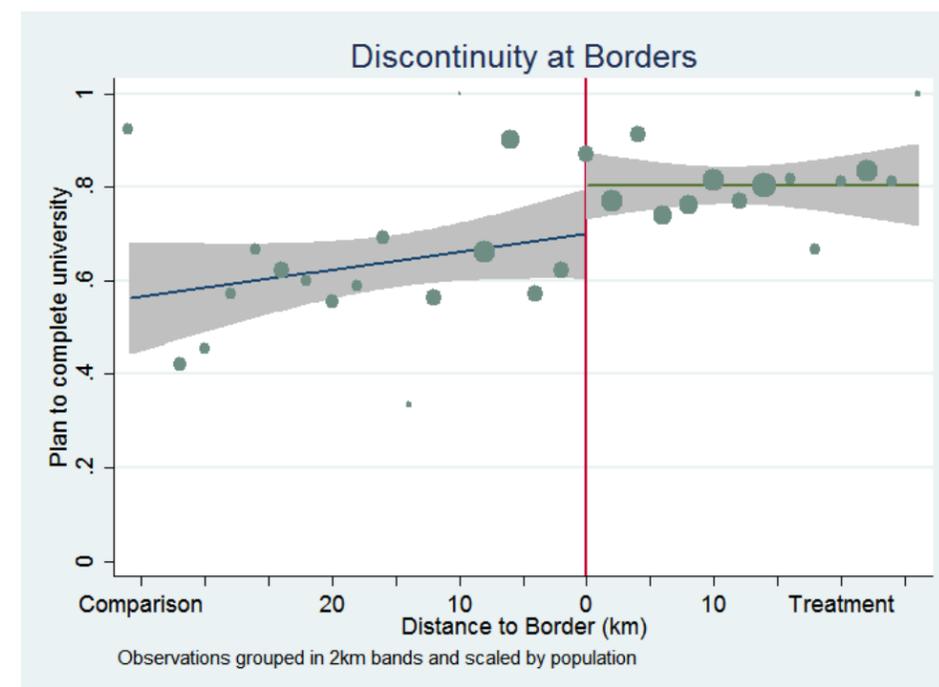


Figure F47: RD Graph – Endline 2nd Shift Enrollment (Age 10-14)

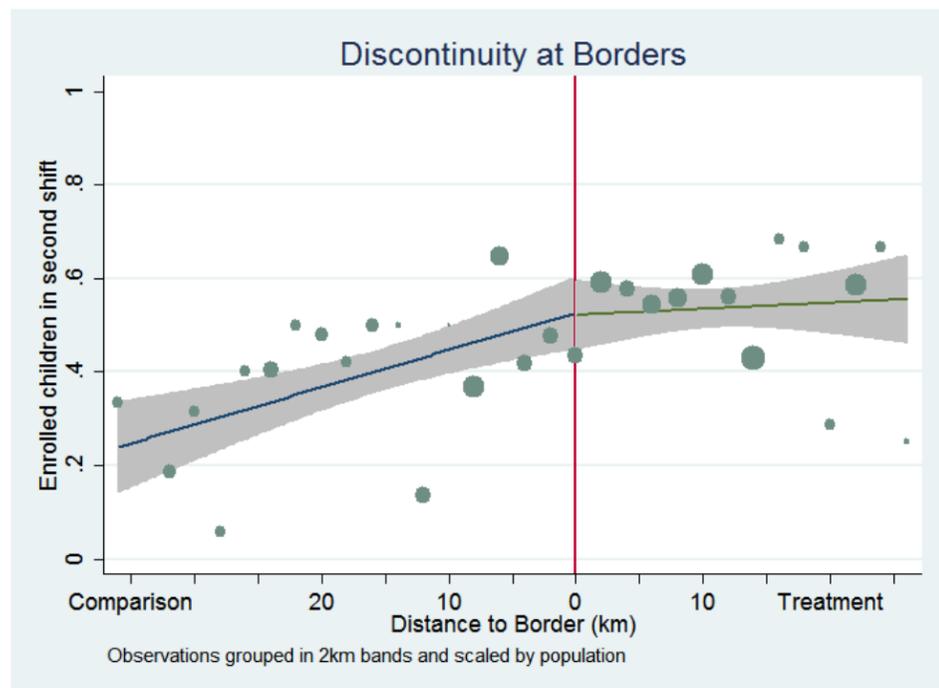


Figure F49: Regression Discontinuity Graph – Endline Out of School Due to Cost (Age 10-14)

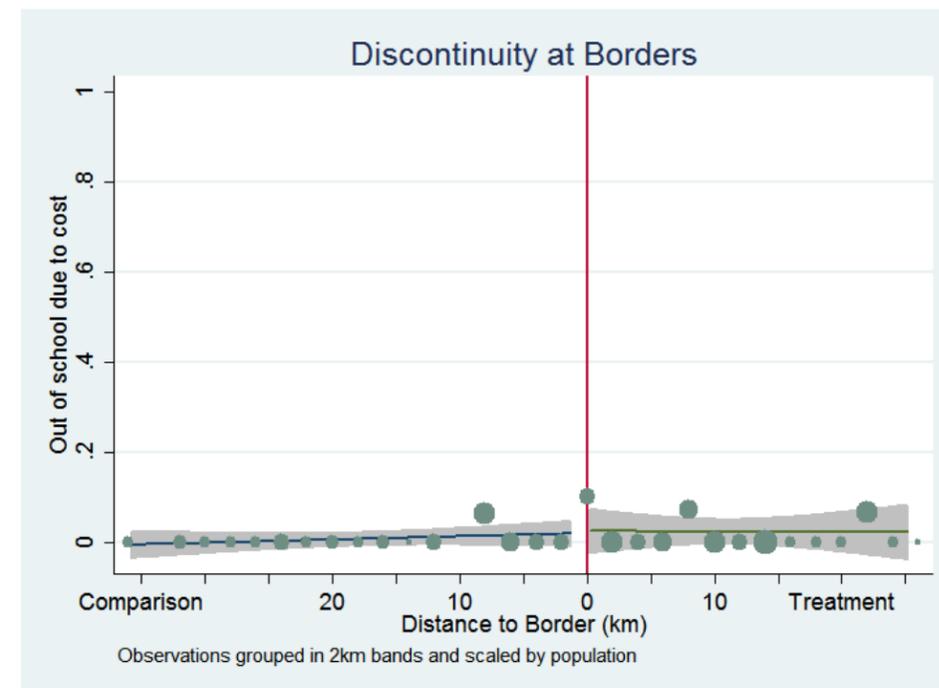


Figure F48: RD Graph – Endline Unenrolled but Plans to Enroll (Age 10-14)

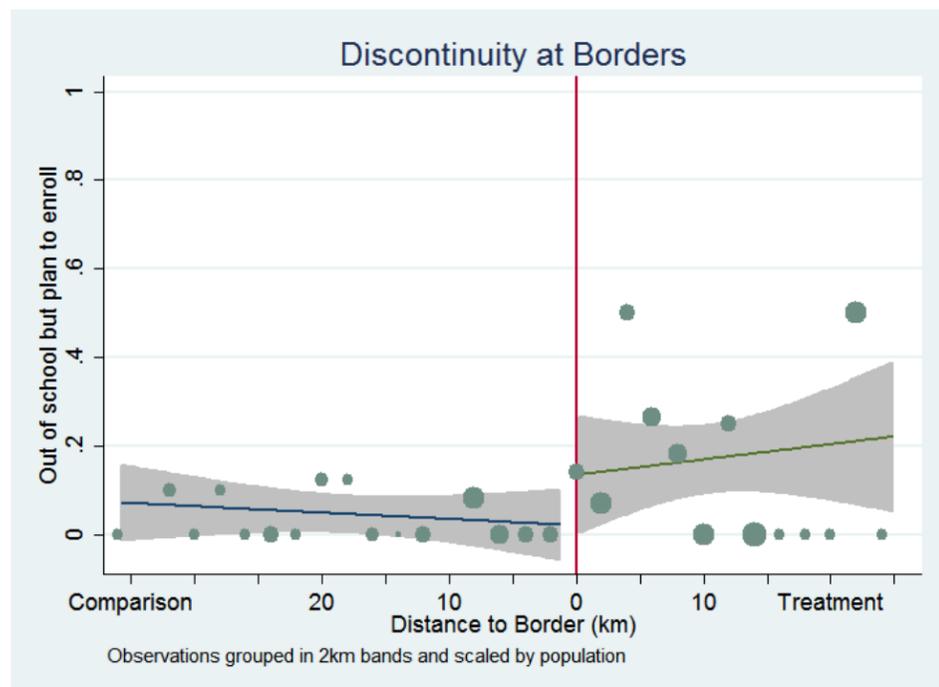


Figure F50: Regression Discontinuity Graph – Endline Days of 2nd Shift Attended (Age 10-14)

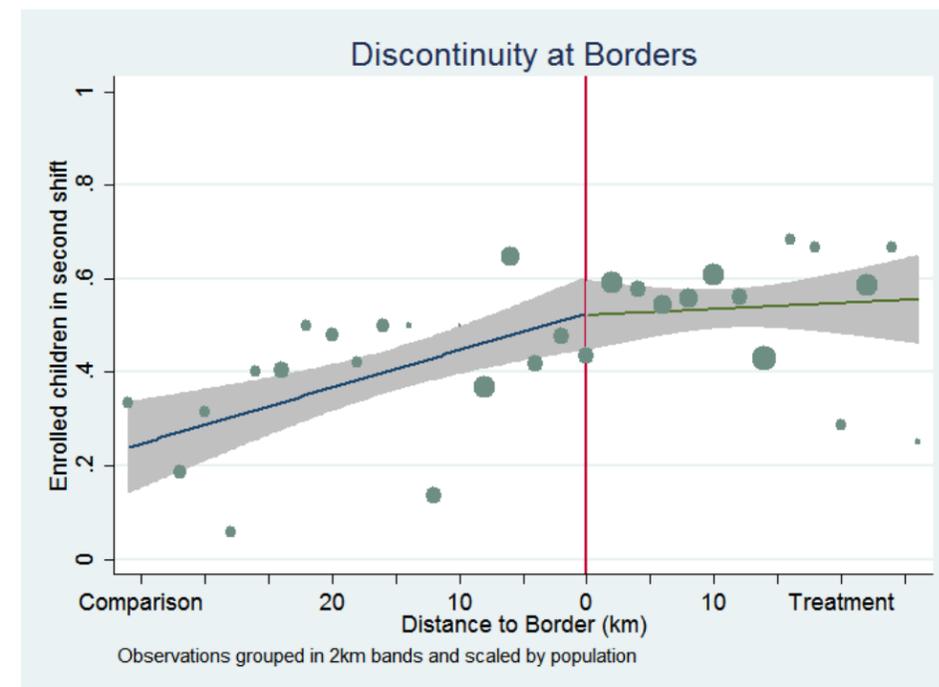


Figure F51: RD Graph – Endline Education Spending (Age 10-14)

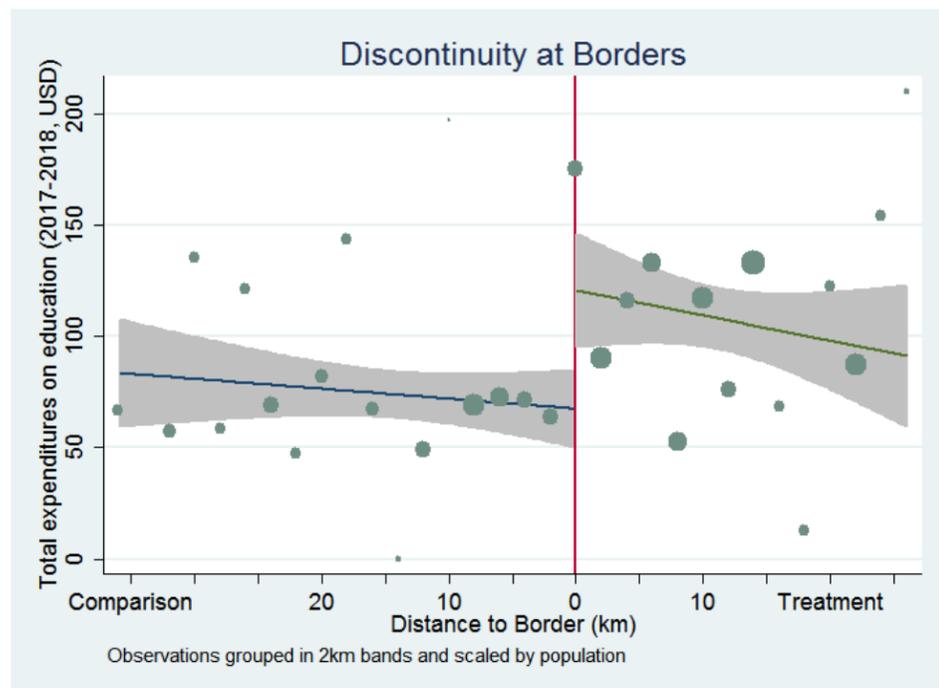


Figure F53: Regression Discontinuity Graph – Endline Hours Studying (Age 10-14)

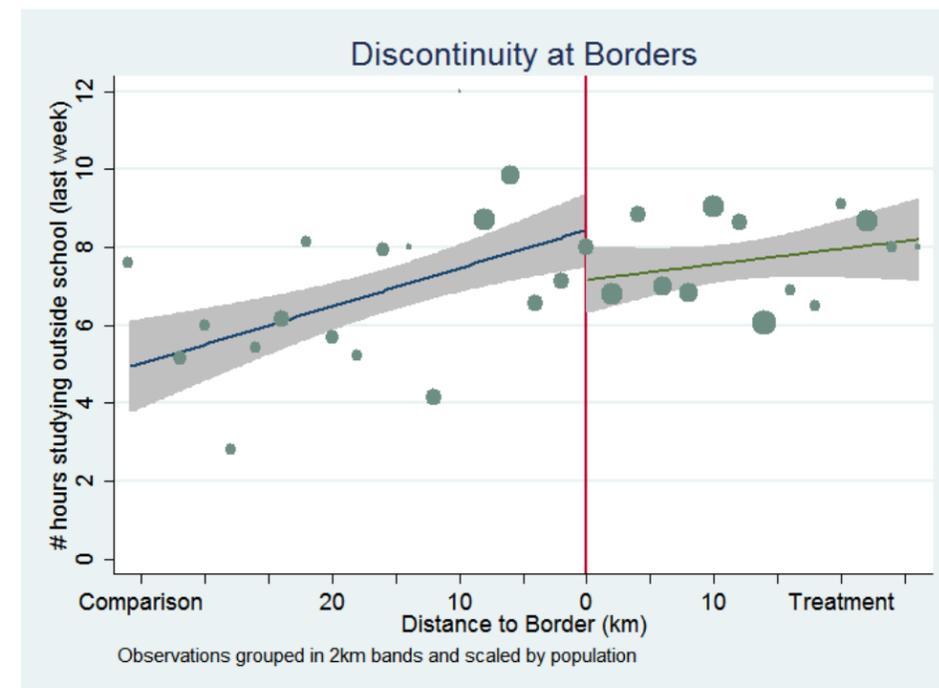
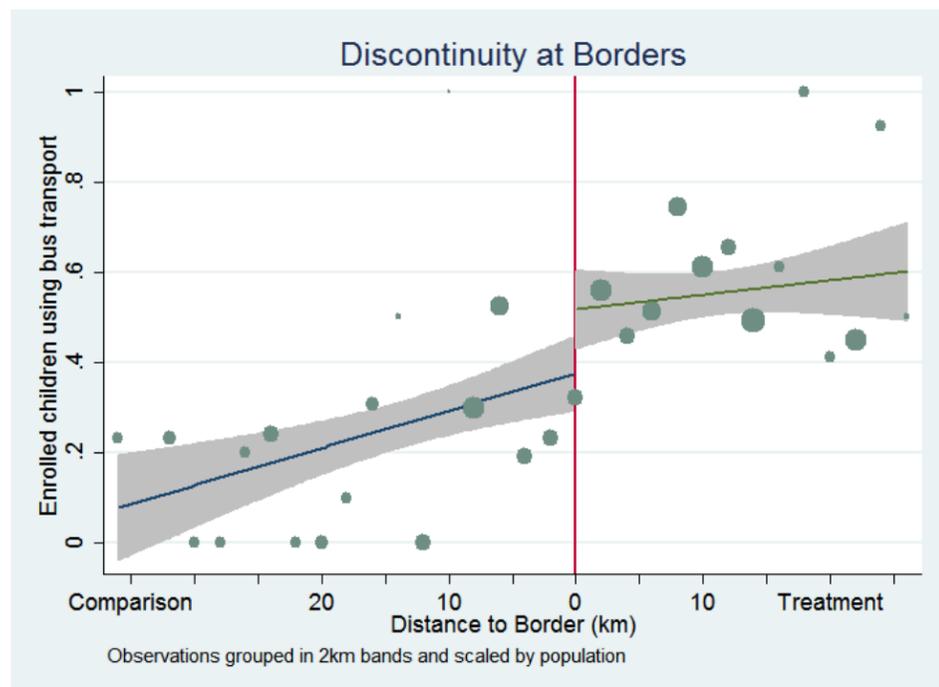


Figure F52: Regression Discontinuity Graph – Endline Fee Based Bus Transport (Age 10-14)



Household Level Outcomes

Figure F54: Regression Discontinuity Graph – Endline Income Per Capita

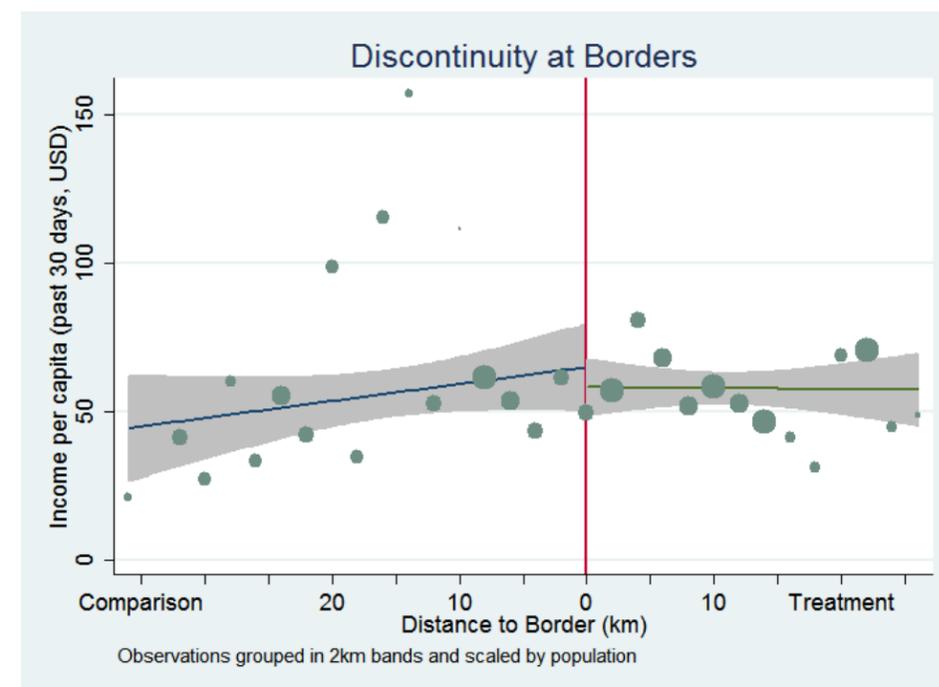


Figure F55: Regression Discontinuity Graph – Endline Total Debt Per Capita

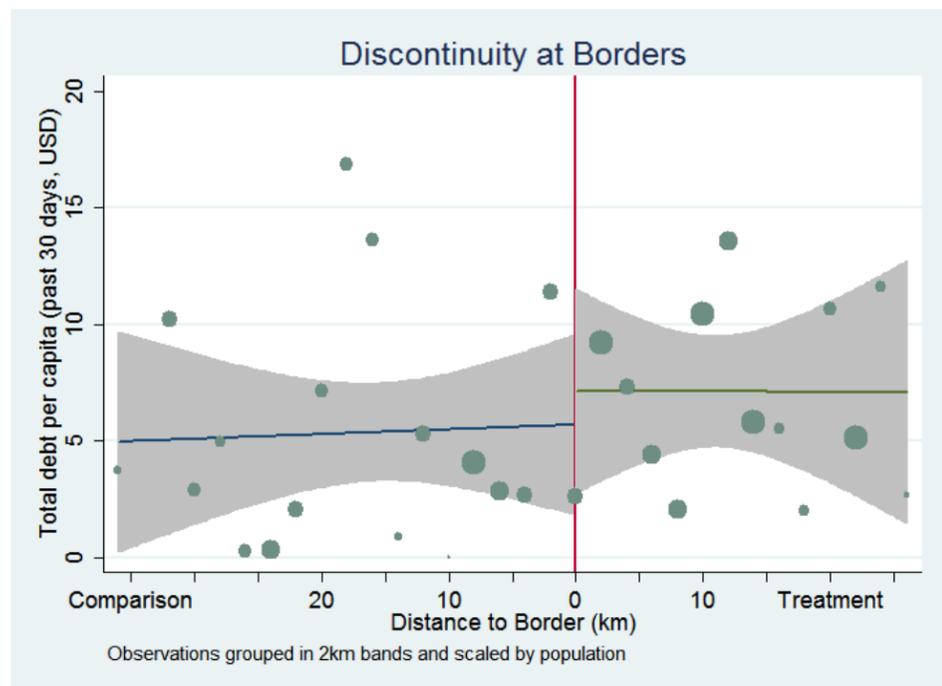


Figure F57: Regression Discontinuity Graph – Endline Worries About Food

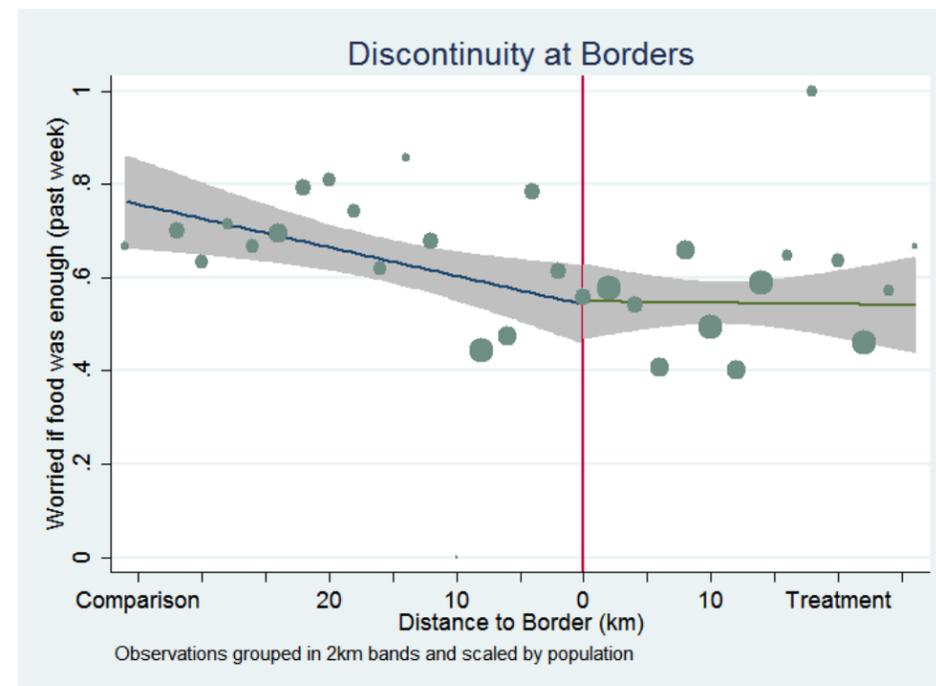


Figure F56: Regression Discontinuity Graph – Endline Total Earnings per Capita

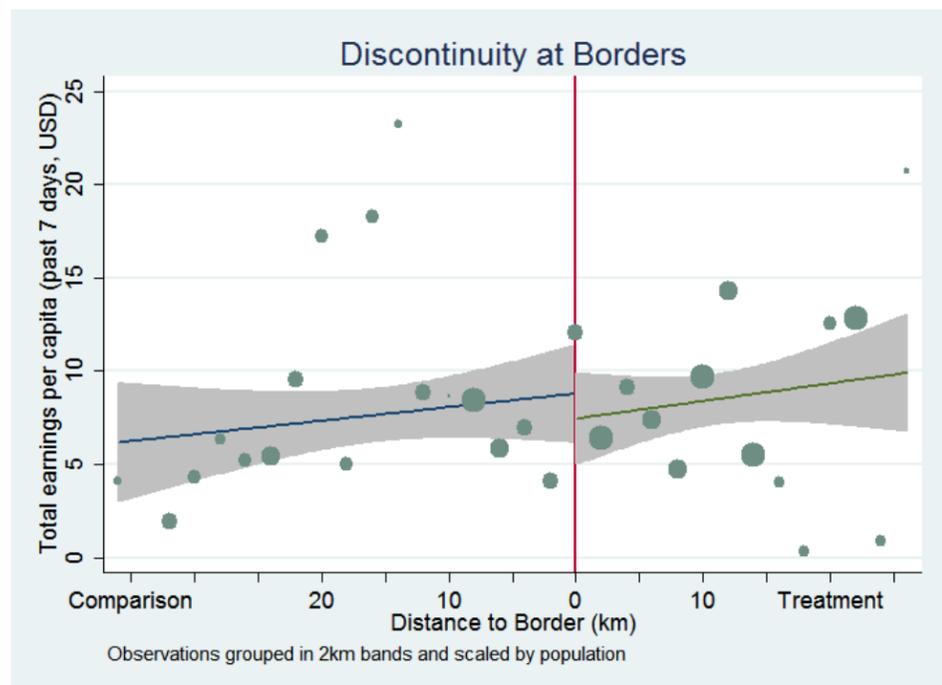


Figure F58: Regression Discontinuity Graph – Endline Skipped a Meal

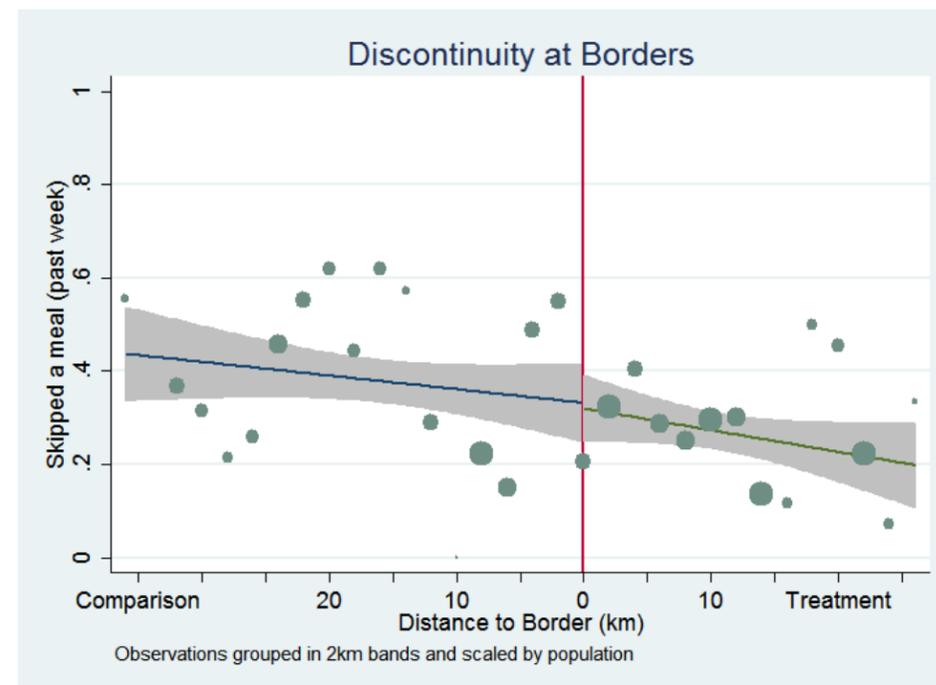


Figure F.59: Regression Discontinuity Graph – Endline Did Not Eat for a Day

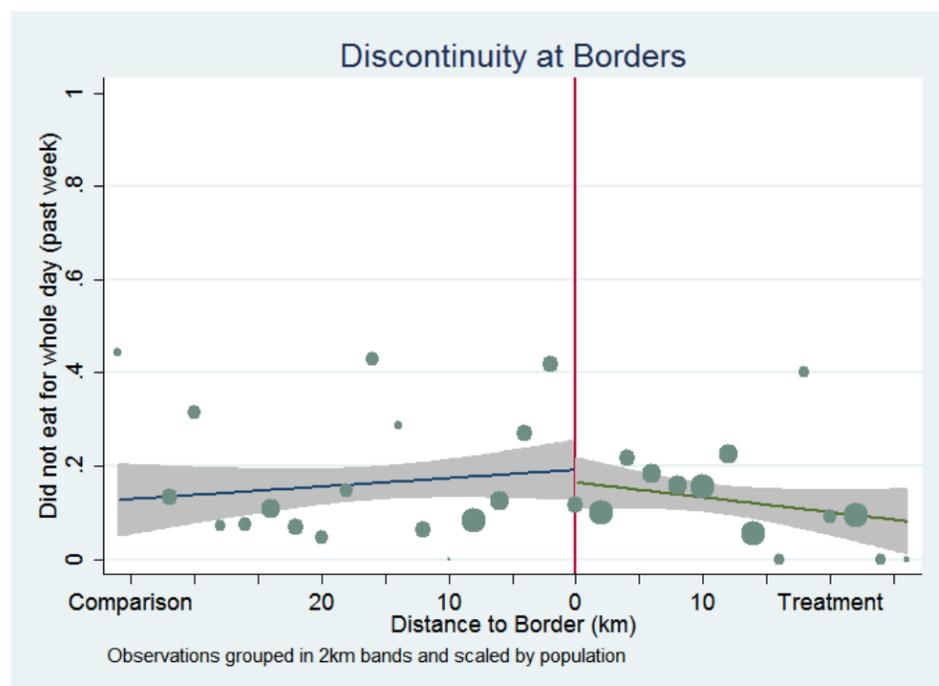


Figure F.61: Regression Discontinuity Graph – Endline Days Eating Grains

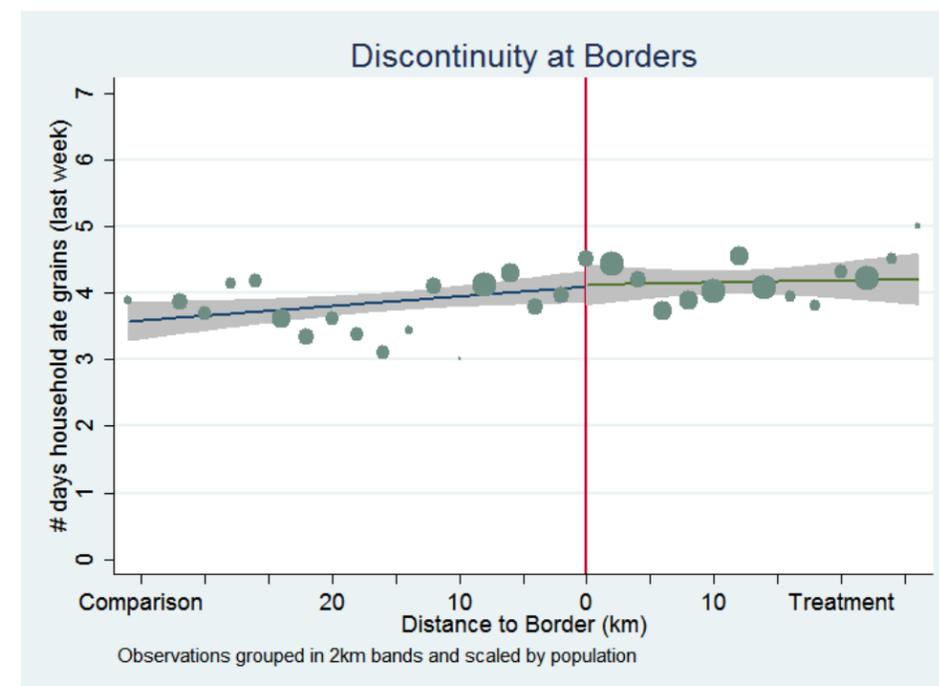


Figure F.60: Regression Discontinuity Graph – Endline Child Skipped a Meal

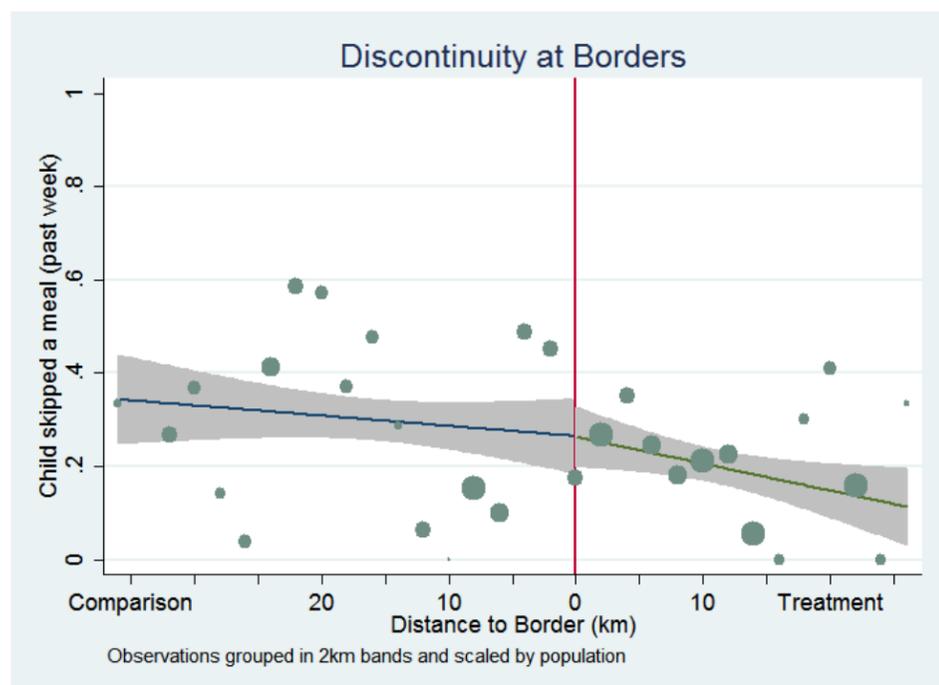


Figure F.62: Regression Discontinuity Graph – Endline Days Eating Beans

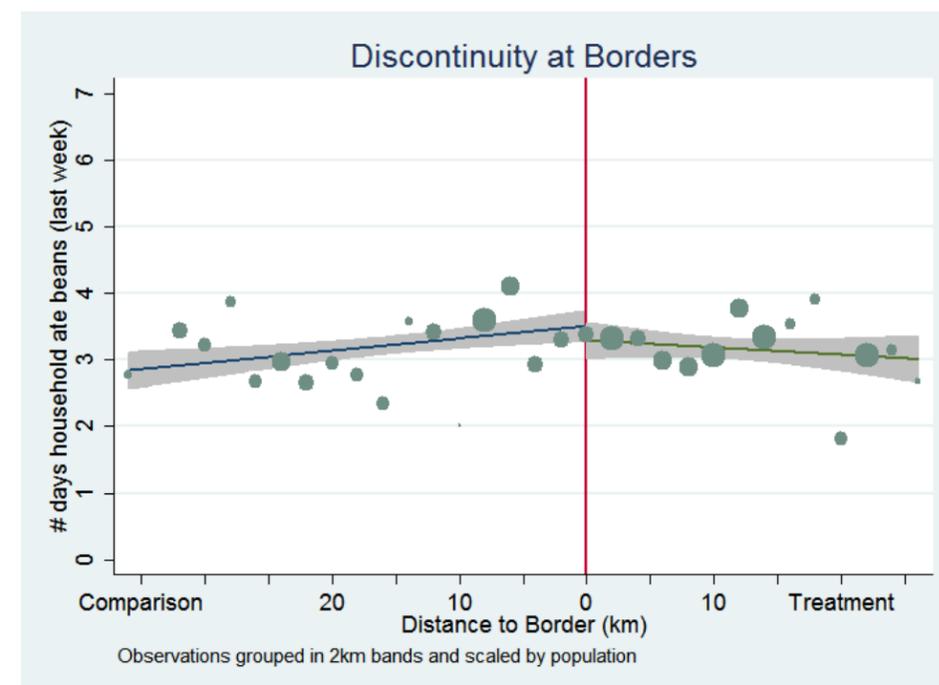


Figure F.63: Regression Discontinuity Graph – Endline Days Eating Vegetables

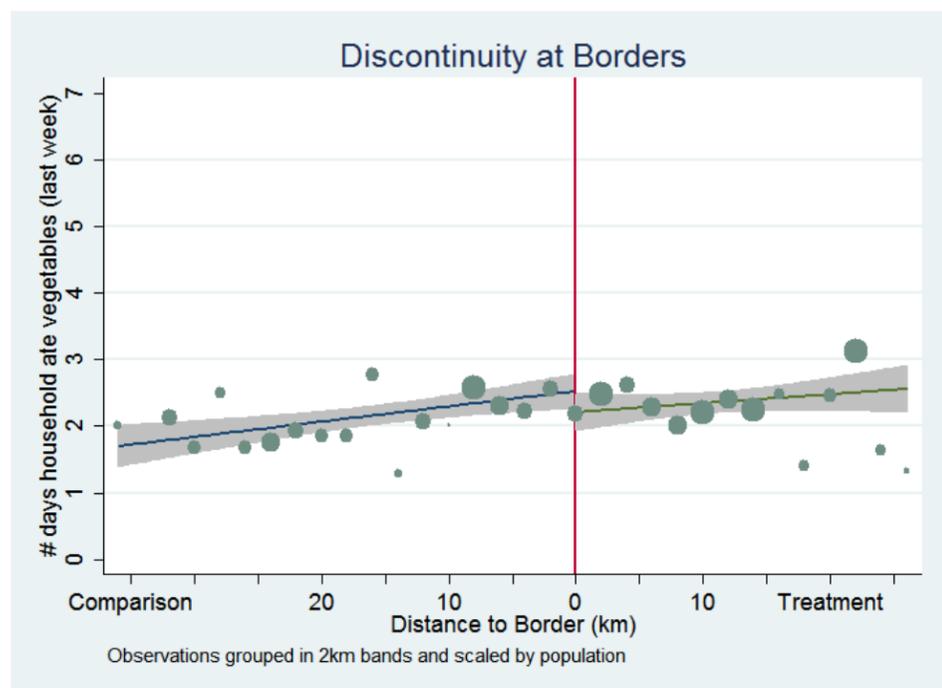


Figure F.65: Regression Discontinuity Graph – Endline Days Eating Meat

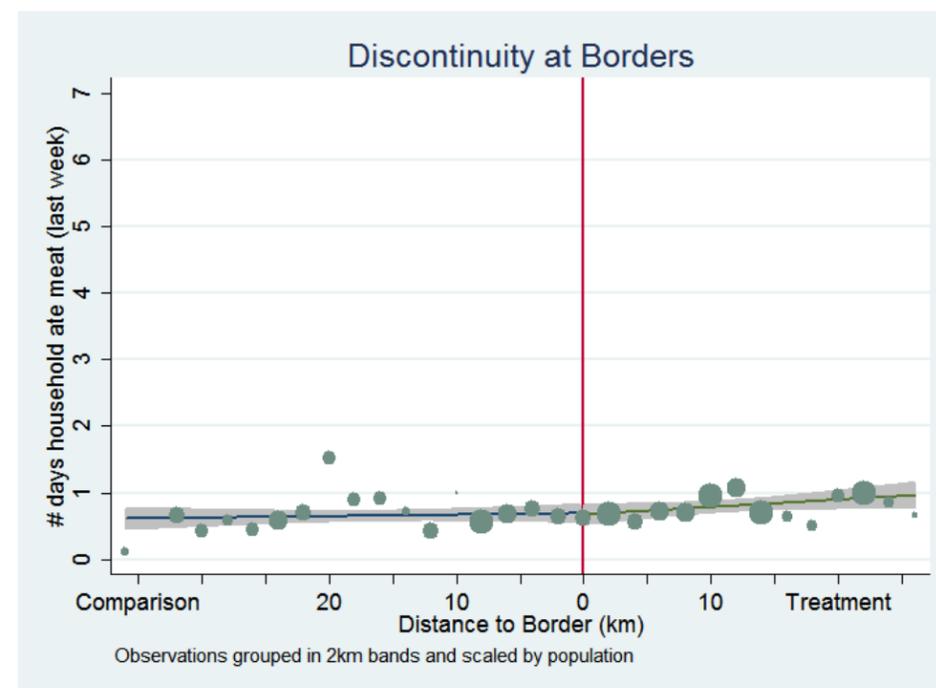


Figure F.64: Regression Discontinuity Graph – Endline Days Eating Fruit

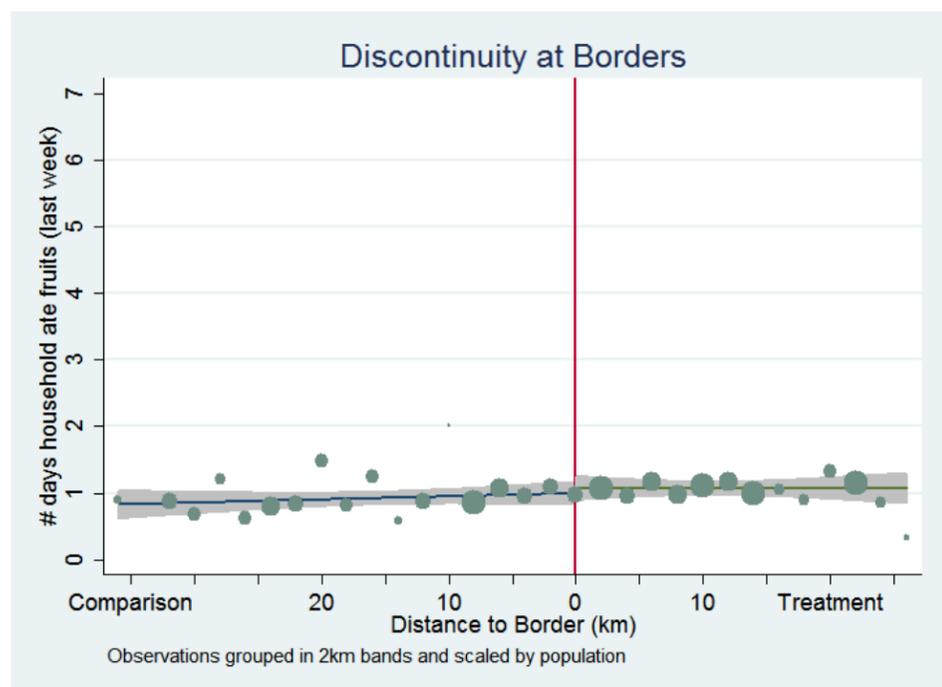


Figure F.66: Regression Discontinuity Graph – Endline Days Eating Eggs

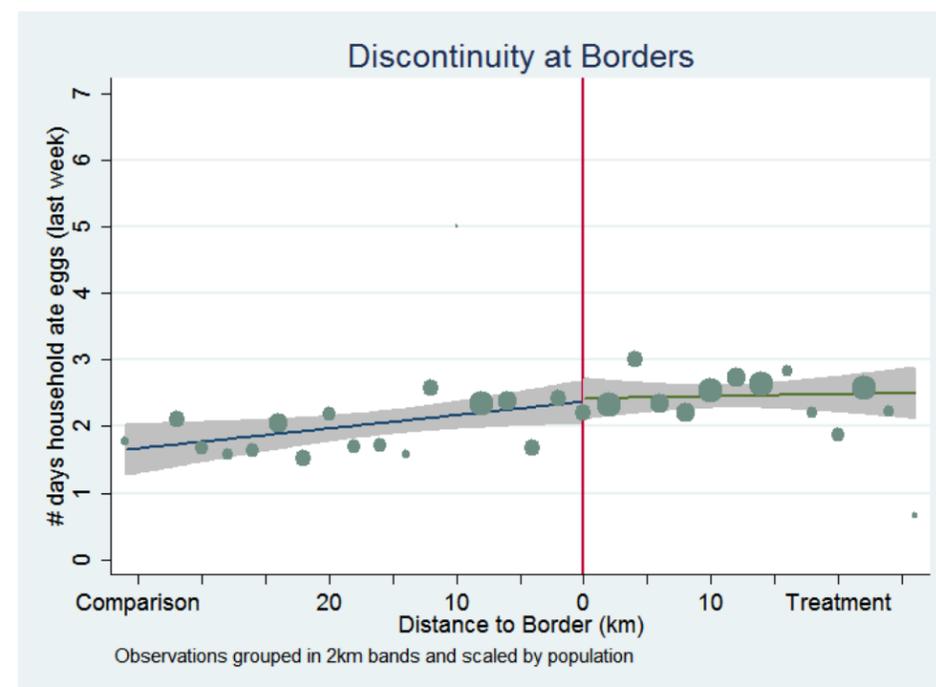


Figure F.67: Regression Discontinuity Graph – Endline Days Eating Dairy

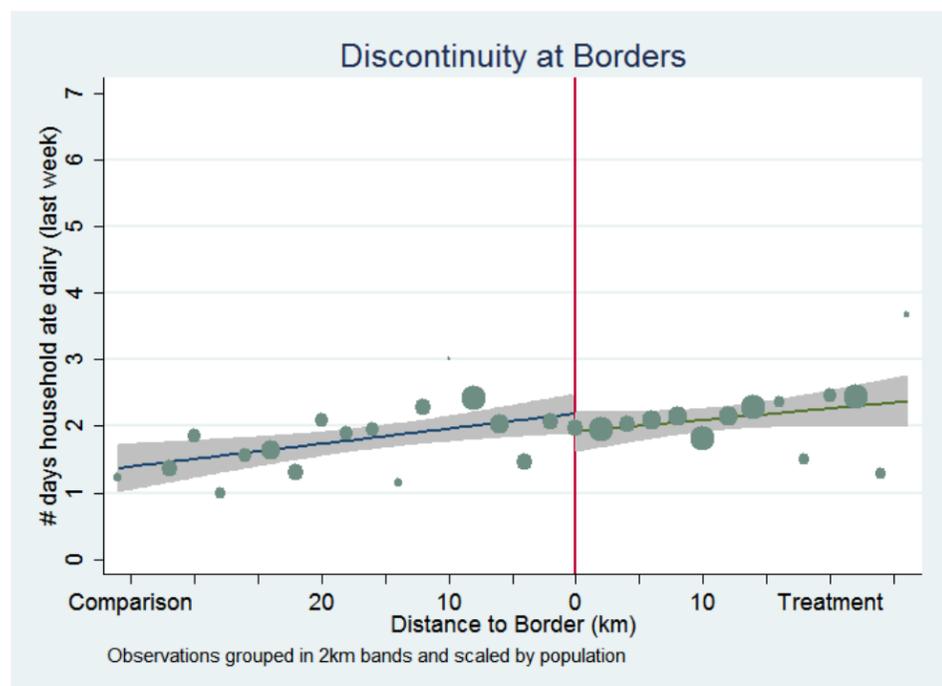


Figure F.69: Regression Discontinuity Graph – Endline Days Eating Sweets

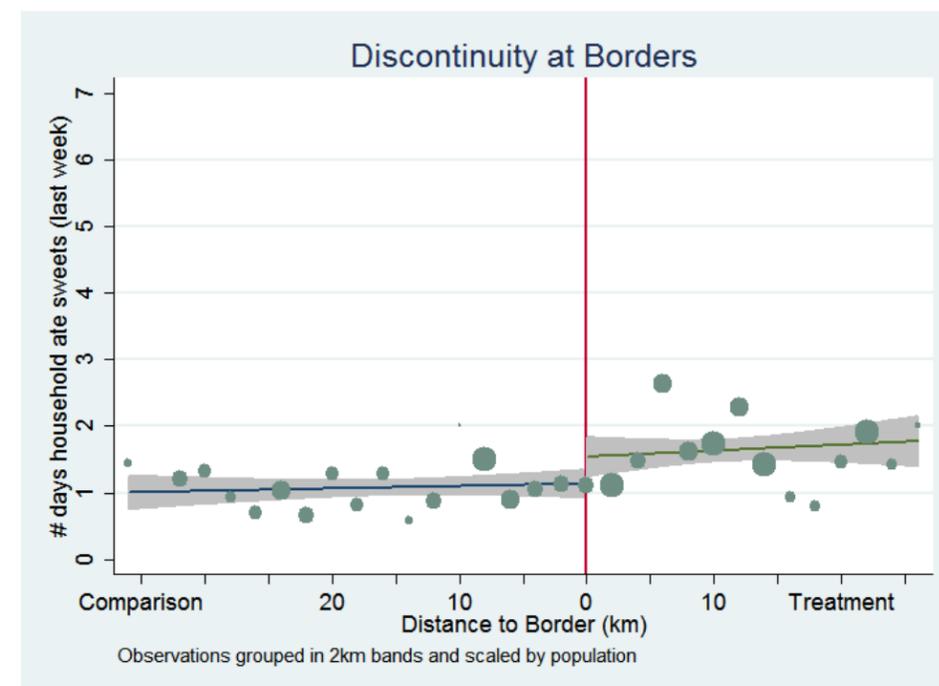


Figure F.68: Regression Discontinuity Graph – Endline Days Eating Fats

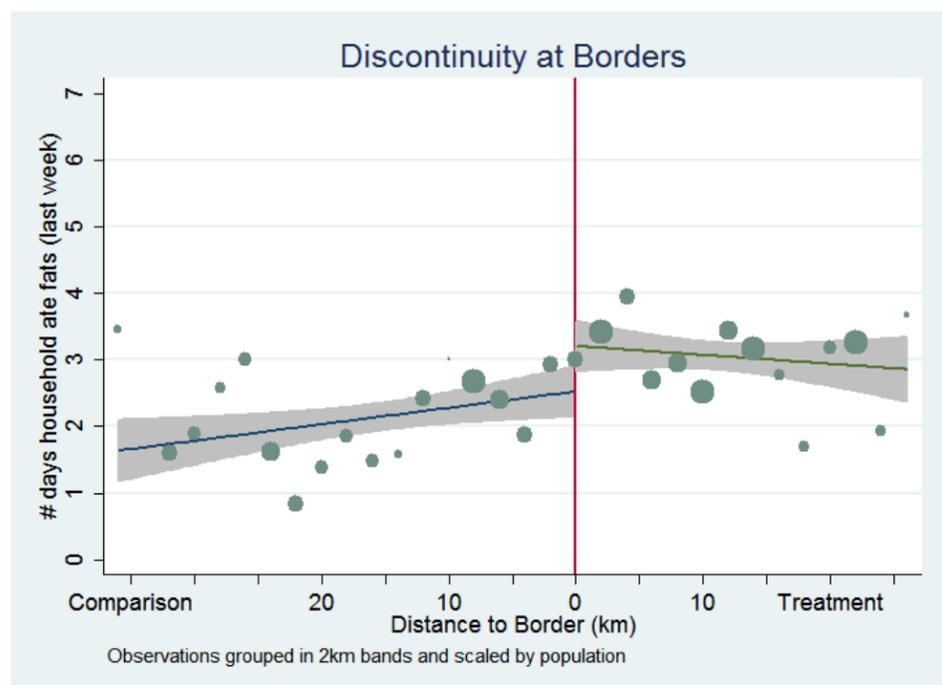


Figure F.70: Regression Discontinuity Graph – Endline Days Eating Condiments

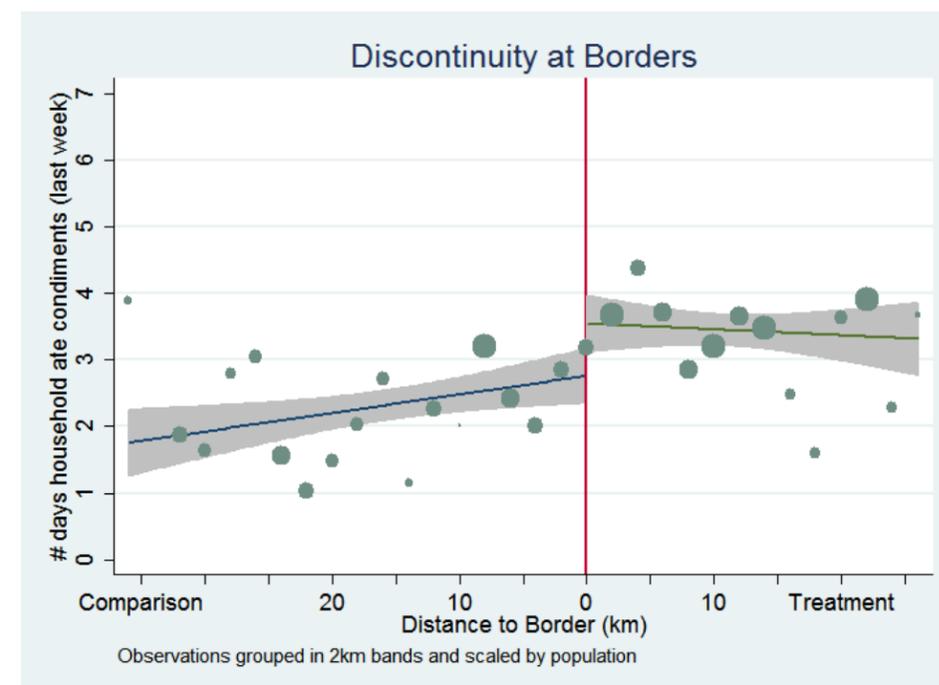
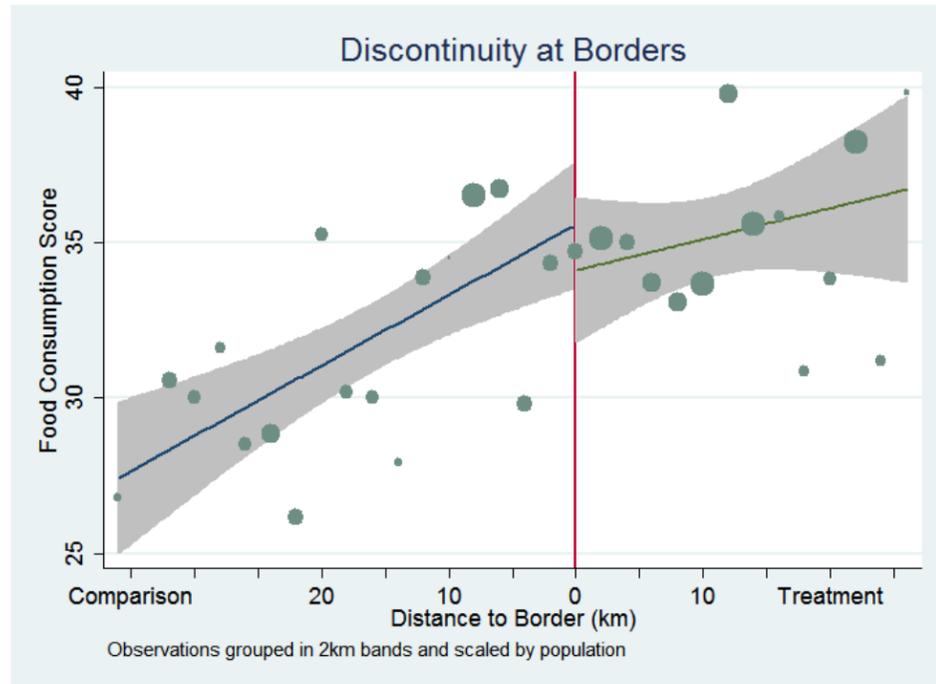


Figure F.71: Regression Discontinuity Graph – Endline Food Consumption Score





unicef 
for every child