ERF 2020
26TH Annual
Conference

Multi-Purpose Cash Assistance in Lebanon: Impact Evaluation on the Well-being of Syrian Refugees

Jad Chaaban, Nisreen Salti, Hala Ghattas, Wael Moussa, Alexandra Irani, Zeina Jamaluddine, and Rima Al-Mokdad

ECONOMIC RESEARCH FORUM
منتدى البحوث الاقتصادية

ERF 26th Annual Conference

Sustainable Development Goals (SDGs) as a Framework for MENA's Development Policy

Paper Submission

Multi-purpose cash assistance in Lebanon: Impact evaluation on the well-being of Syrian refugees

Jad Chaaban, PhD, Coordinator and Associate Professor, Applied Economics and Development Research Group, Department of Agriculture, Faculty of Agricultural and Food Sciences, American University of Beirut, Beirut, Lebanon

Nisreen Salti*, PhD, Associate Professor, Department of Economics, Faculty of Arts and Sciences, American University of Beirut, Beirut, Lebanon

Hala Ghattas, PhD, Interim Director and Associate Research Professor, Center for Research on Population and Health, Faculty of Health Sciences, American University of Beirut, Beirut, Lebanon

Wael Moussa, PhD, Research Scientist, Education Policy and Data Center/Research and Evaluation, FHI 360, Washington, DC, United States

Alexandra Irani, MSc, Project Manager, Department of Agriculture, Faculty of Agricultural and Food Sciences, American University of Beirut, Beirut, Lebanon

Zeina Jamaluddine, MSc, Instructor, Center for Research on Population and Health, Faculty of Health Sciences, American University of Beirut, Beirut, Lebanon

Rima Al-Mokdad, MA, Research Assistant, Department of Agriculture, Faculty of Agricultural and Food Sciences, American University of Beirut, Beirut, Lebanon

*Corresponding author

P.O.Box 11-0236 Riad El-Solh / Beirut 1107 2020 Lebanon

Tel: +9611350000 ext. 4068 Fax: +9611744460

Email: ns17@aub.edu.lb

JEL Classification: D60, I15, I32, I38, O12, O15

Abstract

The study aims to measure the impact on Syrian refugees in Lebanon of multi-purpose cash (MPC) assistance provided by the World Food Programme (WFP) and the United Nations High Commissioner for Refugees (UNHCR) in the short-term (less than 12 months), in the long-term (more than 12 months) and after it has been discontinued. The study employs a fuzzy Regression Discontinuity Design (RDD) on a three-wave repeated cross-section. Data was collected from 11,457 Syrian refugee households (~68,840 individuals), in 2018 and 2019 over three waves of data collection, at 6-month intervals. Findings reveal that the impact of MPC materialized across most dimensions of well-being in the long-term where MPC is found to lead to increases in total and food monthly household expenditures, reduced food insecurity among beneficiaries, an increase in access to sufficient drinking water, an increase in formal school enrolment, an increase in access to primary health care and an improvement in respondent mental health. Long-term MPC led to a decrease in male employment coupled with an increase in male job seekers, indicating that MPC may be increasing working males' ability to choose work with better conditions, a finding that was confirmed qualitatively.

Background and Motivation

By the end of 2018, the global forcibly displaced population reached 70.8 million, a substantial increase from 43.3 million in 2009. The majority of this increase is due to the conflict in Syria, particularly between 2012 and 2015 (United Nations High Commissioner for Refugees, 2019). Humanitarian crises affect an increasing number of people with the average crisis lasting more than nine years. This has led the volume and length of humanitarian assistance to grow significantly over the past decade (United Nations Office for the Coordination of Humanitarian Affairs, 2018), and to be increasingly directed toward protracted crises. At the same time, there has been an increase in humanitarian assistance in the form of cash transfers. In 2016, an estimated $2.8 billion in humanitarian assistance were disbursed through cash and vouchers, up 100% from 2014 (Cash Learning Partnership, 2018). This accentuates the need to improve the effectiveness and expand the outreach of cash interventions in humanitarian settings.

The case of Syrian refugees in Lebanon

Lebanon currently hosts the world's largest refugee population per capita. The Lebanese government estimates that nearly 1.5 million Syrian refugees are currently in the country, of which 916,113 are registered as refugees with the United Nations Higher Commissioner for Refugees (UNHCR) (UNHCR et al., 2019).

The majority of the Syrian refugee population in Lebanon lives in difficult and deteriorating socio-economic conditions, with 73 per cent living below the poverty line set at the Minimum Expenditure Basket equivalent to USD 114 per person per month, and 55 per cent living below the Survival Minimum Expenditure Basket equivalent to USD 87 per person per month (UNHCR et al., 2019).

Starting November 2017, the World Food Programme (WFP) joined UNHCR and other organizations in the delivery of multipurpose cash assistance (MPC, $173.5 per household per month) to eligible households over a 12-month period. The aim of the MPC programme is to bridge the gap for economically vulnerable households to reach a survival level of expenditures ($435/family/month) (Government of Lebanon & United Nations, 2019). This study was commissioned by the Cash Monitoring Evaluation Accountability and Learning Organizational Network (CAMEALEON) to assess the effectiveness of the MPC programme as a means to protect socio-economically vulnerable households from falling deeper into poverty and becoming increasingly exposed to shocks and risks. The programme and this study are not intended as part of policies to encourage the non-return of refugees.

Research questions

This paper presents one component of the CAMEALEON project aimed at measuring the short- and long-term impact of MPC assistance provided by WFP and UNHCR, over and above food assistance, as well as the impact of discontinuation from MPC, to Syrian refugees in Lebanon across multiple dimensions of well-being; including household expenditures, education, employment, access to healthcare, food security, housing, water, and sanitation. Specifically, the study tackles two main research questions:

1. How do variations in the duration of MPC affect multiple well-being dimensions?
2. How does MPC discontinuation impact Syrian refugee households?

Knowledge gap

The growth in humanitarian assistance is paralleled by a significant variation in comparative evidence on cash transfers. There is substantial evidence of the effectiveness of cash assistance in improving food security, but more limited evidence on its effectiveness for health, education, shelter and sanitation. There is a need to further develop the evidence base for the use of cash-based assistance, especially in humanitarian settings (World Bank, 2016) and how the latter can contribute to the measurement and achievement of SDG targets by 2030 by ensuring no population group is left behind.

While impact evaluations of cash assistance have been carried out in the context of Syrian refugees in Lebanon (Battistin, 2016; Boston Consulting Group & World Food Programme, 2017; De Hoop et al., 2018; C. Lehmann & Masterson, 2014; World Vision, 2018), this study is the first to analyse duration variability and discontinuation of cash assistance for multiple well-being dimensions. The study leverages data from 11,457 households from multiple waves of data collection, which constitutes one of the largest sample sizes among impact evaluations conducted in Lebanon to date.

Data and Methodology

The impact evaluation of the MPC programme uses a quasi-experimental fuzzy Regression Discontinuity Design (RDD), using data from ~11,457 Syrian refugee households (~68,840 individuals) collected in three waves, at 6-month intervals (~4,000 households per wave) in July/August 2018, February/March 2019, and July/August 2019.

For Syrian refugee households, eligibility for MPC assistance is determined as follows: WFP and UNHCR rank households according to their score on a proxy means test (PMT) formula predicting household

expenditure levels.[1] WFP follow a bottoms-up approach to distribute MPC (equivalent to $173.5 per household per month) to 23,000 households by including in the programme households starting from the lowest scores and moving up the scores until the allocated funding is fully disbursed. UNHCR employs a geographical bottoms-up targeting and keeps including households in the MPC programme from most vulnerable in each geographic region until it reaches the region's allocated proportion given its allocated budget. UNHCR reaches an estimated 33,000 households and the point at which the funding is fully disbursed creates a region-specific artificial cut-off point.

This creates a quasi-natural experiment around the last eligible households, as households on either side of the cut-off are plausibly similar, and any difference in outcomes between them can be attributed to the causal impact of MPC (Imbens & Lemieux, 2008). In principle, all those whose score is below the cut-off score are offered MPC, while all those above it are not. However, in our case this assignment is fuzzy, because in some cases, the score of the last household included in the programme was higher than the scores of some excluded households due to the use of geographical targeting quotas by UNHCR but not WFP.

Sample extraction

The sampling frame for this study consisted of households just above and just below these threshold scores. The validity of the approach is contingent on there being no systematic difference in observable baseline characteristics of households on either side of the cut-off.

The North, Bekaa, and Mount Lebanon regions include 85 per cent of the total Syrian refugee population and 94 per cent of the MPC beneficiaries. Accordingly, the sample for each wave was extracted from and is representative of those regions. Beirut and the South were excluded due to the negligible proportion of households they include and for logistical reasons. An equal proportion of households was extracted from either side of the regional cut-off lines per wave (for a total of ~4,000 households per wave). A bandwidth of +/-10 was used around the discontinuity, keeping in mind the generalizability of results while ensuring both groups are similar. Probability proportional to size was used to extract the sample (i.e. bigger cadastres

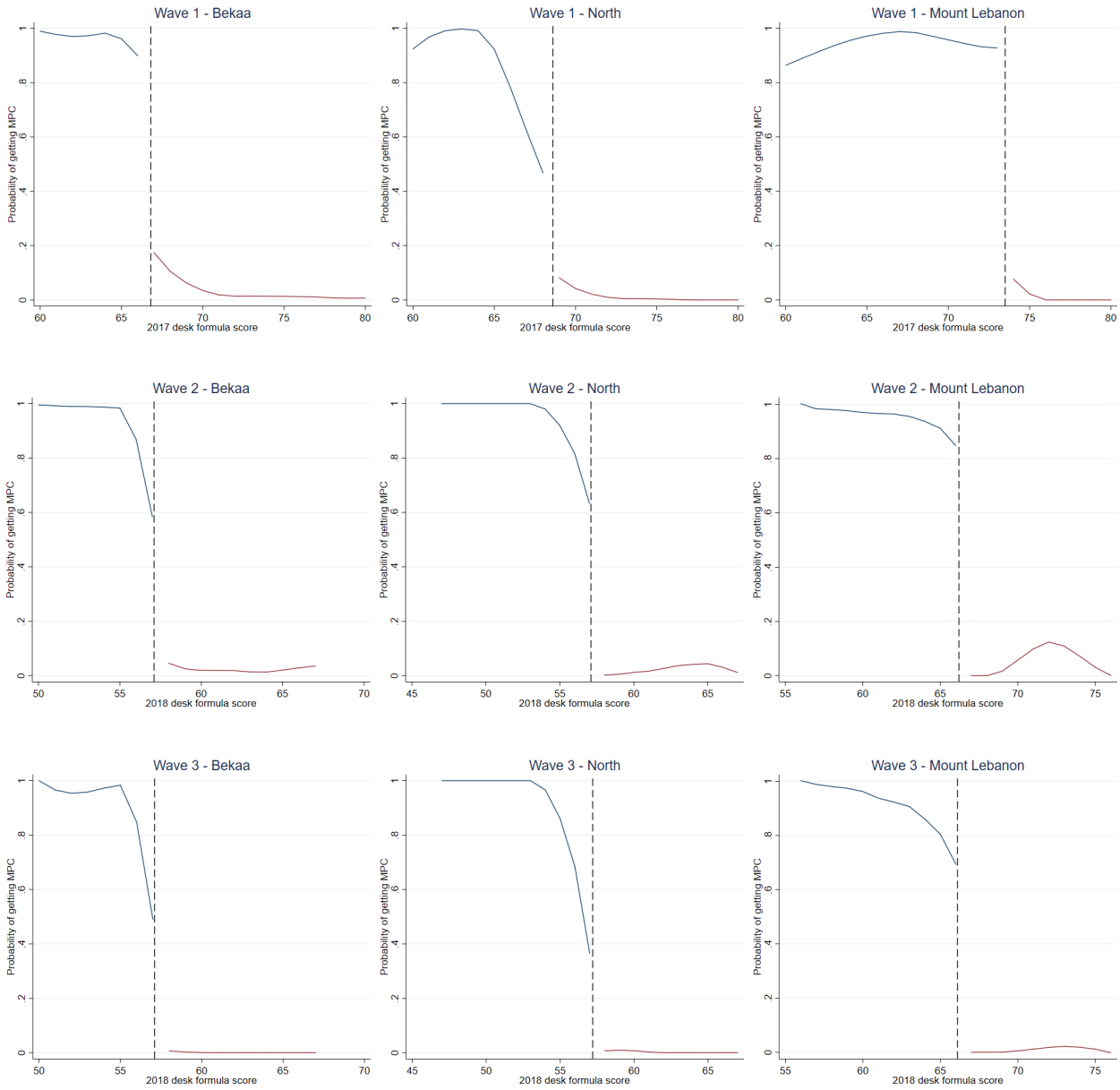
[1] The PMT formula is based on a regression of monthly household expenditure on a set of socio-demographic characteristics using a nationally representative multi-purpose household survey called the Vulnerability Assessment of Syrian Refugees (VASyR). The set of predictors include socio-demographic household characteristics that are included in the UNHCR registration database, and are updated on a regular basis. The regression coefficients are thus used to predict the household expenditure for the entire population of Syrian refugee households in the UNHCR registration database. The regression underlying the PMT is re-estimated annually, using the yearly VASyR survey data.

had a bigger probability of being selected and included a higher number of households to be interviewed than smaller selected cadastres).

Regional cut-off lines by wave

Using structural break tests, optimal cut-off lines were selected by wave and region to ensure the biggest discontinuity in the probability of MPC receipt at the cut-off. Geographic differences in cut-off lines were driven by the geographical targeting employed by UNHCR to select MPC beneficiary households.

Figure 1 Probability of receiving MPC by region and wave



As such, in wave 1, the regional cut-off lines, based on the PMT formula scores for that year that lead to the biggest discontinuity in access to MPC were estimated to be $66.8, $68.6 and $73.5 in the Bekaa, North, and Mount Lebanon regions respectively. For wave 2, the regional cut-off lines shifted to $57.1 for the North and the Bekaa and $66.2 for Mount Lebanon and for wave 3, the regional cut-off lines shifted to $57.1 for the Bekaa, 57.2 for the North and $66.1 for Mount Lebanon.

Table 1 Region and wave specific MPC cut-off lines

	MPC cut-off line		
	Wave 1	Wave 2	Wave 3
	Score 2017	Score 2018	Score 2018
Bekaa	66.8	57.1	57.1
North	68.6	57.1	57.2
Mount Lebanon	73.5	66.2	66.1

MPC Treatment Groups

This study looks at two cash cycles that started in November 2017 and November 2018, each spanning over a 12-month period. The yearly re-estimation of the PMT targeting formula in between both cash cycles led to a sizeable shift in the MPC beneficiary households. Given the timing of our three sample waves, this exogenous shift in eligibility for the programme uniquely positioned this study to explore the impact on MPC treatment groups with different exposure to the programme compared to the group that was not eligible to receive MPC in either of the two rounds. For practicality, we group participants households with different lengths of treatment into three categories:

- Discontinuation from MPC: Households from waves 2 and 3 are combined in this group to measure the impact of having received MPC for 12 months in the first cash cycle then getting discontinued from MPC for 4 or 10 months.
- Short-term receipt of MPC (12 months or less): Households from the three waves are combined in this group to measure the impact of receiving 4, 9 or 10 months of MPC.
- Long-term receipt of MPC (more than 12 months): Households from waves 2 and 3 are combined in this group to measure the impact of receiving 16 or 22 months of MPC.

Each of these treatment groups, in turn, is compared to a control group that has never received MPC (households from all 3 waves of data).

Survey Instrument

A standard multi-purpose household survey instrument is used and includes both household-level and individual-level questions.

A. Household-level modules

The questionnaire includes a housing, water and sanitation module, a food security and food-related coping strategy module, an assets module, as well as expenditure and income modules. Food security was measured using the WFP food consumption and coping strategies modules for Lebanon as well as the Food and Agriculture Organization (FAO) food insecurity experience scale (FIES) (Food and Agriculture Organization, 2016) and the household dietary diversity score (HDDS) (Food and Agriculture Organization, 2010).

B. Individual level and respondent level modules

Interviewed households reported on the demographic characteristics of their members, education (achievement and enrolment), and employment (using the International Labour Organization (ILO) definition for labour force indicators). An extensive health module was developed and includes health outcomes (chronic illness, disability, acute illness), access to primary healthcare and hospitalization and a mental health module.

The questionnaire was designed using SurveyCTO, a digital data collection platform for mobile data collection and implemented using the corresponding Android-based application SurveyCTO Collect.

Ethical Approval

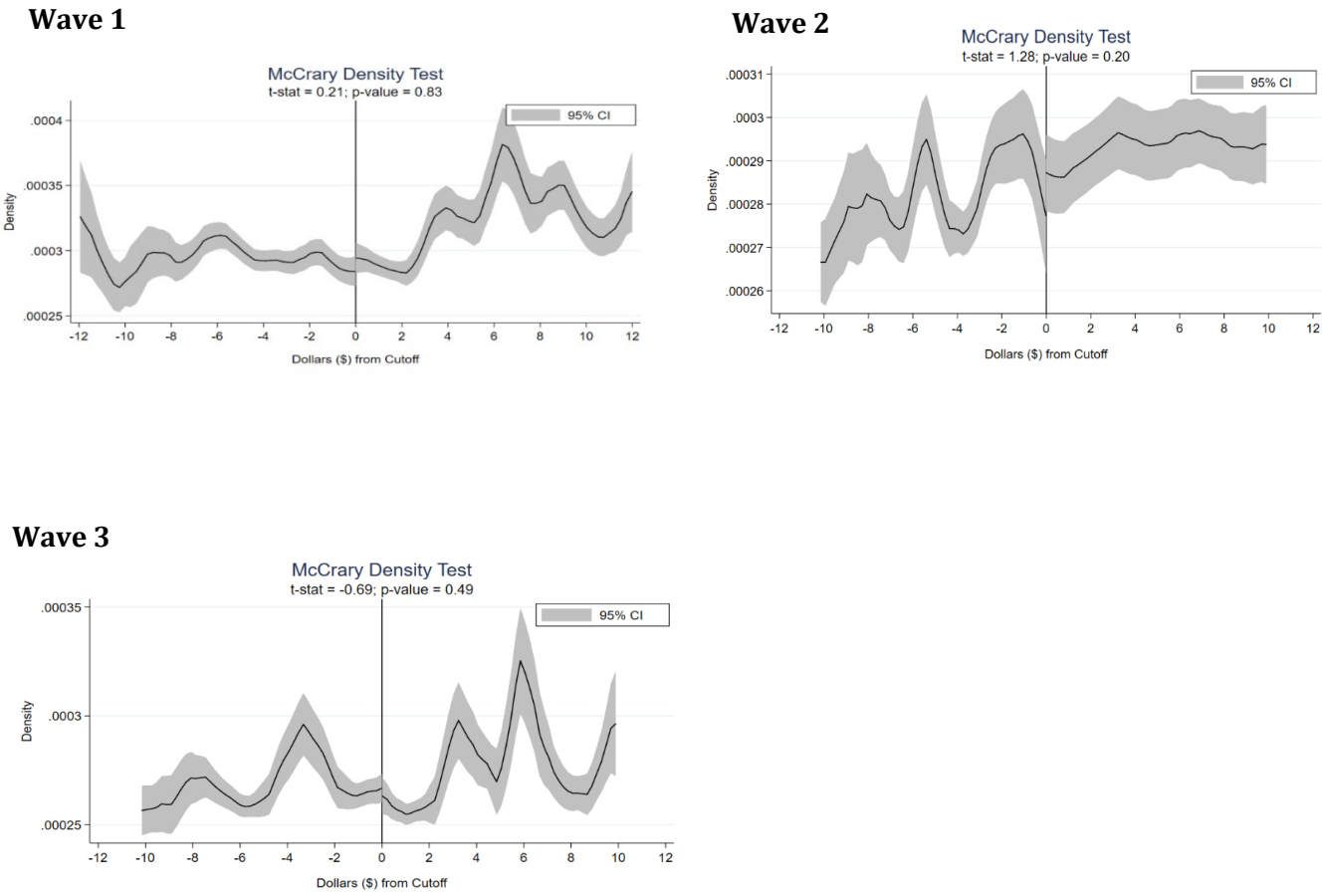
The research protocol (research design, instrument, and data-collection procedures) was approved by the AUB Institutional Review Board (IRB) and informed consent was sought from the respondents.

Empirical Strategy

Given that compliance with the treatment assignment was not perfect, the model employs a fuzzy RDD run on the three-wave repeated cross section. The advantages of using RDD are the fact that estimators of the local average treatment effect are unbiased around the cut-off score or threshold (Imbens & Lemieux, 2008). This estimate can be interpreted as causal if the core RDD assumptions hold, namely that (i) the running variable (in this case, the PMT formula score) does not exhibit discontinuity at the threshold, and therefore, shows no sign of score manipulation, and (ii) observable household characteristics are also continuous at the treatment cut-off line.

The running variables used in our analysis, the 2017 and 2018 PMT scores are not prone to human manipulation. The PMT formula does not rely on household visits data, but instead is based on regression coefficients and data from the UNHCR registration database. We centre the PMT scores for each region in 2017 and 2018, separately at zero. To test for a discontinuity in the running variables, we use the McCrary (2008) density test, which showed no significant discontinuity in the final analyses run on the data from the 3 waves (Figure 2).

Figure 2 McCrary density tests by wave



For our outcomes of interest *Y*, we calculate the fuzzy RDD Local Average Treatment Estimator (LATE) as follows:

$$\lim_{\epsilon \to 0} \frac{E(Y|score=c-\epsilon) - E(Y|score=c+\epsilon)}{Pr(MPC|score=c-\epsilon) - Pr(MPC|score=c+\epsilon)} \quad [1]$$

Each component of the LATE is obtained through a non-parametric estimation of *Y* (for the numerator) and of MPC (for the denominator) as a separate function of the score on each side of the cut-off *c*. The functions on each side of the cut-off are fitted using a kernel-weighted local polynomial regression.[2]

Balance checks

For our regression specification to yield causal estimates for our outcomes of interest, observable household characteristics have to be continuous at the point of discontinuity in the running variable (our treatment cut-off line). Balance checks allow us to verify the existence of possible differences between our two groups of interest in key socio-demographic variables and other observable characteristics.

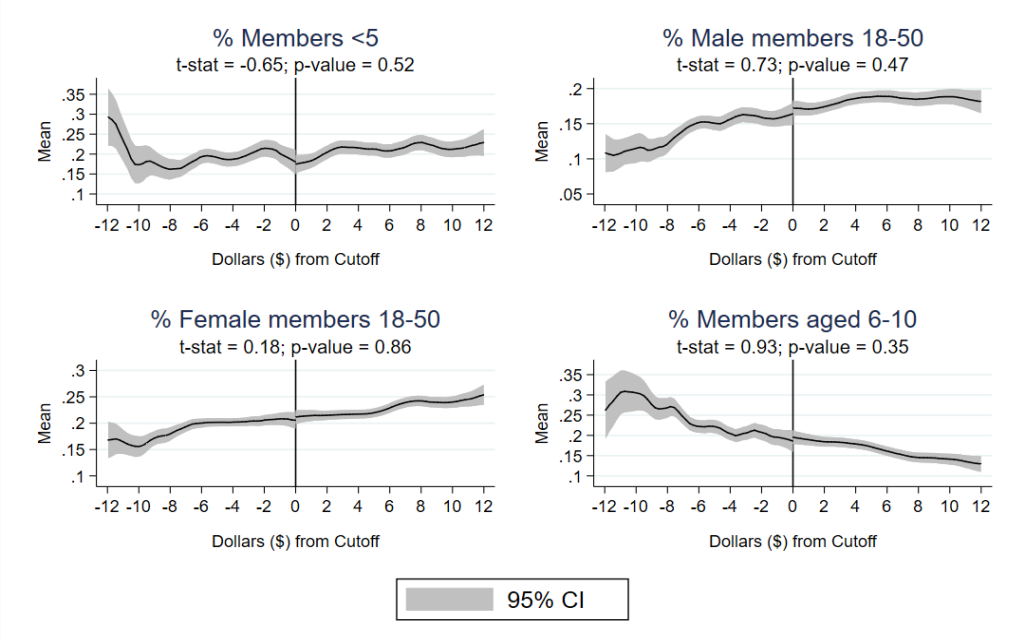
The list of tested variables include head of household characteristics (age, above 60, sex, education, marital status, has a medical condition, has a disability), whether the household includes more than one registered UNHCR case, and whether the household had access to other types of cash transfers (winter cash assistance, WFP food assistance, UNICEF cash transfers).

The list also includes most of the variables used to predict the households' 2017 and 2018 PMT scores, including arrival year to Lebanon of the principal applicant, household size, the dependency ratio (number of members below 15 or above 64 divided by the number of working age members), indicator variables for the presence of more than 3 dependents in the household, having at least 1 dependent with a disability, share of members with no education, and the share of members that are below 5, between 18 and 50 years of age (both males and females), between 6 and 10 years of age, between 11 and 17 years of age, between 18 and 60, above 60, have a disability, and members above 60 with a medical condition.

None of the tested variables were found to be discontinuous for the wave 1 sample around the cut-off at the 5 per cent significance level. Three of the variables were found to be discontinuous for the wave 2 sample (household size, dependency ratio, more than 3 dependents in the HH) and one for the wave 3 sample (share of members above 60) but the difference in means between the groups above and below the cut-off line was negligible and would not affect the identification of the treatment effect.

[2] The standard error of the LATE estimator is estimated by applying the delta method to the estimated standard errors of each component of [1].

Figure 3 Example of wave 1 balance checks



Sample Description

Over half of the households from our target population are situated in the Bekaa (55.6 per cent), followed by 28.5 per cent in the North and 15.9 per cent in Mount Lebanon with high degrees of variation by treatment group (table 2). We find that the head of household characteristics such as age, marital status and disability do not vary by treatment group averaging about 40.2 years of age, with an 86.3 per cent marriage rate and 6.1 per cent disability rate.

We see some degree of variation in terms of household size, gender and education of the head of household. We find that the household size increases from 5.5 to 6.6 as we move from the control to the long-term MPC group. The percentage of female-headed households averages about 18.7 per cent while the percentage of heads who did not complete intermediate education averages 68.5 per cent.

We also find that gender, age and disability status of the individuals in our sample do not vary by treatment group and average 51.5 per cent, 19.2 years and 3.7 per cent respectively.

Table 2 Sample summary statistics by treatment group

	Control	Discontinued from MPC	Short-term MPC	Long-term MPC	Total
Household-level characteristics					
Bekaa	0.426	0.790	0.473	0.751	0.556
	0.49	*0.41*	*0.50*	*0.43*	*0.50*
North	0.366	0.107	0.334	0.196	0.285
	0.48	*0.31*	*0.47*	*0.40*	*0.45*
Mount Lebanon	0.208	0.103	0.192	0.053	0.159
	0.41	*0.30*	*0.39*	*0.22*	*0.37*
Household size	5.525	5.931	6.219	6.526	5.933
	2.08	*1.76*	*2.11*	*1.84*	*2.03*
Female-headed household	0.160	0.207	0.182	0.239	0.187
	0.37	*0.41*	*0.39*	*0.43*	*0.39*
Head of household is married	0.875	0.856	0.875	0.825	0.863
	0.33	*0.35*	*0.33*	*0.38*	*0.34*
Age of head of household	40.276	39.863	40.190	40.186	40.172
	11.14	*8.96*	*9.65*	*9.12*	*10.12*
Head of household has a disability	0.065	0.052	0.064	0.056	0.061
	0.25	*0.22*	*0.24*	*0.23*	*0.24*
Head of household did not complete intermediate education	0.678	0.638	0.701	0.724	0.685
	0.47	*0.48*	*0.46*	*0.45*	*0.46*
Observations	**4331**	**1709**	**2989**	**2428**	**11457**
Individual-level characteristics					
female	0.511	0.511	0.516	0.524	0.515
	0.50	*0.50*	*0.50*	*0.50*	*0.50*
Married (age 12+)	0.586	0.519	0.541	0.473	0.543
	0.49	*0.50*	*0.50*	*0.50*	*0.50*
Age	20.106	19.126	18.704	18.268	19.240
	16.81	*15.54*	*15.79*	*15.06*	*16.04*
Has a disability	0.041	0.032	0.037	0.033	0.037
	0.20	*0.18*	*0.19*	*0.18*	*0.19*
Did not complete intermediate education (age 15+)	0.854	0.829	0.883	0.895	0.864
	0.35	*0.38*	*0.32*	*0.31*	*0.34*
Observations	**23646**	**10048**	**19174**	**15986**	**68854**

Notes: Figures in the table correspond to sample means and standard deviations (in italic) using sampling weights.

Findings and discussion

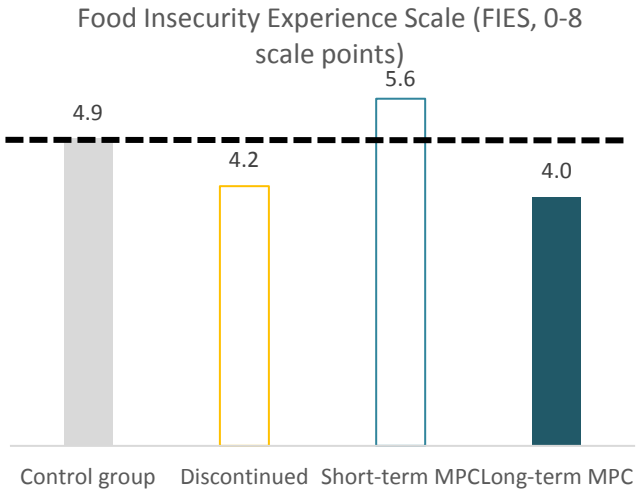
We present in this section a selection of the main findings obtained by estimating equation [1]. A full set of results is available in the final report of this project (Chaaban et al., 2020). For each of the outcomes we investigate, we present the average value for that outcome across each of our treatment groups (discontinued, short-term and long-term MPC), and compare each to the control group that has never received MPC.

Food security

Food insecurity was measured using households' reliance on emergency coping strategies and the Food Insecurity Experience Scale (FIES), a Food and Agriculture Organization validated experiential measure of severity of food insecurity (Ballard, Kepple, & Cafiero, 2013). This indicator is based on responses to eight questions about the constraints households face when trying to obtain adequate food. The scale can take values from 0 to 8, with 8 indicating the highest level of experienced food insecurity.

In the long-term, MPC led to a significant decrease in household food insecurity experience as reported using the FIES (Figure 4). Food insecurity experience in those receiving long-term MPC decreased significantly by 0.9 scale points from 4.9 to 4 (*p-value= 0.051*). A decrease of 1 point out of eight in this scale is indicative of the significant improvement in food security of this population in the long-term.

Figure 4 Impact of MPC on FIES (n=11,401 HHs)



Note: Colour-filled bars indicate statistically significant results at 10% significance levels.

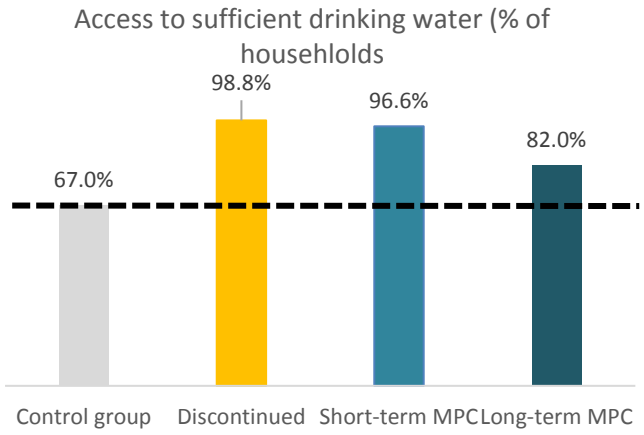
These findings attest to the importance of MPC for the sustained improvement of food security outcomes in the long-term. Results from this study are aligned with previous evidence from Lebanon. The Lebanon Cash Consortium (2017) found a decrease in the use of negative food-related coping strategies among beneficiary households, specifically in the number of days household members resorted to borrowing food and the number of days the household resorted to eating elsewhere. The IRC report (C. Lehmann, & Masterson, D., 2014) found a significant decrease in relying on less preferred foods, reducing the number of meals per day, and restricting the consumption of adults so children can eat.

Housing, water, and sanitation

Cash transfers, through an increase in household income, are hypothesized to allow households to invest in their living environment through enabling them to meet their rent payments, to move to a residence with better living conditions, and access clean drinking water and improved sanitation facilities (Harvey & Pavanello, 2018).

No significant impact was detected on changes in household rent expenditures and residential housing for any of the treatment groups. The share of households reporting sufficient access to drinking water (Figure 5) was significantly higher for all treatment groups compared to the control group (15 to 32 percentage point significant increase above the control group level of access at 67 per cent of households) (*p-value for the discontinued, short-term and long-term respectively are 0.006, 0.046 and 0.023*).

Figure 5 Impact of MPC on access to sufficient drinking water (n=11,457 HHs)



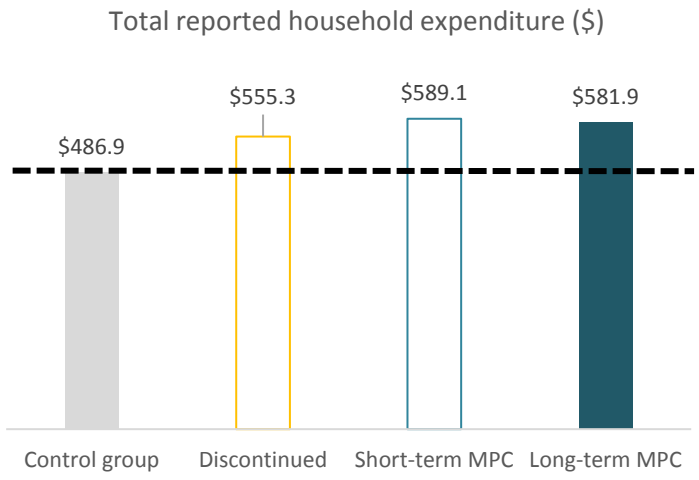
Note: Colour-filled bars indicate statistically significant results at 10% significance levels.

While our estimation exercise compares each treatment group to the control group, and does not allow for a statistical comparison of any treatment group to another, the smaller magnitude of the effect in the long-term group could be due to a shift in behaviour and is worth investigating in future studies. No significant results were observed for other water and sanitation outcomes, such as residence with toilets located inside the dwelling, or access to sufficient washing and cooking water, as these would probably require access to municipal services, and water and sanitation pipes that cannot be secured short of the household changing dwellings altogether.

Household expenditure

Figure 6 shows that MPC led to a significant increase in total reported monthly household expenditure (as estimated by respondents based on the past month taking into account debt repayment) from an average of $486.90 for households in the control group to $581.90 for households receiving long-term MPC (*p-value 0.009*).

Figure 6 Impact of MPC of total reported household expenditure (n=11,109 HHs)



Note: Colour-filled bars indicate statistically significant results at 10% significance levels.

Receiving MPC led to a significant increase in food expenditure for the long-term MPC group. The average monthly food expenditure for the control group was $216.10 and increased by $32.70 for the long-term MPC group (*p-value 0.065).* No significant impact was detected for other major household expenditures, including rent and health.

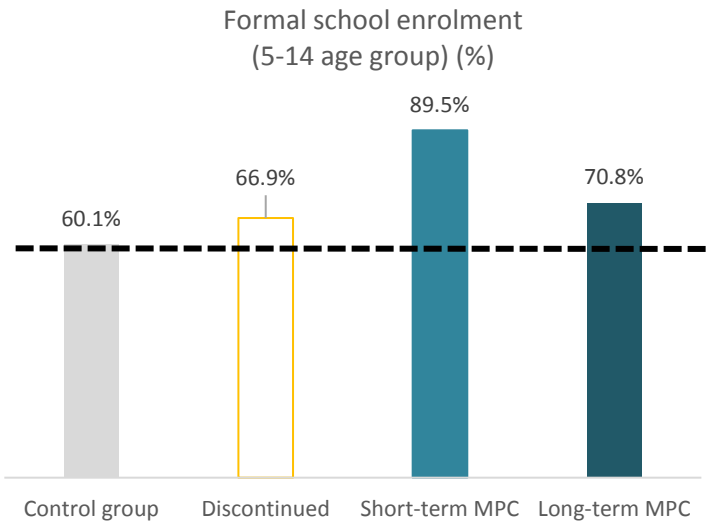
Similarly to findings in this study, Battistin (2016) reports that the Lebanon Cash Consortium (LCC) cash assistance caused a significant increase in total well-being expenditure (the summation of food, water, health, hygiene and housing expenditures) of Syrian refugees in Lebanon.

Education

Cash transfers are hypothesized to increase access to education. By increasing income and reducing household liquidity constraints, households are better able to cover direct and indirect costs associated with school enrolment and attendance. Cash transfers can also help cover part or all of the forgone opportunity costs incurred from children going to school such as forgone earnings (from child labour or children helping in house chores) (Barrientos, 2012; Bastagli et al., 2016; Deaton, 1992).

The measured effect of MPC on formal enrolment among children aged 5-14 at a public or private institution (Figure 7) is positive for the short- and long-term MPC treatment groups and for both genders. Formal enrolment increased from 60.1 per cent among the control group to 70.8 per cent in the long-term MPC group (*p-value 0.063*).

Figure 7 Impact of MPC on formal school enrolment (n=25,332 individuals)



Note: Colour-filled bars indicate statistically significant results at 10% significance levels.

The significant impact of MPC on formal enrolment in the short-term, an impact which persisted in the long-term, was an indication that cash assistance has supported households in overcoming some of the hurdles to enrolling their children in school. Previous evidence from Lebanon from the International Rescue

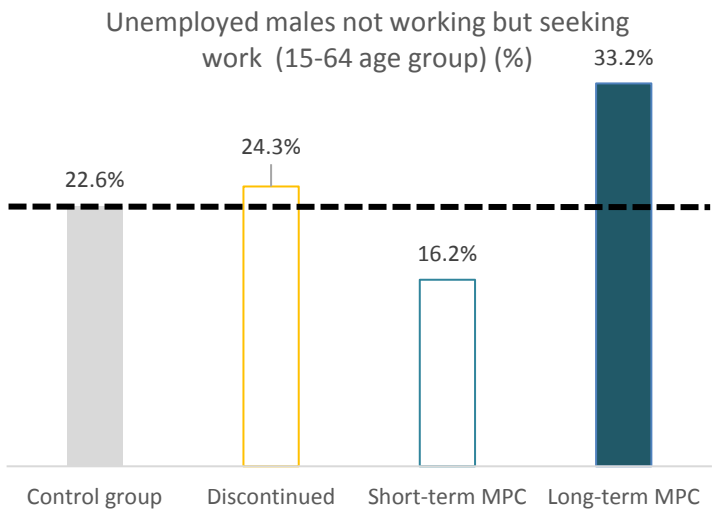
Committee (2014) found that children from households receiving cash assistance were 6 percentage points more likely to be enrolled in school.

Employment

Participation in labour and the number of hours worked by the household are directly affected by cash assistance in their potential to generate income. Two opposing views emerge when evaluating the direction of the impact of cash on employment. Economic theory considers that an increase in cash leads to a decrease in work activity as the extra cash is considered a disincentive to work. Opposing views consider that the improvement in health and nutritional status of cash beneficiaries would facilitate increased labour market participation. Cash assistance is hypothesized to cause shifts in labour types and labour patterns. Cash has been known to lead to a decrease in the potential of participating in low-paid, dangerous or undesirable labour activities, or in low-risk, but low-profit, activities. Other expected shifts in the patterns of employment include the reallocation of labour from farm to non-farm activities and non-formal to formal work (Alzúa, Cruces, & Ripani, 2013; Asfaw et al., 2012; Barrientos, 2012; Bastagli et al., 2016; Moffitt, 2002).

Long-term MPC significantly reduces employment for men (not shown) from 53.3 per cent in the control group to 36.3 per cent (*p-value 0.015*), while significantly increasing the rate of the unemployed men actively seeking work (Figure 8) from 22.6 per cent to 33.2 per cent (*p-value 0.085*). MPC therefore allows men in recipient households to be more selective about the jobs they take and possibly leave hazardous or unfair work conditions. In fact, access to any duration of MPC was correlated with a lower probability of working in hazardous conditions or having a work injury among the employed in the target population.

Figure 8 Impact of MPC on unemployed males (n=14,556 individuals)



Note: Colour-filled bars indicate statistically significant results at 10% significance levels.

Long-term MPC appears to give women the option to leave the labour force (Figure 9), by decreasing the rate of employment from 8.1 per cent in the control group to 2.1 per cent in the long-term MPC group (*p-value 0.102*), and significantly increasing the rate of inactivity (Figure 10) from 86.6 per cent in the control group to 98.2 per cent in the long-term MPC group (*p-value 0.024*) (while the rate of unemployment remains statistically unchanged). Conversely, discontinuation of MPC is associated with two significant effects among women: an increase in their employment (from 8.1 per cent in the control group to 18.8 per cent in the discontinued group, (*p-value 0.079*), coupled with a decrease in their unemployment from 7.1 per cent among the control group to almost zero for the discontinued group (*p-value 0.032*). As such, it would seem that the loss of MPC lowers the reservation wage (the lowest wage rate at which a worker would be willing to accept a job) for unemployed women.

Figure 9 Impact of MPC on female employment (n=16,999 individuals)

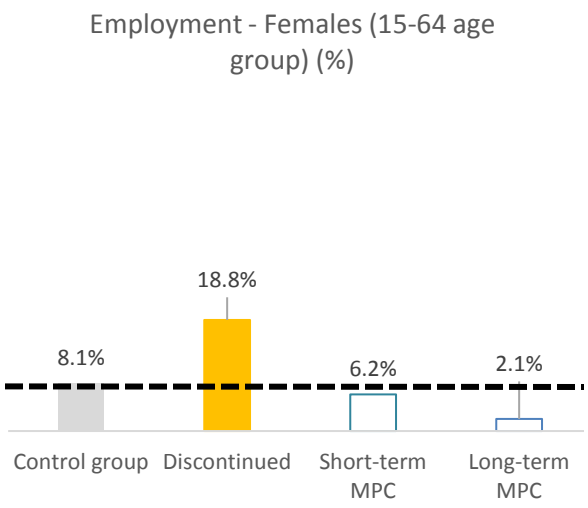
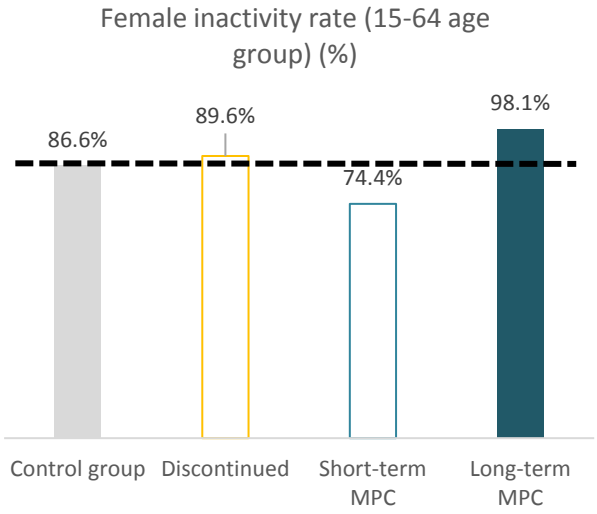


Figure 10 Impact of MPC of female inactivity (n=16,999 individuals)



Note: Colour-filled bars indicate statistically significant results at 10% significance levels.

Syrian refugees are currently legally permitted to work in three economic sectors: agriculture, construction and the environment. The complicated legal status of refugees and vulnerable living conditions mean they have to navigate a labour market largely characterized by informal and precarious work, and difficult working conditions in sometimes risky and hazardous jobs, irregular working hours and pay and threat of arrest and deportation.

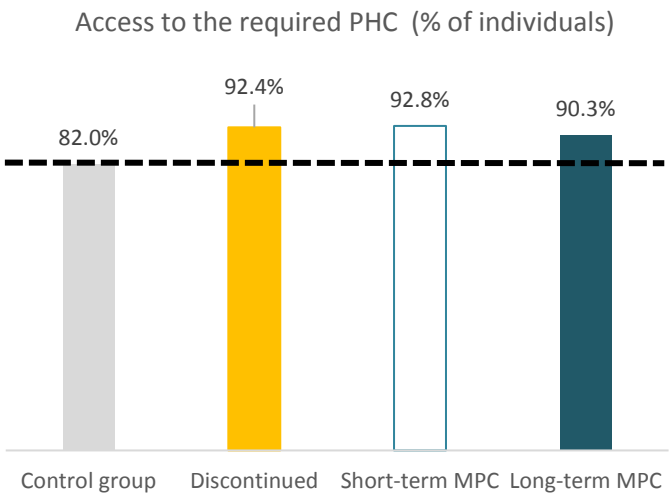
Health

Increases in income resulting from cash assistance can allow households to cover the direct and indirect costs of healthcare and healthcare access. Direct costs include costs related to healthcare fees and medication such as consultation fees, diagnostic tests and cost-share for hospitalisation etc., while indirect costs include the incurred costs of transportation to healthcare facilities (Bastagli et al., 2016; Gaarder, Glassman, & Todd, 2010; Lundberg et al., 2010; World Health Organization, 2011).

The impact of MPC on access to primary healthcare (PHC) was tested by age group, and by asking about access to PHC for illness, preventive care, accident/injury, diagnostic tests, doctor consultations for chronic illnesses, and mental health services, as well as use of family planning methods.

A significant increase was observed in access to any type of PHC (Figure 11) by 8.3 percentage points (from 82 per cent to 90.3 per cent) among individuals in long-term MPC households (*p-value 0.018*). Specifically, an improvement in access to PHC for children under 5 (from 87.5 per cent to 99.5 per cent, (*p-value 0.014*)) and children aged 5 to 19 years (from 83.5 per cent to 92.7 per cent, (*p-value 0.066*)) was noted (not shown). This was accompanied by a significantly higher access (10.4 percentage points) to any type of PHC among individuals living in discontinued households (92.4 per cent compared to 82 per cent for the control group, (*p-value 0.068*)).

Figure 11 Impact of MPC on access to required PHC (n=29,302 individuals)

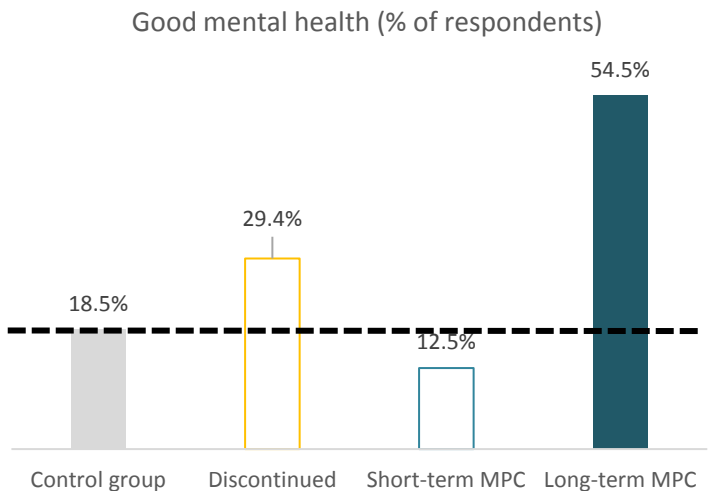


Note: Colour-filled bars indicate statistically significant results at 10% significance levels.

This study found a significant increase in respondents who report good mental health (Figure 12), from 18.5 per cent in the control group to 54.5 per cent in the long-term MPC group (*p-value 0.025*). Access to long-term MPC almost tripled the number of respondents who reported having good mental health.

Mental health of proxy respondents was assessed in wave 3 using the five-item validated version of the Mental Health Inventory (MHI-5) in Arabic (Chaaban et al., 2016; Makhoul et al., 2011; Sibai, Chaaya, Tohme, Mahfoud, & Al-Amin, 2009). MHI-5 is widely used in surveys of general health and is a good predictor of anxiety, depression, behavioural control and general distress (Veit & Ware, 1983). High scores indicate good mental health; this study used a cut-off point of 52 to define good mental health, consistent with the literature.

Figure 12 Impact of MPC on mental health (n=3,633 respondents)



Note: Colour-filled bars indicate statistically significant results at 10% significance levels.

Conclusion

This study measured the short-term (12 months or less) and long-term (more than 12 months) causal impact of the $173.50 and $175 MPC assistance provided by WFP and UNHCR respectively, as well as the impact of discontinuation from MPC on the well-being of Syrian refugees.

While impact evaluations of cash assistance have been carried out in this context (Battistin, 2016; Boston Consulting Group & World Food Programme, 2017; De Hoop et al., 2018; C. Lehmann & Masterson, 2014; World Vision, 2018), this study is the first to analyse duration variability and discontinuation of cash assistance for multiple well-being dimensions.

The causal impact of MPC is measured on multiple dimensions of well-being, namely household expenditures, food security, housing, water and sanitation, education, employment, and health. The key take-away messages from the study are:

1. **The impact of MPC materialised across most dimensions of well-being in the long-term, indicating the importance of households' access to a longer duration of MPC.**

   MPC led to a sizeable and significant increase in total monthly household expenditures and a significant decrease in the food insecurity of households receiving long-term MPC. The percentages of households

from all treatment groups reporting access to sufficient drinking water was significantly higher compared to the control group.

In the education dimension, there was a significant impact of short-term MPC on formal education that was sustained in the long-term for both boys and girls. MPC had a gendered impact in the employment dimension with the inactivity rate of working-age women decreasing in the long-term MPC group as compared to the control group. In a labour market with an excess supply of low-skilled, unregulated, informal labour, it is not surprising to see that the already low labour force participation rate for women should drop even further in response to long-term MPC given their prioritisation of housework, child care, and the desire to avoid poor and unsafe working conditions. The impact for men was different, with a decrease in employment coupled by an increase in unemployment for men in the long-term MPC group, an indication that MPC provided men with the option of opting out of hazardous, risky or irregular employment in ways that the control group cannot afford.

In terms of improving access to PHC by those who needed primary care, the study found a significant impact of long-term MPC on access to any type of PHC, especially for children (of all ages up to 19 years), an indication that households prioritise PHC for their most vulnerable household members. Access to long-term MPC almost tripled the number of respondents who reported having good mental health. The findings together would suggest that there are benefits to instituting longer cash cycles.

2. The benefits of MPC fade for many indicators within 4 to 10 months after discontinuation; households' well-being returned to pre-assistance levels for most indicators, and dropped slightly below the pre-assistance baseline for others.

   In the absence of sustainable solutions and decent working conditions in the Lebanese context for Syrian refugees, access to any MPC duration continues to be necessary to alleviate the rampant economic vulnerability and to support refugees in securing their basic needs.

Acknowledgements

This work was funded by the European Civil Protection and Humanitarian Aid Operations (ECHO), the German Federal Foreign Office (GFFO), the Norwegian Ministry of Foreign Affairs (NMFA) and UK aid from the UK government. The work was commissioned by the Cash Monitoring Evaluation Accountability and Learning Organizational Network (CAMEALEON) composed of the Norwegian Refugee Council (NRC), Oxfam and Solidarités International (SI) and includes the American University of Beirut (AUB), Economic Development Solutions (EDS), Overseas Development Institute (ODI), and Cash Learning Partnership (CaLP) as implementing partners. The views expressed do not necessarily reflect the official policies of the governments or organizations involved.

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