

# Poverty measurement and the targeting of social protection programs: Results of pre-registered analysis

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## Abstract

This document contains the results of all pre-registered analyses set forth in [Altindag et al. \(2022\)](#). Outcome definitions, samples, specifications, and inference were all implemented as registered. The registered analyses consisted of two sets of results: effects of treatment arm on overall welfare, and effects of program receipt on measures of individual well-being. The program we study alleviates economic deprivation for all marginal beneficiary groups, with effect sizes ranging from a statistically insignificant 0.02 SD to 0.21 SD. Despite having a sample large enough to detect even small effect sizes, we do not find statistically significant differences in overall well-being across households subject to alternative budget allocation rules.

**Keywords:** poverty targeting, poverty measurement, social protection, antipoverty programs, unconditional cash transfers, refugees, forced displacement, Lebanon.

**JEL Classification:** I38, I32, O12, D74

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**Disclaimer:** This study was approved by Emory University Institutional Review Board under protocols #3157 and #4634. The pre-registered analysis plan is available at <https://www.socialscienceregistry.org/trials/9725>.

**Acknowledgement:** We thank Zeynep Balcıoğlu and Aytuğ Sasmaz for their support with fieldwork and qualitative research. We also appreciate the input and guidance provided by many members of the UNHCR and WFP Lebanon staff throughout the planning, execution, and analysis phases, including Louise Abellard, Susanne Carl, Marco Principi, Simon Renk, and Milos Terzan. Our gratitude for insightful comments and suggestions extends to Matthew Gudgeon, Olivier Sterck, Jade Siu, and conference and seminar participants at IPA, Tufts University, DevSouth, Northeastern University, the 2023 WFP Impact Evaluation Forum, The World Bank, and The Graduate Center, CUNY. The views and conclusions expressed in this study are those of the authors and do not necessarily reflect the positions or policies of any of the organizations involved.

The below tables present the results of the pre-registered analyses detailed in Section 4 of [Altındag et al. \(2022\)](#). Outcome definitions, samples, specifications, and inference were all implemented as registered. Table 1 contains the results of tests of endline differences in measures of well-being across treatment arms, and Table 2 contains estimates of local average treatment effects amongst alternative arms' marginal beneficiaries (complier average treatment effects). p-values were corrected for multiple hypothesis testing within domain using [Anderson \(2008\)](#) q-corrections. For formal presentation of results, interpretation, and further analysis, we refer the reader to [Altındag et al. \(2025\)](#).

**Table 1:** Pre-registered specification estimates (ITT)

Outcome	Food insecurity targeting	Poor nutrition targeting	Multidimensional deprivation targeting
<b>Domain: Poverty measures</b>			
Expenditure per capita	-0.021 (0.02)	-0.002 (0.021)	0.002 (0.02)
Coping strategies index	-0.25 (0.445)	-0.683 (0.458)	-0.283 (0.448)
Food consumption score	-0.086 (0.528)	0.406 (0.543)	0.339 (0.532)
Multidimensional deprivation	-0.001 (0.005)	-0.003 (0.005)	0.004 (0.005)
<b>Domain: Child well-being</b>			
Child working	0.002 (0.011)	0.005 (0.011)	0.022 (0.012)
Child not in school	0.015 (0.018)	0.004 (0.018)	0.009 (0.018)
Child sick	-0.024 (0.018)	-0.001 (0.019)	0.003 (0.019)
Underage marriage	0.034 (0.018)	0.004 (0.016)	-0.009 (0.016)
<b>Domain: Living conditions</b>			
Livelihood coping index	-0.027 (0.104)	-0.015 (0.104)	0.058 (0.104)
WASH index	-0.011 (0.014)	-0.007 (0.015)	0.015 (0.014)
Shelter quality index	-0.012 (0.021)	-0.008 (0.022)	0.00 (0.022)
<b>Domain: Property rights</b>			
Rental debt stock in 000s	0.665 (60.041)	-67.103 (59.38)	-18.197 (60.302)
Benefits card ever used as collateral	0.009 (0.008)	0.007 (0.008)	0.002 (0.008)
Benefits card currently with lender	0.003 (0.003)	0.001 (0.002)	-0.001 (0.002)
<b>Domain: Social support and networks</b>			
Has any close friends	-0.007 (0.013)	0.008 (0.012)	-0.014 (0.013)
Neighbors could care for children	-0.025 (0.016)	-0.014 (0.016)	-0.009 (0.016)
Can borrow from social circle	-0.029 (0.013)	-0.012 (0.013)	-0.018 (0.013)
Have been asked to assist financially	0.00 (0.01)	0.003 (0.01)	0.006 (0.01)
Lives in a supportive community	0.00 (0.016)	-0.011 (0.016)	-0.011 (0.016)
Community support for household emergencies	0.001 (0.016)	0.011 (0.016)	-0.008 (0.016)
<b>Domain: Productive assets</b>			
Consumer durable assets index	-0.02 (0.011)	-0.007 (0.011)	-0.002 (0.011)
Productive assets index	-0.003 (0.012)	0.013 (0.013)	0.023 (0.013)
<b>Domain: Savings</b>			
Has no savings	0.00 (0.003)	-0.001 (0.003)	-0.002 (0.003)
Had to spend savings to cope	-0.009 (0.015)	0.00 (0.015)	-0.001 (0.015)

**Note:** Table contains estimates of the  $\tau$  from Equation (1) of the pre-registered analysis plan. Standard errors in parentheses. P-values corrected for multiple hypothesis testing within domain. \*q < .10; \*\*q < .05; \*\*\*q < .01

**Table 2:** Pre-registered specification estimates (LATE)

Outcome	Monetary poverty targeting	Food insecurity targeting	Poor nutrition targeting	Multidimensional deprivation targeting
<b>Domain: Poverty measures</b>				
Expenditure per capita	0.207*** (0.048)	0.09 (0.054)	0.171** (0.058)	0.149*** (0.039)
Coping strategies index	0.147** (0.057)	0.062 (0.055)	0.03 (0.064)	0.104*** (0.043)
Food consumption score	0.158*** (0.057)	0.093 (0.055)	0.1 (0.064)	0.109*** (0.045)
Multidimensional deprivation	0.029 (0.054)	0.019 (0.054)	0.024 (0.062)	0.13*** (0.045)
<b>Domain: Child well-being</b>				
Child working	-0.021 (0.017)	0.05* (0.02)	-0.023 (0.018)	0.02 (0.014)
Child not in school	-0.074** (0.026)	0.023 (0.034)	-0.09** (0.031)	-0.018 (0.027)
Child sick	0.015 (0.032)	0.001 (0.029)	0.061 (0.036)	-0.01 (0.026)
Underage marriage	0.005 (0.017)	0.022 (0.048)	-0.008 (0.02)	0.013 (0.027)
<b>Domain: Living conditions</b>				
Livelihood coping index	-0.03 (0.055)	0.00 (0.057)	-0.053 (0.062)	-0.028 (0.047)
WASH index	-0.038 (0.057)	-0.022 (0.054)	-0.116* (0.065)	-0.022 (0.044)
Shelter quality index	-0.078 (0.056)	-0.052 (0.051)	-0.155** (0.061)	-0.021 (0.043)
<b>Domain: Property rights</b>				
Rental debt stock in 000s	-227.618** (86.627)	-194.618 (106.815)	-173.065 (107.519)	-49.738 (90.956)
Benefits card ever used as collateral	-0.023 (0.016)	0.013 (0.013)	-0.018 (0.014)	0.001 (0.009)
Benefits card currently with lender	-0.002 (0.004)	-0.002 (0.003)	-0.003 (0.005)	-0.006 (0.003)
<b>Domain: Social support and networks</b>				
Has any close friends	0.004 (0.02)	-0.023 (0.023)	-0.004 (0.023)	-0.023 (0.017)
Neighbors could care for children	-0.011 (0.027)	-0.014 (0.026)	-0.008 (0.031)	0.02 (0.021)
Can borrow from social circle	0.044 (0.021)	-0.03 (0.024)	-0.037 (0.026)	0.005 (0.018)
Have been asked to assist financially	0.005 (0.017)	-0.01 (0.016)	0.014 (0.019)	0.037* (0.014)
Lives in a supportive community	0.012 (0.027)	-0.009 (0.027)	-0.039 (0.032)	0.031 (0.022)
Community support for household emergencies	-0.013 (0.026)	-0.017 (0.027)	0.031 (0.031)	0.04 (0.022)
<b>Domain: Productive assets</b>				
Consumer durable assets index	0.012 (0.056)	-0.061 (0.055)	0.022 (0.064)	0.068 (0.047)
Productive assets index	-0.096 (0.049)	-0.025 (0.055)	0.003 (0.058)	-0.007 (0.044)
<b>Domain: Savings</b>				
Has no savings	0.00 (0.005)	0.003 (0.004)	-0.001 (0.004)	0.006 (0.003)
Had to spend savings to cope	0.027 (0.026)	0.029 (0.025)	0.028 (0.03)	0.016 (0.02)

**Note:** Table contains estimates of the  $\beta_j$  from Equation (3) of the pre-registered analysis plan. Standard errors in parentheses. P-values corrected for multiple hypothesis testing within domain. \*q < .10; \*\*q < .05; \*\*\*q < .01 **Reading:** Households marginal to the monetary poverty targeting arm have .207 standard deviation higher ln(expenditure per capita) when they receive a higher transfer due to being assigned to the monetary poverty targeting arm.

## References

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