Housing Subsidies and Externalities: Experimental Evidence from Syrian Refugees in Jordan[*]

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1   Extended Abstract

As crises in Syria, Myanmar, Venezuela, and elsewhere become measured in years and not months, policy responses in refugee host countries have necessarily shifted away from emergency response and towards durable solutions. Contrary to media portrayals, nearly two-thirds of displaced populations reside in host communities instead of camps: they live, work, and attend school in the same neighborhoods as the citizens of their host country. With the large and growing global refugee crisis and the scale of the fiscal resources in play, policymakers require better information on the impacts of programs that address basic needs of refugees living in host communities, specifically affordable-housing programs (Ginn, 2018). However, the evidence on the welfare implications of housing subsidies is inconclusive, particularly for refugees. On the one hand, studies have shown that shelter assistance has the potential to provide not just a roof overhead, but downstream benefits on financial well-being, health, education, crime, and social cohesion (Aubry et al., 2015; Barnhardt et al., 2017; Bergman et al., 2020; Chetty et al., 2016; Clampet-Lundquist and Massey, 2008; Katz et al., 2001; Kling et al., 2007; Kumar, 2021; Ludwig et al., 2013). On the other hand, some studies have found null or even negative results, and it is often unclear whether the positive results are due to direct housing-quality effects or indirect neighborhood effects (Barnhardt et al., 2017; Chetty et al., 2016; Jacob et al., 2015; Jacob and Ludwig, 2012; Ludwig et al., 2013; Mills et al., 2006; Picarelli, 2019; van Dijk, 2019). In addition, if subsidizing demand fails to trigger a supply response, then it may cause housing-market inflation that burdens low-income tenants (Rozo and Sviatschi, 2021). Finally, although housing subsidies tend to be very expensive, there is relatively little work comparing their cost-effectiveness to other alternative interventions (Bergman

et al., 2020; Chetty et al., 2016). To fill this knowledge gap, we ran a randomized controlled trial (RCT) in Jordan testing the effectiveness of a housing support program on Syrian refugee tenants and their Jordanian landlords and neighbors.

We use a randomized controlled trial (RCT) among approximately 2,500 refugee households to assess the impacts of the Norwegian Refugee Council's (NRC) urban shelter program, which provides funds to renovate refugees' substandard housing and covers 9-18 months' rent. The program's design represents an important innovation as it provides support to refugee households while simultaneously aiming to create direct positive spillovers in the hosting communities, reducing xenophobia and minimizing inequality.The RCT was designed using a community saturation design to evaluate the following questions at the individual and community level (114 treated and 220 control communities):

- What are the direct impacts of NRC's shelter program on refugee households' wellbeing? What is the impact of NRC's shelter program on recipient landlords' economic wellbeing and attitudes toward refugees?

- How do humanitarian interventions which benefit refugees and local communities impact social cohesion between natives to refugees?

We will focus on a treatment-on-the-treated (TOT) specification, where the first stage predicts treatment implementation using treatment assignment and the second stage regresses the outcomes of interest on the predicted values.

$$T_{ic} = \alpha_0 + \alpha_1 A_{ic} + X_c' \Lambda_1 + Z_{ic}' \Upsilon_1 + \varepsilon_{ic} \tag{1}$$

$$y_{ic} = \beta_0 + \beta_1 \hat{T}_{ic} + X_c' \Lambda_2 + Z_{ic}' \Upsilon_2 + \upsilon_{ic} \tag{2}$$

$$y_{ic} - \bar{y}_c = \gamma_0 + \gamma_1 \hat{T}_{ic} + X_c' \Lambda_3 + Z_{ic}' \Upsilon_3 + \eta_{ic} \tag{3}$$

In the equations above, y_{ic} is the outcome of interest, where c represents the community and i the individual. T_{ic} equals one if the individual received treatment, and A_{ic} equals one if the individual was randomly assigned to treatment. $\bar{y}_c$ represents the mean of y among Jordanian neighbors in locality c. $\hat{T}_{ic}$ in equations (2) and (3) is the predicted value from equation (1). Vectors X_c and Z_{ic} contain the same covariates as the original pre-specified plan. ε_{ic}, υ_{ic}, and η_{ic} are idiosyncratic error terms. Equation (2) is for landlords while equation (3) is for assimilation, measured as the gap between refugees and their neighbors. Standard errors are clustered at the community level, the level of randomization.

Measuring the local impacts of a specific, scalable refugee-housing program is of interest to development practitioners in Jordan and beyond. Humanitarian programming is often under-researched, supported only by individual organizations' monitoring and evaluation practices. While shelter programs are among the most expensive humanitarian programs to run, many practitioners feel that their effects may be among the most far-reaching. Although results in other contexts are promising, there remains limited evidence on shelter impacts in the humanitarian sector. Rigorous evaluation of these impacts will provide lessons on how we can use housing assistance as both a means of humanitarian aid provision and potentially as a development tool for local communities and a means of refugee integration.

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