

## More Is Better

Evaluating the Impact of a Variation in Cash Assistance  
on the Reintegration Outcomes of Returning Afghan Refugees

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## Abstract

This paper studies the effect of a change in the amount of cash assistance provided to Afghan refugees returning from Pakistan on household outcomes post-return. Using a regression discontinuity design, it measures the impact of a large exogenous change in cash assistance amounts on post-return outcomes in a quasi-experimental setting. Administrative data and post-return monitoring data suggest that more than 16 months after their return, returnees who received a larger cash allowance of \$350 per returnee—equivalent to 2.5 times the average annual pre-return annual income—were better off than those who received a smaller cash allowance of \$150. Recipients of the \$350 cash assistance were more likely to invest in durable assets,

such as a house (17 percentage point difference); recipients of the \$150 cash allowance were more likely to use the assistance for immediate food consumption needs (40 percentage point difference). Households that received \$350 per returnee were significantly more likely to have been issued legal documentation for their household members. In line with the literature on cash assistance, the change in cash assistance had no effect on post-return employment outcomes. The findings provide new evidence on the effects of unconditional cash transfers on refugee reintegration and show that larger cash transfer programs can have a large and long-term impact following refugees' return.

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# **More Is Better: Evaluating the Impact of a Variation in Cash Assistance on the Reintegration Outcomes of Returning Afghan Refugees**

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## Introduction and Program Description

Afghan refugees form one of the largest protracted refugee populations in the world, with many Afghans having lived in exile for decades. Despite the ongoing conflict, roughly 2.4 million displaced Afghans have returned to Afghanistan since 2014, including over half a million registered refugees who returned under the voluntary return program of the United Nations High Commissioner for Refugees (UNHCR), which provided them with immediate humanitarian assistance. More than 370,000 Afghan refugees returned to Afghanistan in 2016 alone. Between 2016 and 2018, UNHCR assisted more than 458,000 documented Afghan refugees who returned from Pakistan.<sup>1</sup> The majority of refugees arrived at the Afghan border without any assets or income-generating means. A significant share of returnees were women accompanied by young children, which complicated reintegration.

The majority of Afghan refugees moved to Pakistan during the Soviet invasion in 1979–80, according to the Population Profiling Verification and Response (PPVR) survey conducted in 2011. The protracted nature of the Afghan refugee situation, the large return wave since 2016, ongoing conflict, low economic growth, and weak job creation raise questions about how best to absorb and reintegrate the large number of returnees.

As a response to these challenges, UNHCR offers returning refugees under their mandate cash assistance for reintegration and transportation. Returnees receive two types of cash assistance. First, UNHCR pays transportation assistance, based on the distance traveled and the province of origin. The median transportation assistance received by Afghan returnees in our sample was \$45 per returnee. Second, returnees receive reintegration assistance.

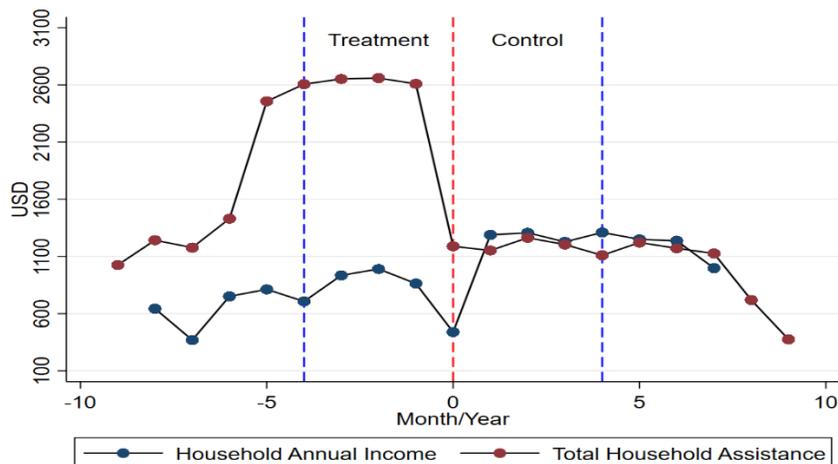
Between July 2016 and March 2017, UNHCR increased its reintegration assistance amount from \$150 per returnee to \$350 per returnee because of the increased needs of returning Afghan refugees and the need to ensure dignified reintegration. The amount of assistance was returned to \$150 per returnee in April 2017. The amount of reintegration assistance is thus determined purely by the timing of return, with returnees returning between July 2016 and March 2017 receiving \$350 per returnee and those returning before July 2016 or after March 2017 receiving \$150 per returnee. We therefore estimate the total assistance received as either \$200 or \$400 per returnee.

The amount of assistance provided to refugees returning to Afghanistan is large compared with their income (figure 1). The one-time \$350 per capita reintegration assistance was equivalent to 60 percent of the annual GDP per capita of Afghans living in Afghanistan (\$591) (ALCS 2017). Households that received \$350 per returning household member received approximately 2.5 times their annual income upon return; households that received \$150 per household member received 1.2 times their annual income.

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<sup>1</sup> More than 380,000 undocumented refugees also returned from Pakistan to Afghanistan in 2016–18, according to annual reports of the International Organization for Migration and UNHCR.

**Figure 1 Annual household income of returning refugees and total amount of assistance received from UNHCR, by month of return**



Source: World Bank estimates based on Voluntary Repatriation Form and Cash Assistance Database (UNHCR).

Note: Month zero is May 2017. Observations to the left of 0 show results for households that received \$350 per returning household member. Observations to the right show side shows results for households that received \$150 per returning household member.

This paper studies the effect of the increased cash assistance on returning Afghan migrants. It studies whether and how, in a context of challenging security, economic, and labor market conditions, increasing the cash assistance affected households’ consumption patterns, investment in long-term assets, and welfare. The main questions are (a) whether Afghan refugees who returned between July 2016 and March 2017 and received the reintegration allowance of \$350 per returnee are better off than those who received the reintegration allowance of \$150 per returnee and (b) if so, whether the higher cash allowance had a measurable impact on beneficiary livelihoods in the medium term (after about one and a half years after return).

### Literature Review

Humanitarian agencies have increasingly switched from in-kind to cash assistance. As of 2011, cash transfer programs had reached more than 1 billion people in developing countries (DFID 2011). In line with a strategy to support refugees’ autonomy and self-sufficiency, UNHCR increasingly shifted its support from in-kind assistance to unconditional cash assistance, in order to allow refugees to prioritize based on their own needs.

An evaluation of GiveDirectly’s unconditional cash transfer (UCT) program in Kenya finds strong evidence that cash transfers increase asset-building (Haushofer and Shapiro 2018). UCT recipients used 39 percent of the cash transfer on purchasing assets. Beneficiary households were 23 percentage points more likely to live in a house with an iron (opposed to a thatched) roof and 51 percent more likely to have increased their livestock holdings than the control group. UCT recipients spent their cash transfers on a broad variety of items, such as food, health care, and education. Three years after they received the cash assistance, beneficiary households had accumulated 40 percent more assets than control households, having used 60 percent of the initial transfer on asset accumulation.

Covarrubias, Davis, and Winters (2012) study the effectiveness of the Malawi social cash transfer scheme on the economic productivity of recipient households. They find that the program led to investments in agricultural assets and livestock, reductions in low-skilled labor participation, and a reduction in the likelihood of child labor.

Another study on the effectiveness of UCTs in Malawi finds that unconditional cash transfers led to a 23 percent increase in annual per capita household consumption by beneficiaries and that beneficiary households were able to invest the UCT in productive income-generating activities (Abdoulayi and others 2017). Access to health care was 12 percentage points higher for UCT recipients than nonrecipients, and school participation was higher at all ages.

Banerjee and others (2017) analyze the results of seven randomized trials of cash transfers across six countries.<sup>2</sup> They find no evidence that the programs affected the propensity to work, or the number of hours worked by either men or women.

The effects of conditional cash transfers (CCTs) on educational outcomes for children have been rigorously evaluated in recent years (Schultz 2004; de Janvry and others 2006; Filmer and Schady 2011). There is also a large body of evidence supporting the effectiveness of UCTs in increasing schooling, reducing child labor, and improvements in health and nutrition (Duflo 2003; Case, Hosegood, and Lund 2005; Edmonds 2006; Edmonds and Schady 2012).

To compare CCT and UCT transfers, Baird, McIntosh, and Özler (2011) conducted an experiment in Malawi that randomly assigned households to either conditional or unconditional cash assistance. The conditional transfer was based on girls' school attendance. The study finds that UCTs were more effective in preventing early marriage among girls (27 percent lower than the no-cash group) and pregnancy (44 percent lower). CCTs had no effect on these long-term outcomes, although they were more effective in increasing school attendance.

Most of the evidence on the effectiveness of UCTs comes from Sub-Saharan Africa, a region that, like Afghanistan, is characterized by generalized high levels of poverty and weak institutional capacity in administering CCTs. A difference-in-differences evaluation of a cash transfer program for orphans and vulnerable children in Kenya reveals that that cash transfer program had positive impacts on expenditure on health and food and decreased the elasticity of consumption of inferior goods such as alcohol and tobacco (Kenya CT-OVC Evaluation Team 2012). In a second paper evaluating the same UCT program, the authors find significant impacts (7.8 percentage points) on enrollment of children 12 and older but no impacts on younger children. The finding that cash transfers had no impact on the enrollment of children under 12 could be related to the fact that primary (but not secondary) education is free in Kenya.

The literature on the effectiveness of assisting return migrants to Afghanistan includes an evaluation of a shelter assistance program implemented by UNHCR. UNHCR provided post-return shelter assistance to Afghans between 2009 and 2011. Loschmann, Parsons, and Siegel (2005) use a multidimensional poverty index comprising four dimensions: economic welfare, health, education, and basic services. To address selection bias, they use a propensity score matching approach. They estimate that the shelter assistance

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<sup>2</sup> The cash transfer programs studied were implemented in Honduras, Indonesia, Morocco, Mexico (two programs), Nicaragua, and the Philippines.

program increased food security, access to heating, and dietary diversity by 5–6 percentage points relative to the control group.

## Data Sources

### UNHCR Data Sources

We use three data sources to measure post-return outcomes of this study:

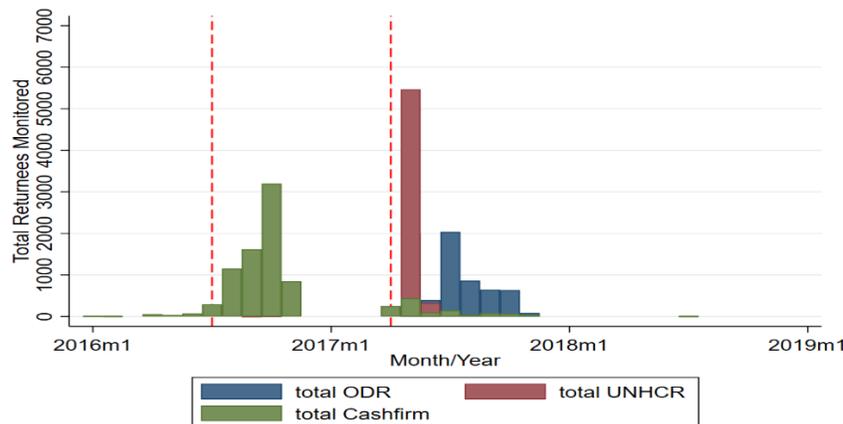
- UNHCR’s phone monitoring, collected between June and July 2017
- A data set on returnee monitoring conducted by Orange Door Research (ODR) on behalf of UNHCR, collected between December 2018 and January 2019
- Data from an external evaluation conducted by a private consulting firm that collected returnee monitoring data on behalf of UNHCR in December 2017.

On average, UNHCR surveyed respondents 19.5 months post-return, ODR did so 17.4 months post-return, and the private firm did so 13.5 months post-return. The average mean duration of return before being surveyed is 15.6 months.

We combined the three post-return monitoring datasets with UNHCR’s voluntary repatriation form (VRF), using the unique household identification number assigned to returning households by UNHCR. The VRF is UNHCR’s household-level registration form for returning refugees upon return to Afghanistan (baseline). It is used to compare baseline characteristics of returnees. Socio-demographic data from the VRF are used as covariates in the estimation strategy.

Figure 2 shows the number of returnees tracked, by data source. Considering the sample of returnees that received the \$350 reintegration amount as the control group and the group that received \$150 as the treatment group, we have a sample of 1,331 returnee households in the \$350 (control) group and 3,009 in the \$150 (treatment) group.

**Figure 2 Number of returnees monitored, by source data, 2016–18**



Note: The dotted lines represent the starting point and ending point of the increase in the reintegration amount to \$350.

We harmonized variables across the three post-return surveys as much as possible to compare post-return outcomes between the two groups. The three data sources collected similar data on the province

and district of residence, the province of origin, and reasons for settling in the location. We also included information on the residence of returnees, harmonized across the three data source, including the type, size, and ownership status of the dwelling. The three data sources include information on income, employment, education (for children), food security, and access to health services. These variables allow us to compare living standards in the treatment and control groups.

The cutoff criterion for the reintegration assistance was strictly determined in April 2017.<sup>3</sup> Although the policy change was implemented that month, we have significant data on returnees only starting the following month (May 2017).

Because of harsh winter conditions, UNHCR temporarily suspended its voluntary repatriation program from Pakistan between December and March 2017. The process of returns from the Islamic Republic of Iran and other countries continued throughout the year. Only 215 households were registered in the VRF between December 2016 and March 2017, representing 0.2 percent of the 89,235 total individual returns between 2016 and 2017.

### ***Second Round of Data Collection***

Between March and May of 2020, the study team attempted to recontact a sample of 2016–17 returnees from Pakistan to (a) identify whether the impact of reintegration assistance remained significant more than three years post-return and (b) use the same survey tool on returnees who could be part of the regression discontinuity design (RDD) sample. The data collection exercise used returnee phone numbers from UNHCR to conduct follow-up data collection post-return.

Most phone numbers were provided to UNHCR shortly after the returnees crossed the border from Pakistan enroute to resettle in Afghanistan. Because returnees move and change phone numbers as they resettle in Afghanistan, we were able to reach only 16.1 percent of the database of returnee phone numbers and only 6 percent of the returnee population eligible for the study (per their return date). Given this high rate of attrition and the small size of the second-round sample, we use the 2020 data to complement findings from the UNHCR post-return monitoring data.

### **Limitations of the Study**

There are limitations in analyzing results from three data sources, related to differences in questions or levels of aggregation. For example, the sources measure income differently, with the ODR data measuring household income with a categorical variable (five categories) ranging from AFA 3,000 to more than AFA 10,000 and the private firm data measuring the exact household income. The exact measurement of income led to a nonresponse of 35 percent. The minimum possible household income collected by ODR was AFA 3,000 (about \$30 using current exchange rates).

Another limitation is the number of months between the sample of \$350 recipients and the sample of returnees who received \$150. Although the cash assistance was reduced in April 2017, the last surveyed refugees to return before the policy change returned in November 2016 and the first surveyed returnees

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<sup>3</sup> Strict discontinuity refers to a design in which there is a single binary treatment, the assignment variable perfectly predicts the receipt of the treatment, and the probability of treatment jumps from 0 to 1 when the variable crosses a certain threshold. Fuzzy discontinuity refers to a design in which there is imperfect compliance of the rule, meaning that the variable partly crosses a cutoff point, allowing for a smaller jump in the probability of assignment to the treatment at the threshold (not necessarily a sharp 0 to 1 jump).

post-policy change arrived in May 2017. This time difference could allow for secular time trends to be misattributed to the policy change, although this issue may not be significant, given the largely exogenous nature of the decision to return from Pakistan.

## Study Design and Methods

### Study Design

This evaluation relies on an unintended quasi-experimental policy change corresponding to a variation in the amount of reintegration cash assistance to returning Afghan refugees. The increase in the cash transfer amount (to \$350 per returnee) was in place for only a short time up to April 2017, and the reduction of cash assistance amount to \$150 per returnee in April 2017 was unexpected and unanticipated.

We estimate the effect of the change in cash assistance on post-return integration outcomes. The estimation strategy adopted is a sharp regression discontinuity, as the treatment status,  $D_i$  (the amount of reintegration assistance received), is a deterministic and discontinuous function of the date of the return variable<sup>4</sup>,  $x_i$ , such that

$$D_i = \begin{cases} \$350 & \text{if } x_i < \text{April 2017} \\ \$150 & \text{if } x_i \geq \text{April 2017} \end{cases}$$

We apply a strict regressions discontinuity design (RDD), which establishes the causality based on the assumption that differences between returnee outcomes in a short enough timeframe (before and after April 2017) are attributed to the reduction of cash assistance from \$350 to \$150 per returning household member.<sup>5</sup> An important assumption of an RDD is the arbitrary nature of the cutoff, which creates a quasi-random treatment assignment around it.

We applied a nonparametric estimation strategy to establish a causal estimate of the effect of cash assistance on reintegration outcomes by estimating treatment effects around the cutoff month when cash assistance was decreased from \$350 to \$150 per returning household member. This local linear regression approach allows slopes to vary on either side of the cutoff by imposing an interaction term between the running variable (day of return) and the treatment indicator variable. This approach ensures that we do not mistake a trend as a difference attributable to treatment by simply comparing means on either side of the cutoff.

We estimate the impact of the reduction in reintegration assistance on reintegration outcomes with the following nonparametric/local RDD model

$$y_i = \alpha + \beta_1 D_i + \beta_2 x_i + \beta_3 D_i * x_i + \varepsilon_i \quad (2)$$

$$st \ x_i \in \{-z_i, +z_i\} \quad (3)$$

<sup>4</sup> The reintegration assistance was \$150 per returning household member between January 2016 and June 2016. Reintegration assistance was increased in July 2017 to \$350 per returning household member and later reduced to \$150 in April 2017.

<sup>5</sup> In a small “neighborhood” to the either side of the cutoff, the average treatment effect does not necessarily rely on the correct specification of the model for  $E[Y0i|x_i]$ .

where  $y_i$  is the reintegration outcome of interest (education, house ownership, etc.) and  $D_i$  indicates whether the household received a reduction in assistance ( $D_i = 1$  is the reduction of assistance from \$350 to \$150). The variable  $z_i$  is the number of days before or after the change in reintegration assistance (bandwidth). Selection of  $z_i$  was conducted using the data-driven mean-squared error-reducing strategy, proposed by Calonico, Cattaneo, and Titiunik (2014).

### **Baseline Differences in Treatment and Control Groups**

We observe some differences in observable characteristics of returnees according to the time of return and the amount of reintegration assistance received. Individuals who returned after the reduction of reintegration assistance to \$150 per individual earned, on average, about 200 Pakistani rupees (about \$1.92) less per person per month than those who were given \$350. This difference is miniscule compared with the size of the reintegration assistance.

We performed balance tests to examine differences in baseline characteristics between the potential treatment and control groups. Table 1 presents the results of a balance test to examine differences between the treatment and control groups around the 55.3-day average bandwidth.<sup>6</sup> The results shows that the differences in baseline characteristics are largest for household size, age of household head upon return, and probability of uneducated household head, which we control for in the regression model. Differences in baseline per capita income are insignificant.

**Table 1 Balance test of baseline characteristics of control and treatment groups within bandwidth of 55.3 days**

<i>Variable</i>	<i>(1)</i>	<i>(2)</i>	<i>Overall</i>	<i>(1) versus (2)</i>	<i>p-value</i>	<i>N</i>
	<i>\$350 allowance</i>	<i>\$150 allowance</i>				
Transport allowance per capita (US dollars)	48.889	45.820	46.575	3.069***	0.000	2,522
	(0.571)	(0.295)	(0.265)	(0.612)		
Household per capita income (PRe)	1,114.420	1,026.595	1,048.186	87.825	0.389	2,522
	(88.985)	(50.443)	(43.881)	(101.917)		
Household size (indicated on voluntary repatriation form)	5.481	4.585	4.805	0.896***	0.000	2,522
	(0.126)	(0.068)	(0.060)	(0.139)		
Household head gender (0: Female, 1: Male)	0.785	0.721	0.737	0.065***	0.002	2,519
	(0.016)	(0.010)	(0.009)	(0.020)		
Age of household head	39.376	36.781	37.420	2.595***	0.001	2,519
	(0.662)	(0.372)	(0.325)	(0.752)		
Uneducated	0.785	0.657	0.688	0.129***	0.000	2,519
	(0.016)	(0.011)	(0.009)	(0.021)		

<sup>6</sup> The selection of bandwidth was conducted using the mean-squared error-reducing approach of the rdrobust package on Stata.

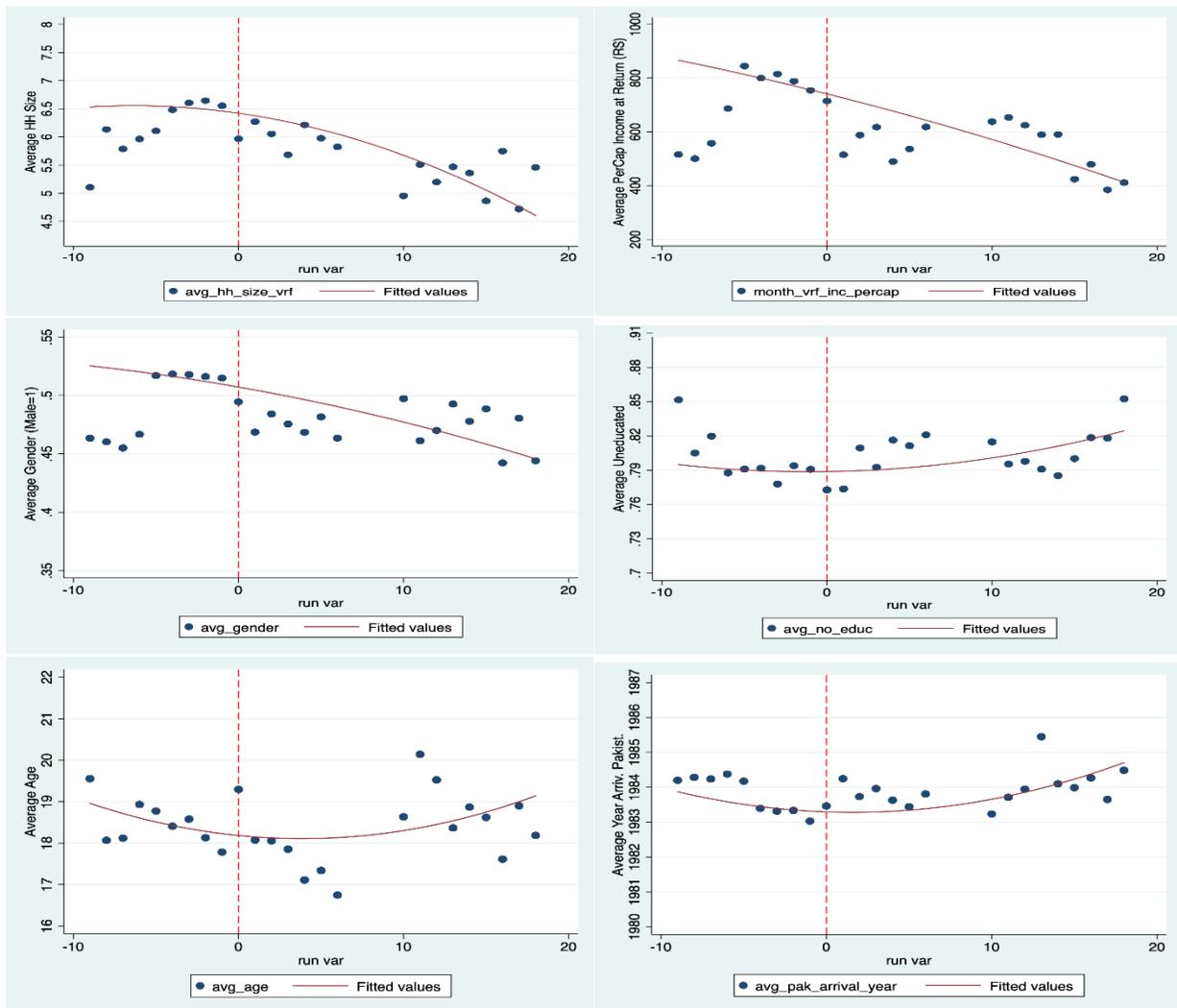
Year of arrival in Pakistan      1,983.858    1,983.288    1,983.429    0.571\*    0.065    2,401

Note: Robust standard errors are in parentheses.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

We also tested for smoothness of covariates around May 2017, to show the trend of covariates over time and any differences between treatment and control groups around the cutoff (month zero). The six panels in figure 3 show that average per capita income upon arrival to Afghanistan decreased over time as well as household size. A potential interpretation for the decreasing trend in household size could be the decrease in reintegration assistance offered by UNHCR. Given that the reintegration assistance amount was of substantial value compared with household income, households may have been incentivized to send back more household members during the period when the reintegration assistance was \$350 and send back fewer household members when the reintegration assistance amount was reduced to \$150.

Figure 3 Baseline characteristics of Afghan returnees from Pakistan, by month of return



Note: Month 0 is May 2017.

## Descriptive Statistics

### *Consumption and Investment Choices by Reintegration Amount*

We start by examining the relationship between the reintegration amounts and the consumption bundle that the population of returning refugees spent the assistance on. Households in the treatment group were more likely to use the reintegration assistance to purchase long-term assets, and households in the control group were more likely to purchase consumption goods (table 2). Almost half of returnees in the control group spent more than half of their reintegration assistance on food, compared with only 17 percent in the treatment group. Households in the treatment group were more likely to purchase land (21 percent) than households in the control group (7 percent). Returnees in the treatment group were also more likely to use it to pay for transportation and rent.

**Table 2 Items on which returnees spent their assistance (percent of total)**

Item	\$350 per returnee	\$150 per returnee
Land	21.0	6.2
Rent	20.1	7.8
Transportation	20.0	7.4
Food	16.9	46.2
Shelter	9.9	7.1
Health	6.7	5.4
Debt	5.3	5.2
None	0.2	14.6

The 2020 follow-up survey asked returnees to rank the usefulness of UNHCR reintegration cash assistance for multiple spending items related to reintegration. The largest difference between the \$350 and \$150 per returnee recipients was their assessment of the usefulness of the assistance for purchasing land and building a house (table 3).

**Table 3 Returnees' assessment of usefulness of UNHCR reintegration assistance for different purposes**

Possible use of assistance	Recipients of \$350 per returnee allowance	Recipients of \$150 per returnee allowance	Difference
Purchase land	2.17	1.53	0.63
Build house	2.09	1.74	0.35
Return to province of origin	3.08	2.80	0.28
Pay rent	3.04	2.84	0.20
Pay expenses associated with an illness	1.73	1.62	0.11
Pay loan	1.78	1.67	0.11
Open business	1.44	1.35	0.08
Purchase a house	1.29	1.24	0.05
Pay for a child's schooling	1.48	1.44	0.03
Acquire legal documentation ( <i>tazkira</i> )	1.55	1.63	-0.08
Ret. to desired province	2.24	2.59	-0.35

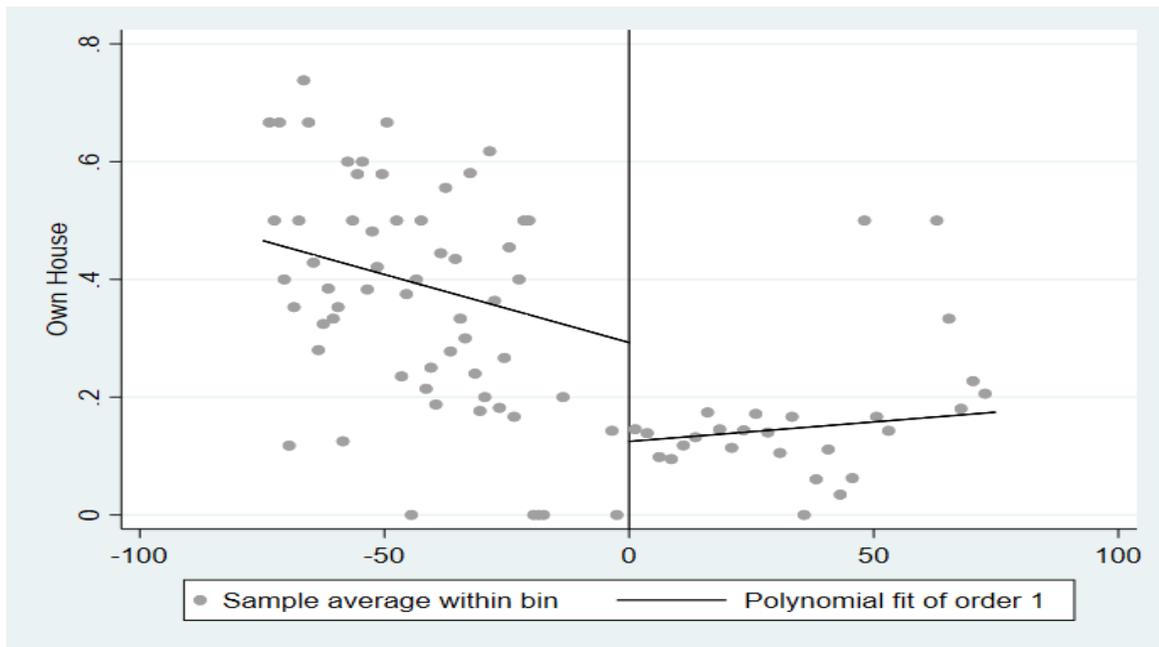
Note: Ratings are from 0 to 10.

### Home Ownership by Reintegration Amount

The likelihood of owning a dwelling upon returning to Afghanistan is highly correlated with both the total payment received by the household and the household size. Returning households reporting owning their residence approximately 16 months after their return received \$2,253 in reintegration assistance on average, compared with \$1,655 for households not owning a home post-return. The share of returnees who owned their home post-return was 43 percent in the treatment group and 17 percent in the control group.

Figure 4 shows the relationship between the amount of assistance provided by UNCHR and the likelihood of owning a house post-return. The difference in the cutoff—or the discontinuity at month zero—can be interpreted as the treatment effect. After the reintegration assistance amount was reduced from \$350 to \$150 per returnee, home ownership rates dropped from about 40 percent to 20 percent.<sup>7</sup>

**Figure 4 Relationship between amount of reintegration assistance and home ownership, by date of return**

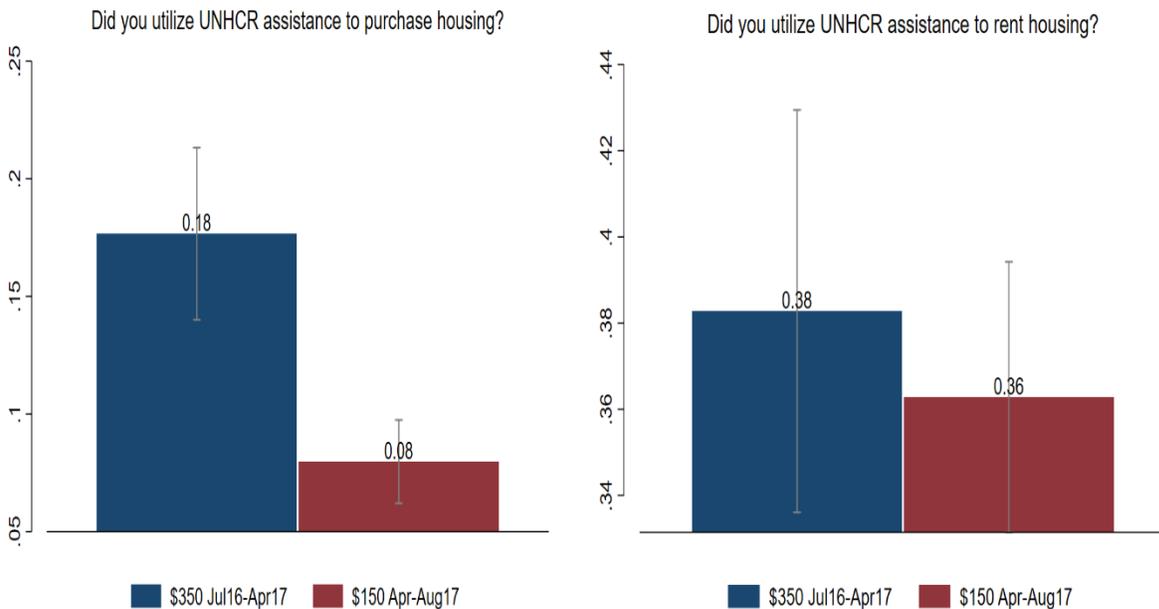


When a sample of returnees were surveyed again in 2020, we found evidence that households in the control group were 50 percent more likely to have purchased housing post-return than households in the treatment group (15 percent compared with 10 percent). They were less likely to have owned their own home before their return (20.5 percent for the control group, 9.9 percent for the treatment group).

<sup>7</sup> On average, households receiving \$350 per person were surveyed 13.4 months after return; households that received \$150 per person were surveyed 17.5 months post-return. The difference means that any estimates of correlation between the amount of assistance and home ownership is likely biased downward, as households are more likely to own their own home as their time in Afghanistan increases.

Households in the control group were more than twice as likely to report having used UNHCR funds to purchase housing than households in the treatment group (18 percent versus 8 percent). We find no statistically significant difference in the likelihood of having used UNHCR reintegration assistance to pay for rental housing (figure 5).

**Figure 4 Using UNHCR reintegration assistance to purchase or rent housing, by reintegration amount (2020 follow-up)**



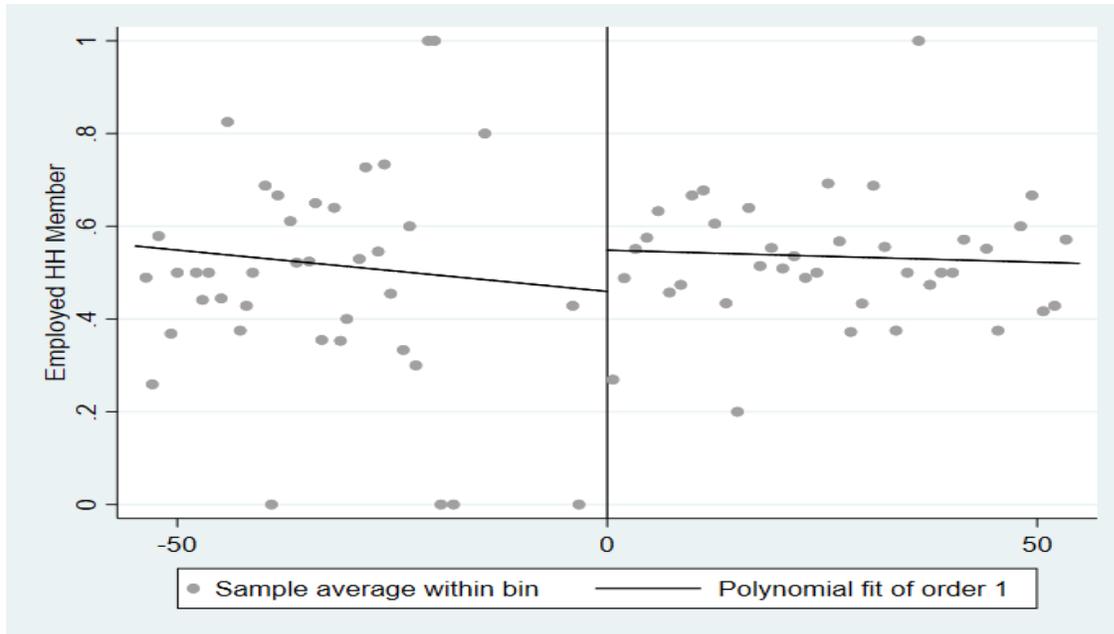
One of the most important indicators of successful reintegration is reintegration into the labor market. Among refugees who returned in 2016, the rate of employment out of the labor force was 57 percent.<sup>8</sup> Returnees who had been employed in Pakistan before returning to Afghanistan had an employment out of labor force rate of 66 percent after return; the rate among returnees who had not been employed in Pakistan was only 25 percent.

One would expect that a large injection of cash assistance might decrease the need for employment, by increasing the reservation wage. However, we find that households receiving \$150 were as likely as those receiving \$350 to have an employed household member (figure 6). About half of households in each group had an employed family member.<sup>9</sup>

<sup>8</sup> Employment out of the labor force is calculated out of the share of individuals between 16 and 64 years old, who are not studying, and are either employed or actively searching for employment (excludes inactive individuals).

<sup>9</sup> We are unable to reject the null that mean household employment probability is the same for the control and treatment groups.

**Figure 6 Relationship between amount of reintegration assistance and likelihood of having an employed household member, by date of return**



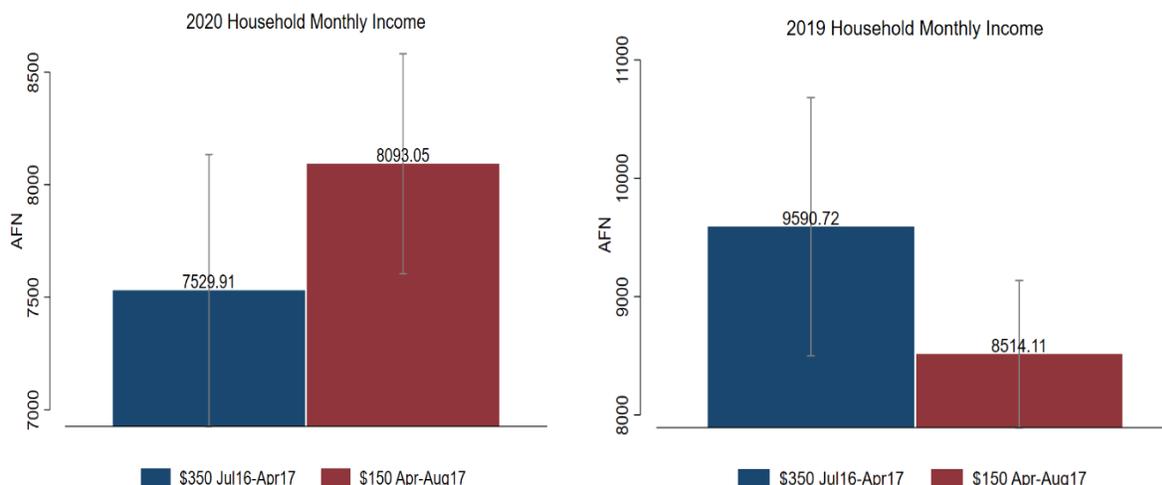
Note: Month zero is May 2017. Observations to the left of 0 show results for households that received \$350 per returning household member. Observations to the right show side shows results for households that received \$150 per returning household member.

When surveyed again in 2020, more than half of returnees (56 percent) were engaged in daily wage labor, with 41 percent of the total working as unskilled daily wage workers. There were no statistically significant differences between the control and treatment groups in terms of the likelihood of being employed as a daily wage worker in 2020.

There is little evidence that households in the treatment group were more likely to have been able to use this assistance to generate income. Household incomes of the two groups were not significantly different in 2019 and 2020 (figure 7). Both groups reported a deterioration in income in 2020, likely related to the impacts of COVID-19.

Among returnees, 57 percent reported earning less after they returned to Afghanistan than they had earned in Pakistan, with no significant differences between the control and treatment groups. Only 48 percent of respondents reported having had a household member employed the previous week (52 percent in the treatment group, 47 percent in the control group).

**Figure 7 Reported monthly household income among returnees, 2019 and 2020**



There appears to have been no long-term impact of reintegration assistance on reservation wages or the likelihood of employment. Returning households receiving more cash assistance used it to invest in assets such as housing or transportation; it did not affect their labor market **outcomes**. Sixteen months after their return, working-age individuals from each group were equally likely to be employed.

Among households returning between 2016 and 2018, 37 percent did not include a working-age male. Returnee households headed by men were more likely to have a working household member post-return to Afghanistan: More than half of male-headed households but just 40 percent of female-headed households had a working household member.<sup>10</sup>

Households headed by women were more likely to return after April 2017, at a time when the amount of reintegration assistance was reduced from \$350 to \$150 per household member. The smaller household size (4.1 in female-headed households versus 6.9 in male-headed households) and the lower assistance per returning household member put female-headed households at a disadvantage upon arrival in Afghanistan, as the total amount of assistance received averaged \$1,019, far less than the \$2,000 male-headed households received.

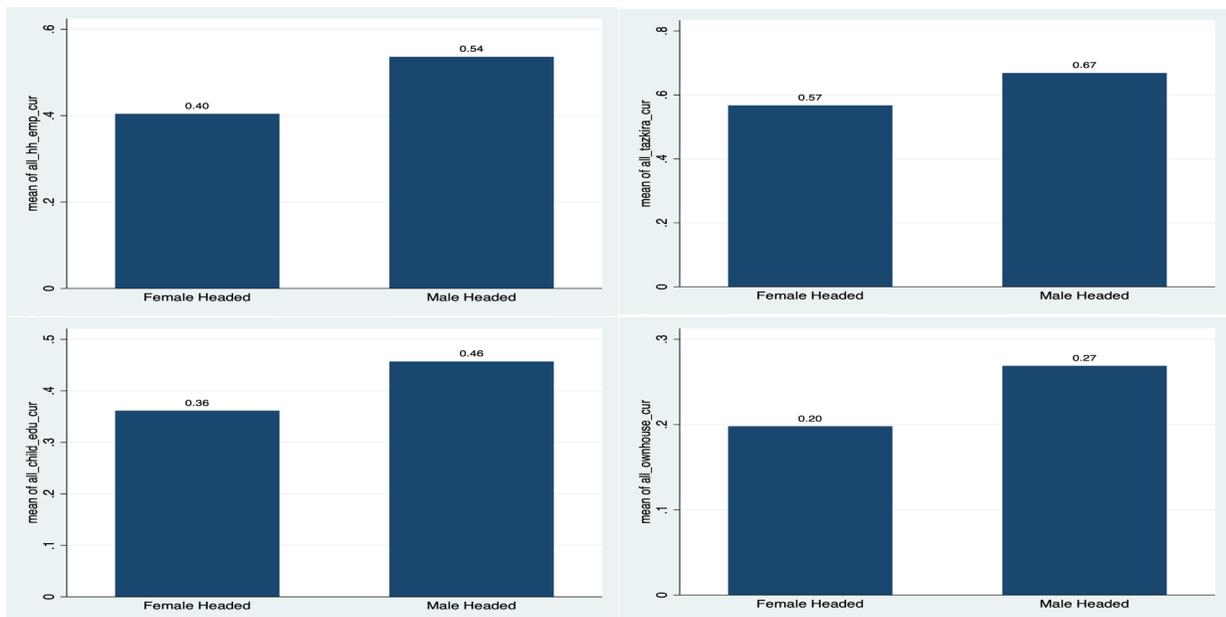
Working-age men were much more likely to return with their families during the period when UNHCR increased the reintegration assistance to \$350. It is impossible to determine whether pull (the increase in cash assistance) or push (increased pressures on Afghan refugee communities in Pakistan) factors were the main reason for returning.

<sup>10</sup> Female-headed households are defined as households without a working-age male member upon return to Afghanistan.

Female-headed households were worse off than male-headed households on all outcomes evaluated in this paper (figure 8). They were less likely to have received legal documentation (*tazkira*) for their household members after returning to Afghanistan and less likely to be residing in an owned dwelling. School-age children from female-headed households without a working-age male were 10 percentage points more likely to be out of school (36 percent of children of female-headed and 46 percent of children of male-headed households were in school).

Differences in school enrollment are particularly worrisome for children in female-headed households, because without a working-age male household member in Afghanistan, these households are more likely to send their children out to work. Not enrolling in school and the lower likelihood of having *tazkiras* are likely to lead to long-term differences in developmental outcomes for returning children.

**Figure 8 Differences in reintegration outcomes in male- and female-headed households**



One of the objectives of providing reintegration assistance to returning refugees is to assist them in making investments that increase their ability to generate positive outcomes (Sen 1999). One of the most valuable capabilities is access to education, which increases earnings for the individual and generates positive externalities by increasing the level of educational attainment within communities.

Adult education rates among returnees are exceptionally low, with 78 percent of returning adult women and 56 percent of returning adult men having received no education. Most of the returning children of school age (7–16) were born and raised in Pakistan. Upon school entry in Afghanistan, they face cultural and language barriers, curricula differences, financial difficulties, and the strain of integrating into a new environment. All of these factors may deter households from enrolling their children in school upon return.

Upon arrival in Afghanistan, 68 percent of girls and 57 percent of boys between the ages of 10 and 16 reported not having any educational attainment in Pakistan. In 2020, 61 percent of school-age returnee children were reported to have been enrolled in school. Among returnees 6–18, boys were more than 30 percentage points more likely to be enrolled in school than girls (77 percent versus 46 percent). The largest gender difference in educational attainment is among returnees 17–21, among whom half of women and three-quarters of men had some education.

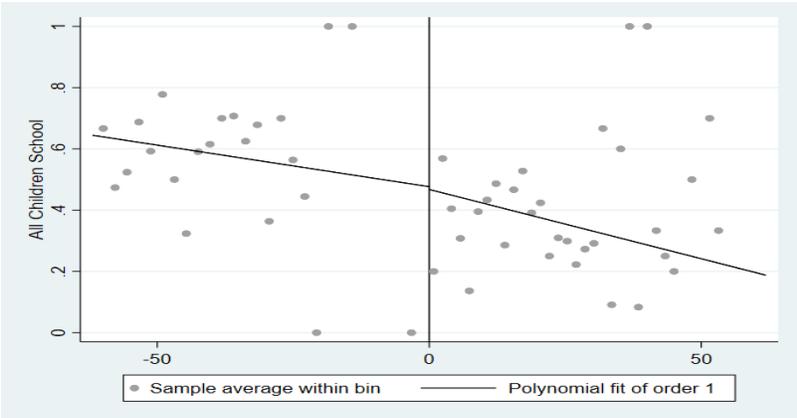
**Table 4 Educational attainment in Pakistan, by age group at time of return to Afghanistan (percent of total except where indicated otherwise)**

Type of education	Primary-school age (5–9)		Secondary-school age (10–16)		Tertiary-school age (17–21)	
	Male	Female	Male	Female	Male	Female
None	92	92	57	68	25	50
Primary	3	2	22	9	56	20
Religious school	4	4	4	5	7	11
Informal	1	1	17	19	11	18
Number of observations	31,057	29,490	34,757	33,345	18,131	17,308

School attendance may also be associated with financial costs, including the direct costs of transportation and school materials and the opportunity cost of not working. Households with employed members were 8 percentage points more likely to have enrolled their children in schools than households without a working member (51 percent versus 43 percent).

We find no evidence that the amount of cash assistance affected the likelihood of enrolling a child in school (figure 9). Multiple factors may explain the absence of an effect. First, education in Afghanistan is free; an unconditional cash transfer to returnees might not therefore affect school enrollment. Second, we are able to measure only whether households enrolled all their children in schools. A better measure of the effect of cash assistance on school enrollment would have collected school enrollment data on every school-age child within the household, especially given gender dynamics in Afghanistan.

**Figure 9 Relationship between amount of reintegration assistance and likelihood of enrolling all children in the household in school, by date of return**



Note: Month zero is May 2017. Observations to the left of 0 show results for households that received \$350 per returning household member. Observations to the right show side shows results for households that received \$150 per returning household member.

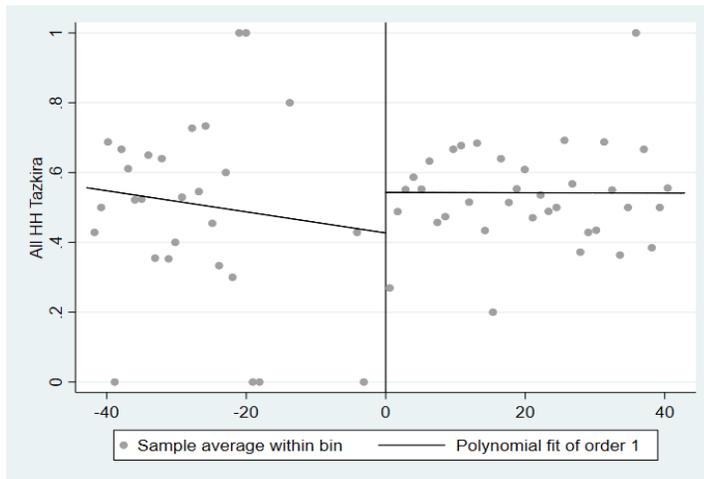
### Ownership of Legal Documentation Post-Return

Ownership of *tazkira* is an important measure of reintegration, as it is needed to engage in civil life, such as enrolling in schools or owning property. We thus examine the trends in *tazkira* ownership post-return and the relationship between UNHCR reintegration assistance and the likelihood that returning households obtained it upon return.

Monitoring data from 19,600 returnees between 2016 and 2017 show a significant correlation between *tazkira* ownership and enrollment in school. About half (49 percent) of 2016 returnees who had *tazkira* for their children enrolled their children in school. Among the 7 out of 10 children without *tazkira*, only a third were enrolled in school 16 months after return to Afghanistan.

Households in the treatment group were more likely to have *tazkira* for all household members than households in the control group (76 percent versus 60 percent) (figure 10).

**Figure 10 Relationship between amount of reintegration assistance and likelihood of receiving *tazkira* (legal document), by date of return**



Note: Month zero is May 2017. Observations to the left of 0 show results for households that received \$350 per returning household member. Observations to the right show side shows results for households that received \$150 per returning household member.

### Impact of Cash Assistance on Reintegration Outcomes

After controlling for a set of household-level characteristics, we find that the impact of cash assistance on home ownership, legal documentation, and consumption patterns was large and statistically significant. We include six covariates as controls within the nonparametric model: the amount of transportation assistance received, pre-return income, household size, gender of the household head, age of the household head, and whether the household head had any form of education. The regression models aggregate observations at the household level because outcome variables are measured at the household level. As we estimate the impact of a reduction in reintegration assistance (from \$350 to \$150) on five outcome variables, we calculate the mean-squared error, minimizing bandwidth separately for each outcome variables.

Households that received \$350 in a small neighborhood of the cutoff were 17 percent points more likely to own a house, 29.8 percent points more likely to have been issued legal documentation for their household, and 40.4 percent points less likely to have spent more than half their reintegration assistance on food (table 5).

**Table 5 Nonparametric regression discontinuity design estimate of impact of reducing UNHCR cash assistance from \$350 to \$150 per household member**

<i>item</i>	(1) <i>Own house</i>	(2) <i>Employed household Member</i>	(3) <i>All household members have tazkira</i>	(4) <i>Spent most of the assistance on food</i>	(5) <i>All children in school</i>
Cash amount (1=\$150, 2=\$300)	-0.170*** (0.054)	0.076 (0.095)	-0.298*** (0.109)	0.404*** (0.107)	-0.010 (0.109)
Observations	4,302	4,302	4,299	2,979	2,184
Kernel type	Triangular	Triangular	Triangular	Triangular	Triangular
BW type	MSERD	MSERD	MSERD	MSERD	MSERD
Observations left	956	610	371	358	456
Observations right	2110	1897	1818	571	958
Days on each side	74.81	54.90	42.86	42.26	61.80
Conventional <i>p</i> -value	0.00169	0.423	0.00620	0.000152	0.929
Order Loc. Poly. ( <i>p</i> )	1	1	1	1	1
Order bias ( <i>q</i> )	2	2	2	2	2
Covariates	Yes	Yes	Yes	Yes	Yes

*Note:* Robust standard errors are in parentheses.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

We find no significant effect of change in cash assistance on the likelihood of having an employed household member approximately 16 months after receiving the grant. The impact on the likelihood of enrolling children in school also becomes insignificant after controlling for confounding factors in the neighborhood of a 62-day bandwidth.

### Robustness Test: Parametric Regression Discontinuity Design Model

To ensure the robustness of results, we estimate the effects using a parametric strategy in which all returnee household-level observations are used. While the local linear regression approach is more likely to be unbiased in terms of estimating average treatment effects, the parametric estimation strategy, by using all available observations, provides a more precise estimate of treatment effects. The robustness check uses the following parametric model:

$$y_i = \alpha + \beta D_i + f(x_i) + \varepsilon_i \quad (3)$$

where  $y_i$  is the reintegration outcome of interest (education, house ownership, etc.);  $D_i$  indicates whether the household received a reduction in assistance ( $D_i = 1$  is the reduction of assistance from \$350 to \$150); and  $f(x_i)$  is a flexible function of the running variable, the week of return (centered on zero at the cutoff). If the function  $f$  is correctly specified, we can interpret  $\beta$  as the average treatment effect on the treated

(ATT). We control for differences in pre-return income, household head age, gender, education, and household size, as the household head was slightly older and the household size slightly larger in the treatment group (see table 1).

To understand whether  $f(x_i)$  should take a linear or quadratic form, we run regressions with both the day of return ( $x_i$ ) and the same model using an  $x_i$  and  $x_i^2$  term, in order to look for an inflection point and test whether the relationship between the outcome variables and the day of return is indeed nonlinear. After testing the functional form of  $f(x_i)$ , we find that the additional quadratic terms are not significant and therefore opt for a linear form for the day of return.<sup>11</sup>

After controlling for a set of household and individual demographic factors, we find that the results described in section 5 still hold. Households in the treatment group were 25 percentage points more likely to own a house, 23 percentage points more likely to have been issued *tazkira*, and 24 percentage points less likely to have spent most of the cash assistance on food than households in the control group (table 6). Differences between the nonparametric model and the linear parametric model are particularly pertinent regarding education. In section 5, we did not find any impact of cash assistance on children's school enrollment. In contrast, the parametric model suggests that households in the treatment group were 14 percent points more likely to enroll all their children in school than households in the control group.

**Table 5 Results of linear parametric model on effect of UNCHR cash assistance on reintegration outcomes**

<i>Item</i>	(1) <i>Own house</i>	(2) <i>Household member employed</i>	(3) <i>Household has tazkira</i>	(4) <i>All children in school</i>	(5) <i>Spent most of the assistance on food</i>
Cash amount (1=\$150, 0=\$300)	-0.245*** (0.021)	0.065*** (0.023)	-0.226*** (0.022)	-0.144*** (0.032)	0.238*** (0.027)
Day of return	0.000 (0.000)	-0.000 (0.000)	0.001*** (0.000)	-0.000* (0.000)	0.000** (0.000)
Transportation per capita	0.002*** (0.000)	-0.001* (0.001)	-0.003*** (0.001)	-0.001* (0.001)	0.001** (0.001)
Household per capita Income (RS)	-0.000 (0.000)	0.000** (0.000)	0.000** (0.000)	-0.000 (0.000)	-0.000 (0.000)
Household size (per Voluntary Repatriation Form)	0.004* (0.002)	0.007** (0.003)	0.003 (0.003)	0.005 (0.005)	-0.005 (0.003)
Household head gender (0 = Female, 1 =Male)	0.057*** (0.015)	0.079*** (0.019)	0.057*** (0.018)	0.076*** (0.028)	-0.086*** (0.021)

<sup>11</sup> We conducted a joint *F*-test of significance of the quadratic term and predicted the post-estimation margins, in order to test for an inflection point or curvature of the week of return variable. Results are available upon request.

Household head age at time of follow-up	−0.001 (0.000)	−0.002*** (0.000)	0.002*** (0.000)	−0.000 (0.001)	0.001 (0.001)
Household head uneducated	0.037*** (0.014)	−0.005 (0.017)	−0.049*** (0.017)	−0.031 (0.026)	−0.018 (0.020)
Constant	0.256*** (0.034)	0.474*** (0.041)	0.862*** (0.038)	0.560*** (0.061)	0.217*** (0.041)
Observations	4,302	4,302	4,300	2,184	2,979
R-squared	0.085	0.012	0.045	0.038	0.102
Functional form	Linear	Linear	Linear	Linear	Linear

Note: Robust standard errors are in parentheses.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

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