Online Appendix for *Why Do People Stay Poor?*

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August 25, 2021

A Solution of the Structural Model

In this appendix we characterize the full solution of our structural model:

$$\max_{l\geq 0, h\geq 0, h'\geq 0} Af(\bar{k})g(l+h') + wh - w'h' - \frac{1}{2}(\sqrt{\psi_l}l + \sqrt{\psi_h}h)^2 \tag{1}$$

subject to

$$h \leq \overline{H} \quad \text{[H]}$$

$$h' \leq \overline{N} \quad \text{[N]}$$

$$h + l \leq \overline{R} \quad \text{[R]}$$

Case 1 Mixed occupational choice with hired-in labour ($l > 0, h > 0, h' > 0$).

Case 1a All [H], [N] and [R] slack.

In this case, the optimal solution must satisfy:

$$Af(\bar{k})g'(l+h') = \psi_l l + \sqrt{\psi_l \psi_h} h$$

$$w = \sqrt{\psi_l \psi_h} l + \psi_h h$$

$$Af(\bar{k})g'(l+h') = w'$$

Note that this is possible under the assumption that $w > w'$ and $\psi_h > \psi_l$. We can interpret the left-hand side of the first order conditions as the marginal benefit of increasing the amount of self-employment or wage labour supplied or the amount of labour hired in (in terms of additional production or earnings), whereas the right-hand side represents the respective marginal cost. Because the agent is choosing an interior solution for these three variables, it must be that the marginal benefit is equal to the marginal cost.

Case 1b [H] binding, [N] and [R] slack.

If $h = \overline{H}$, then the optimal solution is characterised by:

$$Af(\bar{k})g'(l+h') = \psi_l l + \sqrt{\psi_l \psi_h}\, \overline{H}$$

$$h = \overline{H}$$

$$Af(\bar{k})g'(l+h') = w'$$

Moreover, because [H] is binding, we have that

$$w \geq \sqrt{\psi_l \psi_h} l + \psi_h \overline{H},$$

i.e. in the optimum the marginal benefit of wage work could be greater than the marginal cost. This might mean that the agent would like to supply more hours of paid labour, but cannot do so because of the labour demand constraint.

Case 1c [H] and [N] slack, [R] binding.

If $h < \overline{H}$ but $h + l = \overline{R}$, letting λ denote the Lagrange multiplier on the time endowment constraint, the optimal solution must satisfy

$$\begin{aligned} Af(\bar{k})g'(l + h') &= \psi_l l + \sqrt{\psi_l \psi_h} h + \lambda \\ w &= \sqrt{\psi_l \psi_h} l + \psi_h h + \lambda \\ Af(\bar{k})g'(l + h') &= w' \\ h + l &= \overline{R} \end{aligned}$$

The multiplier $\lambda \geq 0$ represents the value of relaxing the binding constraint [R] at the optimum. It appears in the right-hand side of the first order conditions because, when the time endowment constraint binds, increasing the hours worked in livestock rearing implies decreasing the hours in wage labour (and vice versa). Combining the first two equations, we can characterise the solution as:

$$\begin{aligned} Af(\bar{k})g'(l + h') - \psi_l l - \sqrt{\psi_l \psi_h}(\overline{R} - l) &= w - \sqrt{\psi_l \psi_h} l - \psi_h(\overline{R} - l) \\ h &= \overline{R} - l \\ Af(\bar{k})g'(l + h') &= w' \end{aligned}$$

Case 1d [H] and [R] binding, [N] slack.

In this case the optimal solution is:

$$\begin{aligned} l &= \overline{R} - \overline{H} \\ h &= \overline{H} \\ Af(\bar{k})g'(\overline{R} - \overline{H} + h') &= w' \end{aligned}$$

As before, at the optimum we have

$$\begin{aligned} Af(\bar{k})g'(\overline{R} - \overline{H} + h') &\geq \psi_l(\overline{R} - \overline{H}) + \sqrt{\psi_l \psi_h}\,\overline{H} \\ w &\geq \sqrt{\psi_l \psi_h}(\overline{R} - \overline{H}) + \psi_h \overline{H} \end{aligned}$$

i.e. the marginal benefits of self-employment and wage labour could be greater than the respective marginal costs.

In all the sub-cases where [N] is binding, in the optimum we will have

$$Af(\bar{k})g'(l + \overline{N}) \geq w',$$

meaning that, because the farmer is hiring in the maximum amount of labour she can, it is possible that the marginal benefit of hiring in is still bigger than the marginal cost of doing so.

Case 1e [H] and [R] slack, [N] binding.
The optimal solution is characterised by:

$$\begin{aligned} Af(\bar{k})g'(l + \overline{N}) &= \psi_l l + \sqrt{\psi_l \psi_h} h \\ h &= \sqrt{\psi_l \psi_h} l + \psi_h h \\ h' &= \overline{N} \end{aligned}$$

Case 1f [R] slack, [H] and [N] binding.
The optimal solution is given by:

$$\begin{aligned} Af(\bar{k})g'(l + \overline{N}) &= \psi_l l + \sqrt{\psi_l \psi_h}\,\overline{H} \\ h &= \overline{H} \\ h' &= \overline{N} \end{aligned}$$

Case 1g [H] slack, [R] and [N] binding.
The optimal solution must satisfy:

$$\begin{aligned} Af(\bar{k})g'(l + \overline{N}) - \psi_l l - \sqrt{\psi_l \psi_h}(\overline{R} - l) &= w - \sqrt{\psi_l \psi_h} l - \psi_h(\overline{R} - l) \\ h &= \overline{R} - l \\ h' &= \overline{N} \end{aligned}$$

Case 1h All [H], [N] and [R] binding.

The optimal solution is:

$$\begin{aligned} l &= \overline{R} - \overline{H} \\ h &= \overline{H} \\ h' &= \overline{N} \end{aligned}$$

Case 2 Mixed occupational choice without hired-in labour ($l > 0, h > 0, h' = 0$).

In all the sub-cases below, because $h' = 0$, necessarily we have

$$Af(\bar{k})g'(l) \leq w'$$

This means that, as no labour is being hired in, the marginal benefit of doing so must be less than the marginal cost. Also, [N] is slack because $\overline{N} > 0 = h'$.

Case 2a Both [H] and [R] slack.

In this case, the optimal solution must satisfy:

$$\begin{aligned} Af(\bar{k})g'(l + h') &= \psi_l l + \sqrt{\psi_l \psi_h} h \\ w &= \sqrt{\psi_l \psi_h} l + \psi_h h \\ h' &= 0 \end{aligned}$$

Case 2b [H] binding, [R] slack.

The optimal solution is characterised by:

$$\begin{aligned} Af(\bar{k})g'(l + h') &= \psi_l l + \sqrt{\psi_l \psi_h}\, \overline{H} \\ h &= \overline{H} \\ h' &= 0 \end{aligned}$$

with

$$w \geq \sqrt{\psi_l \psi_h} l + \psi_h \overline{H}$$

Case 2c [H] slack, [R] binding.

By the same argument as above, in the optimum we must have:

$$\begin{aligned}
Af(\bar{k})g'(l+h') - \psi_l l - \sqrt{\psi_l\psi_h}(\overline{R}-l) &= w - \sqrt{\psi_l\psi_h} l - \psi_h(\overline{R}-l) \\
h &= \overline{R} - l \\
h' &= 0
\end{aligned}$$

Case 2d Both [H] and [R] binding. The optimal solution is:

$$\begin{aligned}
l &= \overline{R} - \overline{H} \\
h &= \overline{H} \\
h' &= 0
\end{aligned}$$

with

$$\begin{aligned}
Af(\bar{k})g'(\overline{R}-\overline{H}) &\geq \psi_l(\overline{R}-\overline{H}) + \sqrt{\psi_l\psi_h}\,\overline{H} \\
w &\geq \sqrt{\psi_l\psi_h}(\overline{R}-\overline{H}) + \psi_h\overline{H}
\end{aligned}$$

We turn now to cases where the agent does only livestock rearing (self-employment) and no wage labour. Because $h = 0$, it must be the case that

$$w \leq \sqrt{\psi_l\psi_h} l + \lambda$$

at the optimum, where λ is again the Lagrange multiplier on the time endowment constraint (and $\lambda = 0$ if the constraint is slack). This mean that, even at $h = 0$, the marginal cost of supplying hours of paid work is higher than the marginal benefit. Also, note that the labour demand constraint [H] will always be slack, as $h = 0 < \overline{H}$.

Case 3 Livestock rearing only with hired-in labour ($l > 0, h = 0, h' > 0$).

Case 3a Both [R] and [N] slack.
The optimal solution must satisfy:

$$\begin{aligned}
Af(\bar{k})g'(l+h') &= \psi_l l \\
h &= 0 \\
Af(\bar{k})g'(l+h') &= w'
\end{aligned}$$

Case 3b [R] binding, [N] slack.

The optimal solution is given by:

$$l = \overline{R}$$
$$h = 0$$
$$Af(\bar{k})g'(\overline{R} + h') = w'$$

with

$$Af(\bar{k})g'(\overline{R} + h') \geq \psi_l \overline{R}$$

Case 3c [R] slack, [N] binding.

At the optimum we must have:

$$Af(\bar{k})g'(l + \overline{N}) = \psi_l l$$
$$h = 0$$
$$h' = \overline{N}$$

Case 3d Both [R] and [N] binding.

The optimal solution is:

$$l = \overline{R}$$
$$h = 0$$
$$h' = \overline{N}$$

Case 4 Livestock rearing only without hired-in labour ($l > 0, h = 0, h' = 0$).

Again, because $h' = 0$, we must have

$$Af(\bar{k})g'(l) \leq w'$$

at the optimum.

Case 4a [R] slack.

The optimal solution must satisfy:

$$Af(\bar{k})g'(l) = \psi_l l$$
$$h = 0$$
$$h' = 0$$

Case 4b [R] binding.

The optimal solution is:

$$l = \overline{R}$$
$$h = 0$$
$$h' = 0$$

with

$$Af(\bar{k})g'(R) \geq \psi_l \overline{R}$$

Next, we examine the cases where the agent does only wage labour but no livestock rearing herself. Because $l = 0$, we necessarily have that

$$Af(\bar{k})g'(h') \leq \sqrt{\psi_l \psi_h} h$$

Notice also that, since $h \leq \overline{H} \leq \overline{R}$, the time endowment constraint [R] is automatically slack.

Case 5 Wage work only with hired-in labour ($l = 0, h > 0, h' > 0$).

Case 5a Both [H] and [N] slack.

The optimal solution is given by:

$$l = 0$$
$$w = \psi_h h$$
$$Af(\bar{k})g'(h') = w'$$

Case 5b [H] binding, [N] slack. The optimum must satisfy:

$$l = 0$$
$$h = \overline{H}$$
$$Af(\bar{k})g'(h') = w'$$

with

$$w \geq \psi_h \overline{H}$$

Case 5c [H] slack, [N] binding. The optimum must satisfy:

$$l = 0$$
$$w = \psi_h h$$
$$h' = \overline{N}$$

Case 5d Both [H] and [N] binding. The optimum must satisfy:

$$l = 0$$
$$h = \overline{H}$$
$$h' = \overline{N}$$

In the last possible case, we have that $l + h' = 0$. Under standard regularity conditions (in particular, if we assume $g'(0) = +\infty$) this would never be an optimal choice. This is because the marginal return of starting any livestock rearing (either through self-employment or by hiring in external labour) is arbitrarily large, whereas the marginal cost is only finite.

However, to allow for this case, we consider the possibility of liquidating the physical capital stock, which would yield a profit of $\rho\bar{k}$ with $\rho \leq 1$. Hence, the problem that the agent faces is just a choice of hours of paid work:

$$\max_{h \geq 0} \rho\bar{k} + wh - \frac{1}{2}\psi_h h^2 \tag{2}$$

subject to

$$h \leq \overline{H} \tag{H}$$

Case 6 Wage work only without hired-in labour ($l = 0, h > 0, h' = 0$).

Case 6a [H] slack.
The optimality condition is

$$w = \psi_h h$$

Case 6b [H] binding. In this case we must have

$$h = \overline{H}$$

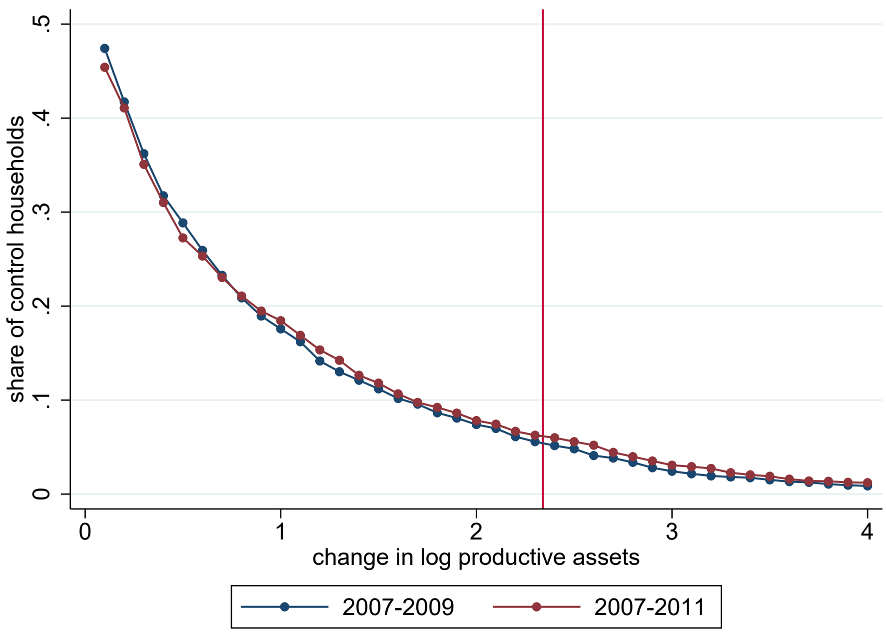
and $w \geq \psi_h \overline{H}$.

The above will be optimal when the solution to the maximization problem in (2) yields a higher payoff than the outcome of (1).

Finally, we note that with this parametrisation it is not possible to have $l = 0$ and $h = 0$ at the same time, because at those levels, the marginal cost of supplying wage labour is 0, whereas the marginal benefit is $w > 0$. However, this case seems to be empirically relevant.

B Appendix Figures

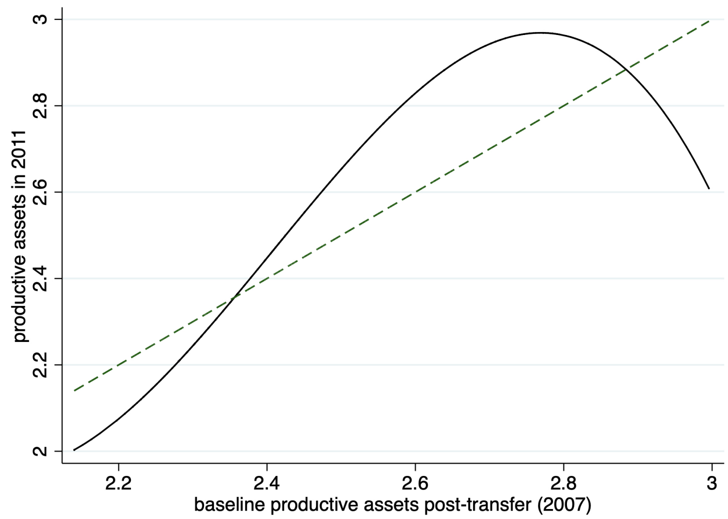
Figure B.1: Positive Asset shocks for control households



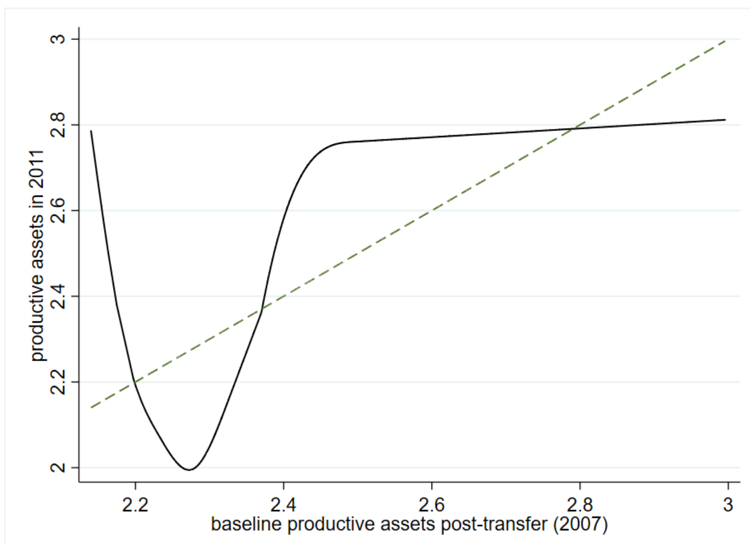
Notes: The figure reports the share of control households that experience a change in log productive assets larger that X between 2007 and 2009 (blue line) or 2007 and 2011 (red line), where X varies between 0 and 4 in increments of 0.1. The horizontal red line indicates the proximate size of asset transfer provided by BRAC to households in treatment villages.

Figure B.2: Alternative Estimates of the Transition Equation

(a) 3rd Order Polynomial

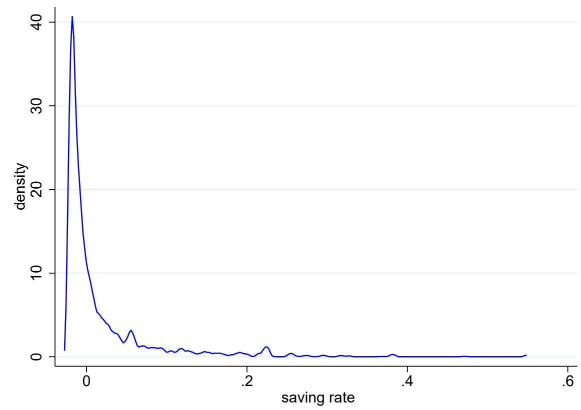


(b) B-splines

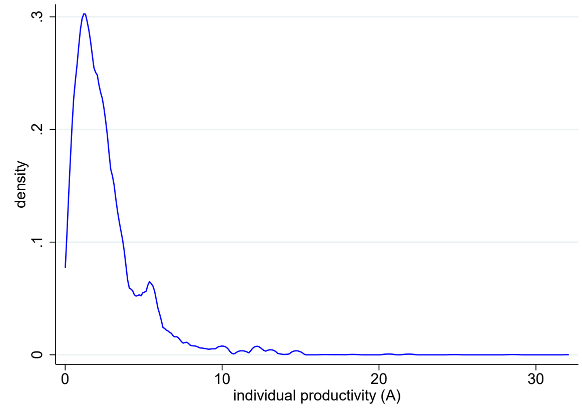


Notes: The sample is restricted to ultra-poor households in treatment villages with log baseline productive assets below 3. Productive assets are measured as the natural logarithm of the total value, in 1000 Bangladeshi Taka, of all livestock, poultry, business assets, and land owned by the households. Post-transfer assets are imputed by adding to each household's baseline assets the median value of a cow within the catchment area of a household's BRAC branch. The dashed line represents the 45° line at which assets in 2011 equal initial assets in 2007. Panel a) plots the predicted values of a regression of log productive assets in 2014 on a third order polynomial of log productive assets including the transfer in 2011. Panel b) shows a B-spline estimate of the same relationship.

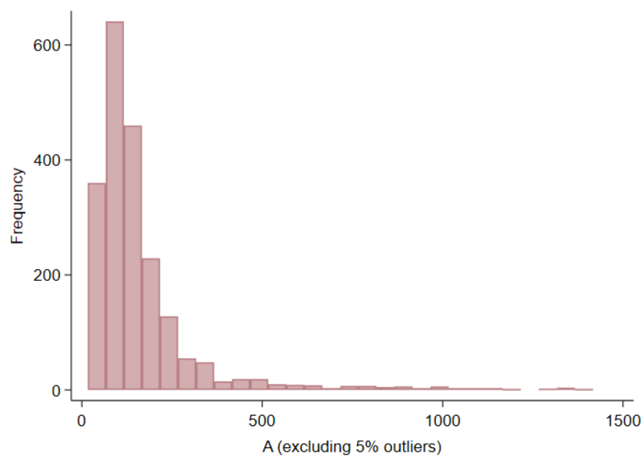
Figure B.3: What explains Bimodal Distribution of Assets? Savings Rate and Individual Productivity in Livestock Rearing among the Ultra-Poor



(a) Distribution of savings rate



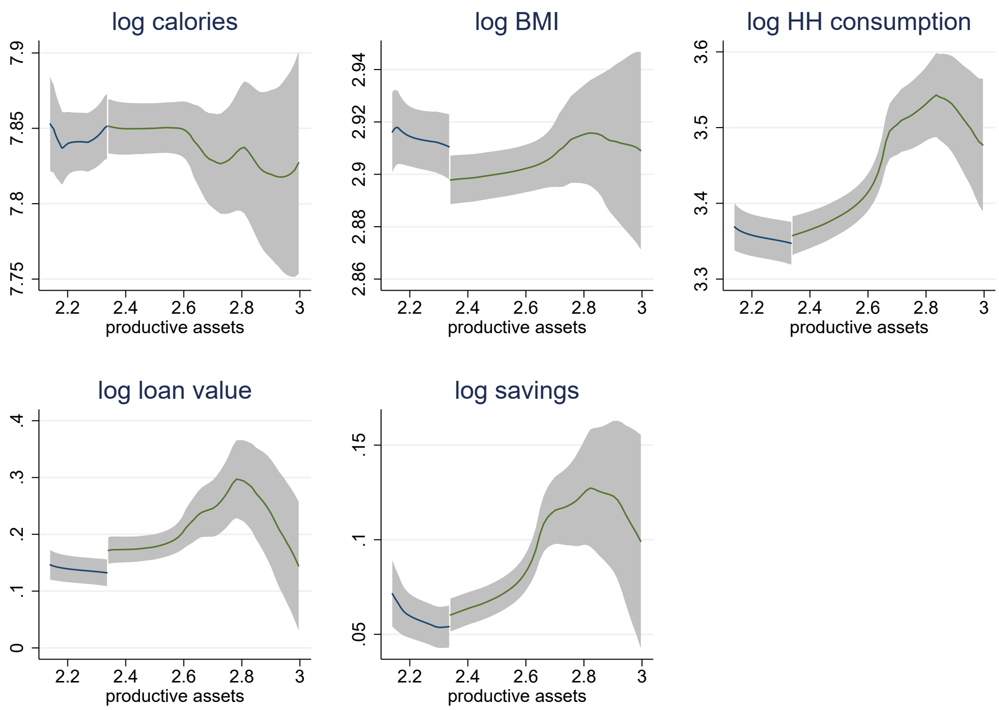
(b) Distribution of Productivity, panel regression



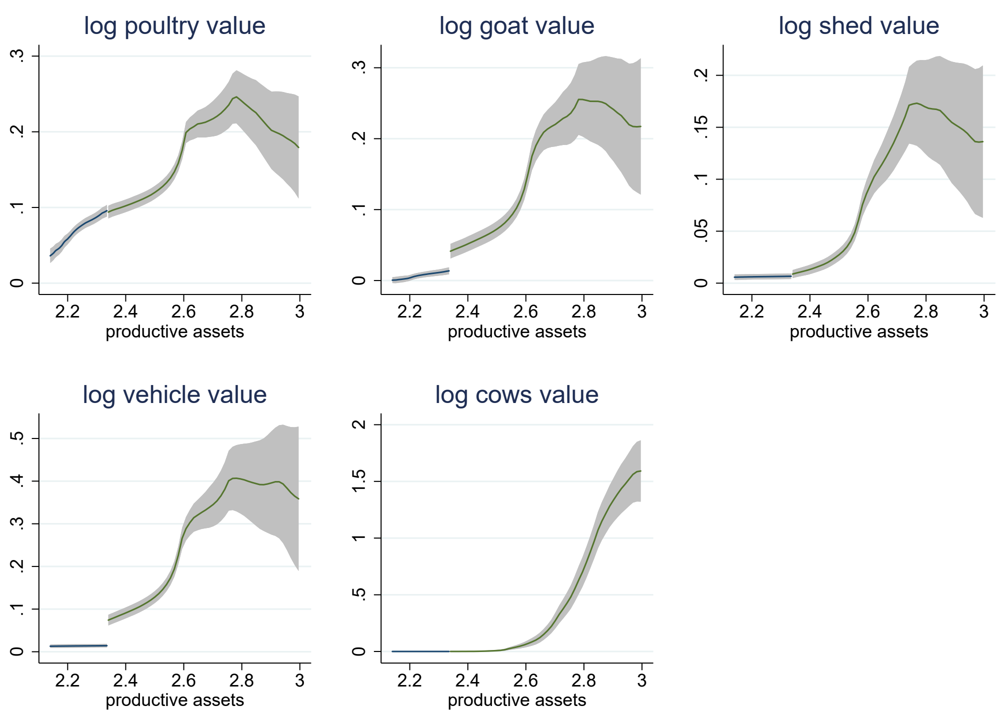
(c) Distribution of Productivity, structural estimation

Notes: The graph shows density estimates of the distribution of households' savings rate (panel (a)) and livestock rearing productivity (panel (b)) for all surveyed households in treatment villages. The savings rate is net of survey wave and branch fixed effects. Household level productivity estimates are obtained by regressing log livestock income on log hours worked in livestock rearing, and the log of the number of cows, controlling for survey round, BRAC branch, and household fixed effects in a panel over the survey rounds 2007, 2009, 2011, 2014, and 2018. The graph (panel (b)) plots $A_i = exp(\hat{\mu_i})$ of the household fixed effects $\hat{\mu_i}$, which we interpret as a measure of household TFP. One outlier at 124.8 is excluded. The distribution of the product of savings rate and productivity, $s_i \times A_i$, is also unimodal (not shown). The last figure (panel (c)) shows the density of household-level calibrated parameters for productivity in livestock rearing from the structural model. The sample are the 64% of ultra-poor individuals for whom individual-level parameters can be calibrated using baseline and/or year 2 data (as described in section VI.B).

Figure B.4: Local polynomial regressions of baseline characteristics on productive assets



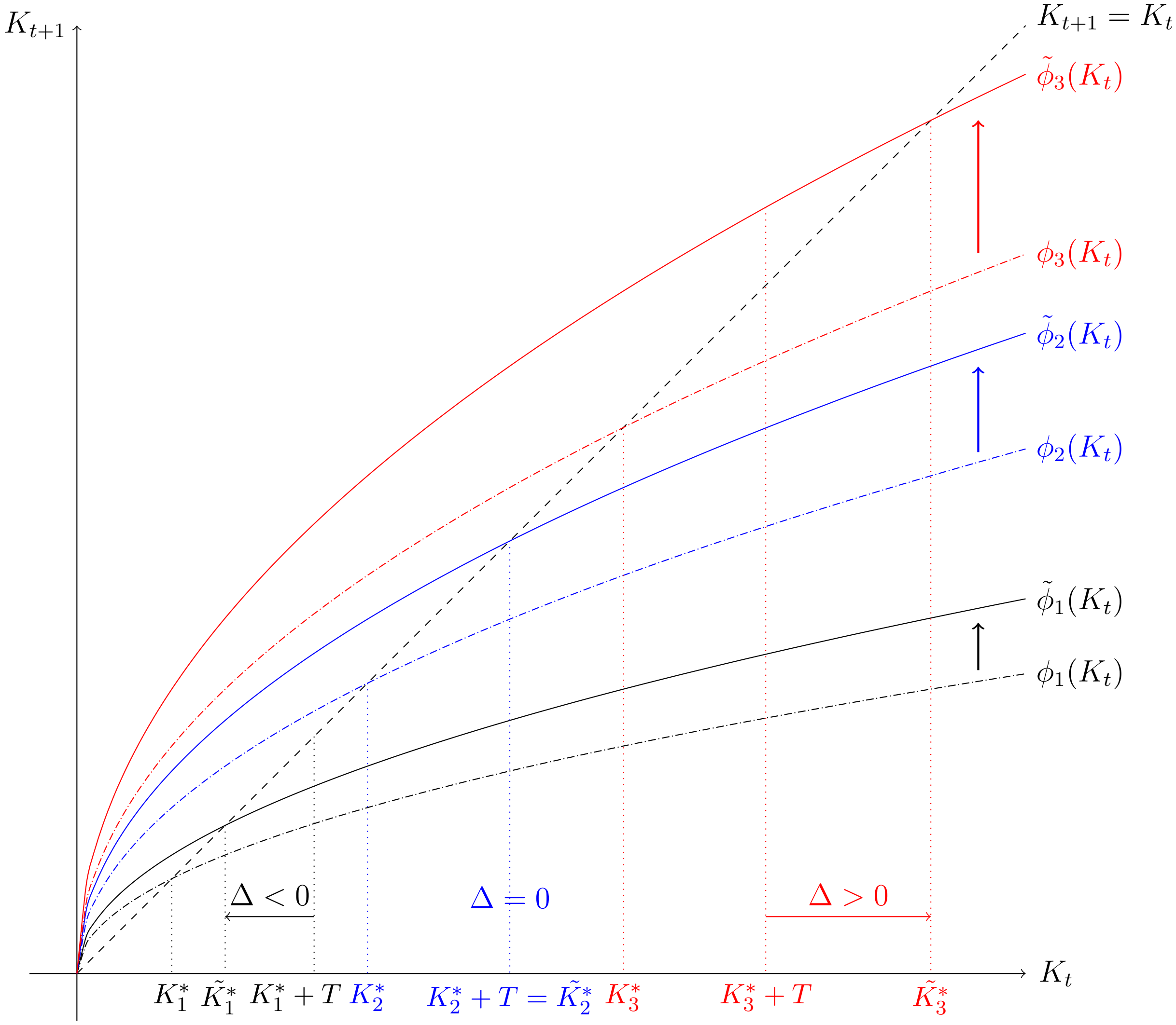
(a) Nutrition and Liquidity



(b) Asset composition

Notes: The sample is restricted to ultra-poor households with log baseline productive assets below 3.

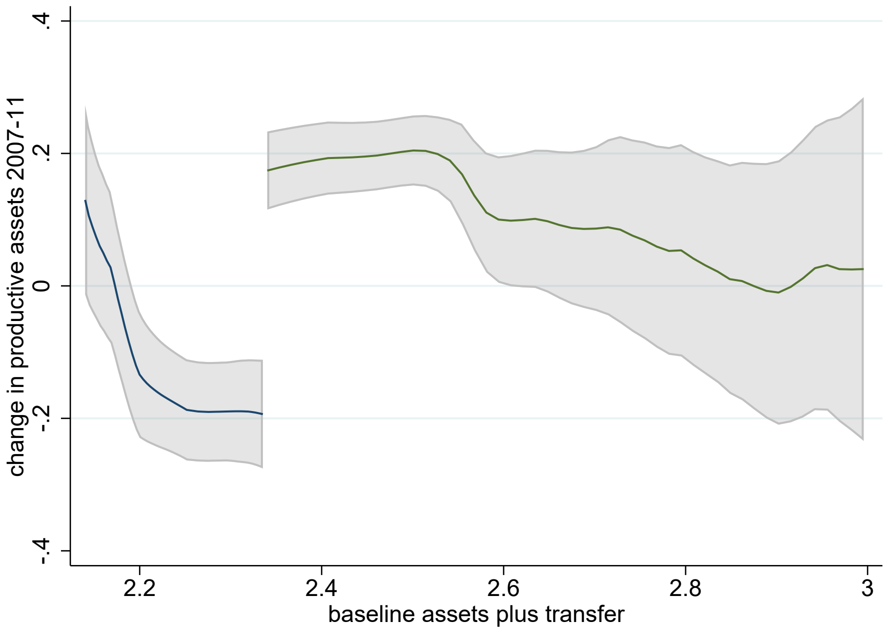
Figure B.5: Unstable Steady State in the Empirical Transition Equation can emerge from Endogenous Response to Training under Concave Individual Transition Equations



. Hence, $\widetilde{K_2^*}$ has the apparent characteristics of a poverty threshold, even though all individual transition equations are globally concave.

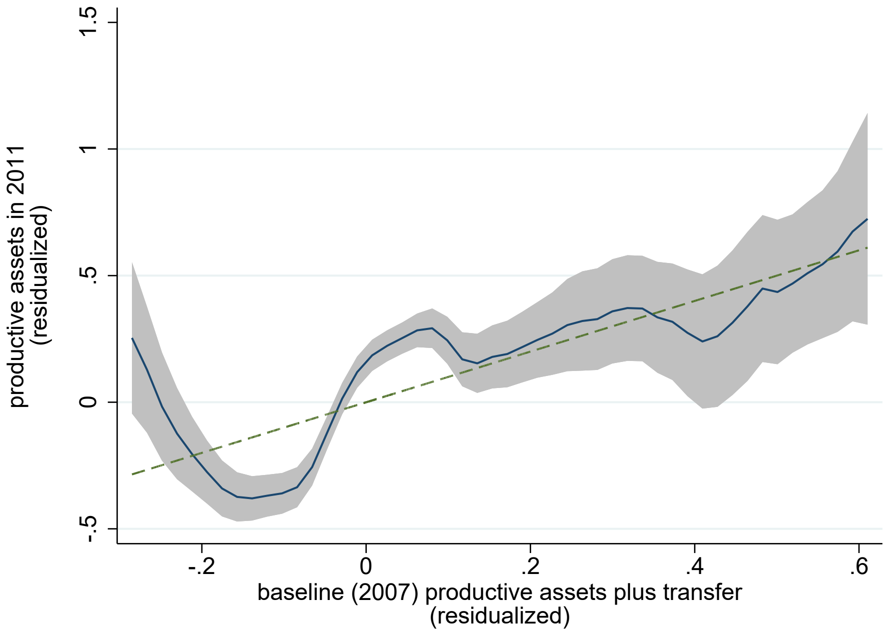
Notes: The figure illustrates the case in which the effect of the training is increasing in K_0. There exists level of capital, K_2^* such that $K_2^* + T = \widetilde{K_2^*}$ (in blue). Individual $i = 1$ (in red) with $K_1^* < K_2^*$ gains less from the training which means that their new steady state is below their initial steady state plus the transfer, that is $K_1^* < \widetilde{K_1^*} < K_1^* + T$, which implies $\Delta_1 < 0$. Conversely, individual $i = 3$ (in black) with $K_3^* > K_2^*$ gains more from the training, raising their new steady state above their post-transfer asset value, that is $K_3^* < K_3^* + T < \widetilde{K_3^*}$, which implies $\Delta_3 > 0$

Figure B.6: Asset accumulation above and below $\hat{k}$



Notes: The sample is restricted to ultra-poor households in treatment villages with log baseline productive assets below 3. Productive assets are measured as the natural logarithm of the total value, in 1000 Bangladeshi Taka, of all livestock, poultry, business assets, and land owned by the households. Post-transfer assets are imputed by adding to each household's baseline assets the median value of a cow within the catchment area of a household's BRAC branch. The graphs show the smoothed values from local polynomial regressions estimated separately below and above a threshold of $\hat{k} = 2.34$. The gray areas represent 95 percent confidence bands.

Figure B.7: Transition equation with Human Capital Controls

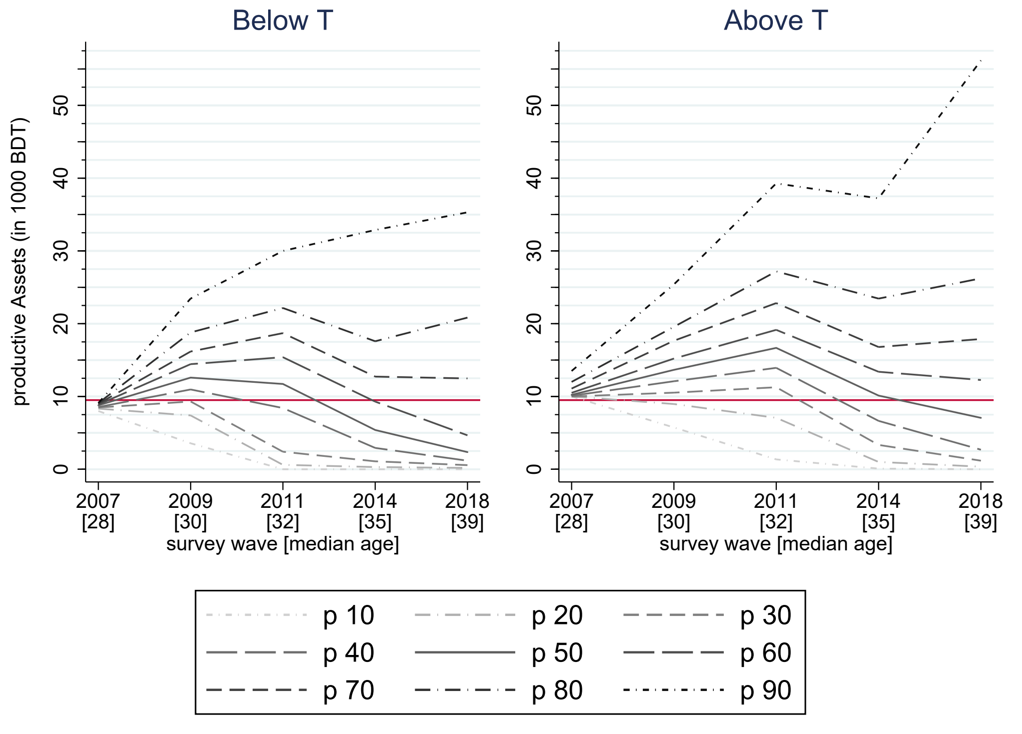


Notes: The sample is restricted to ultra-poor households in treatment villages with log baseline productive assets below 3. Productive assets are measured as the natural logarithm of the total value, in 1000 Bangladeshi Taka, of all livestock, poultry, business assets, and land owned by the households. Post-transfer assets are imputed by adding to each household's baseline assets the median value of a cow within the catchment area of a household's BRAC branch. The figure plots the residuals from an OLS regression, in each year (post-transfer in 2007), of log productive assets on the following set of control variables: age, age squared, BMI, a health index constructed from the number of physical activities the respondent struggles to perform, a dummy for each year of formal education completed, literacy, numeracy, an indicator for whether the respondent reports being happy or very happy, and an indicator for whether the respondent reports having mental anxiety that hampered daily activities. The graphs show the smoothed values from a local polynomial regression of the 2011 residuals on the 2007 (post-transfer) residuals. The gray areas represent 95 percent confidence bands.

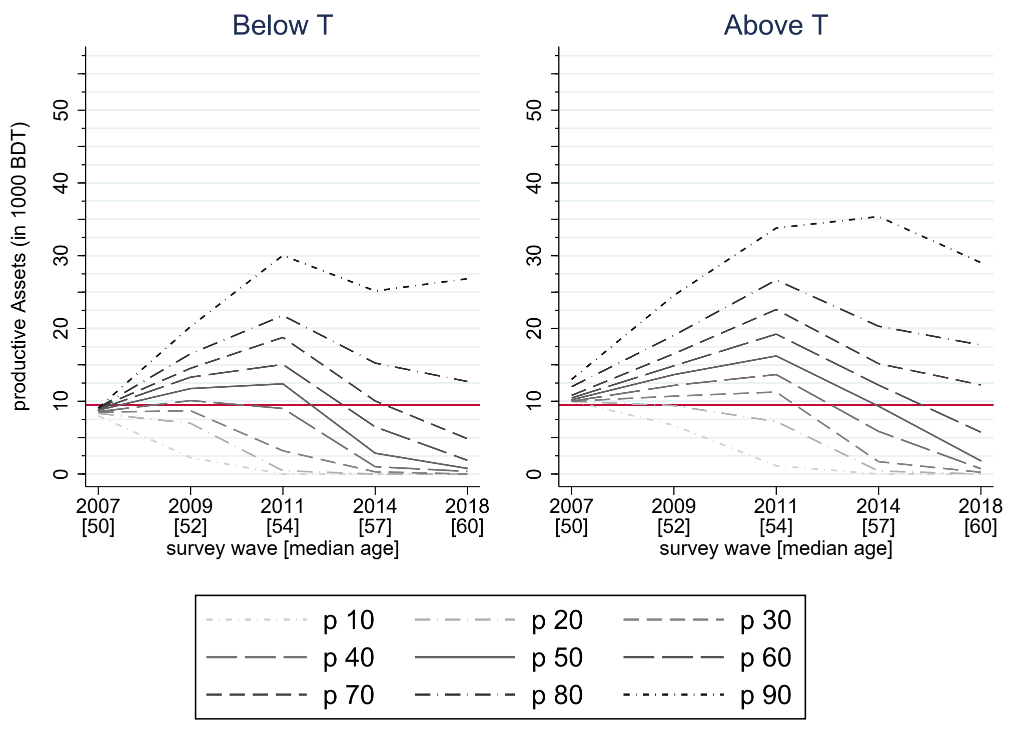
Figure B.8: Asset stock over the life-cycle: control villages

Notes: The figure plots local polynomial plots of log productive assets against respondents' age. The sample consists of all households in control villages except the targeted ultra-poor (who receive BRAC's TUP program in 2014) and is trimmed at 80 years of age. Each line represents a different survey wave.

Figure B.9: Productive Asset Dynamics in the Long Run above and below Poverty Threshold by Age



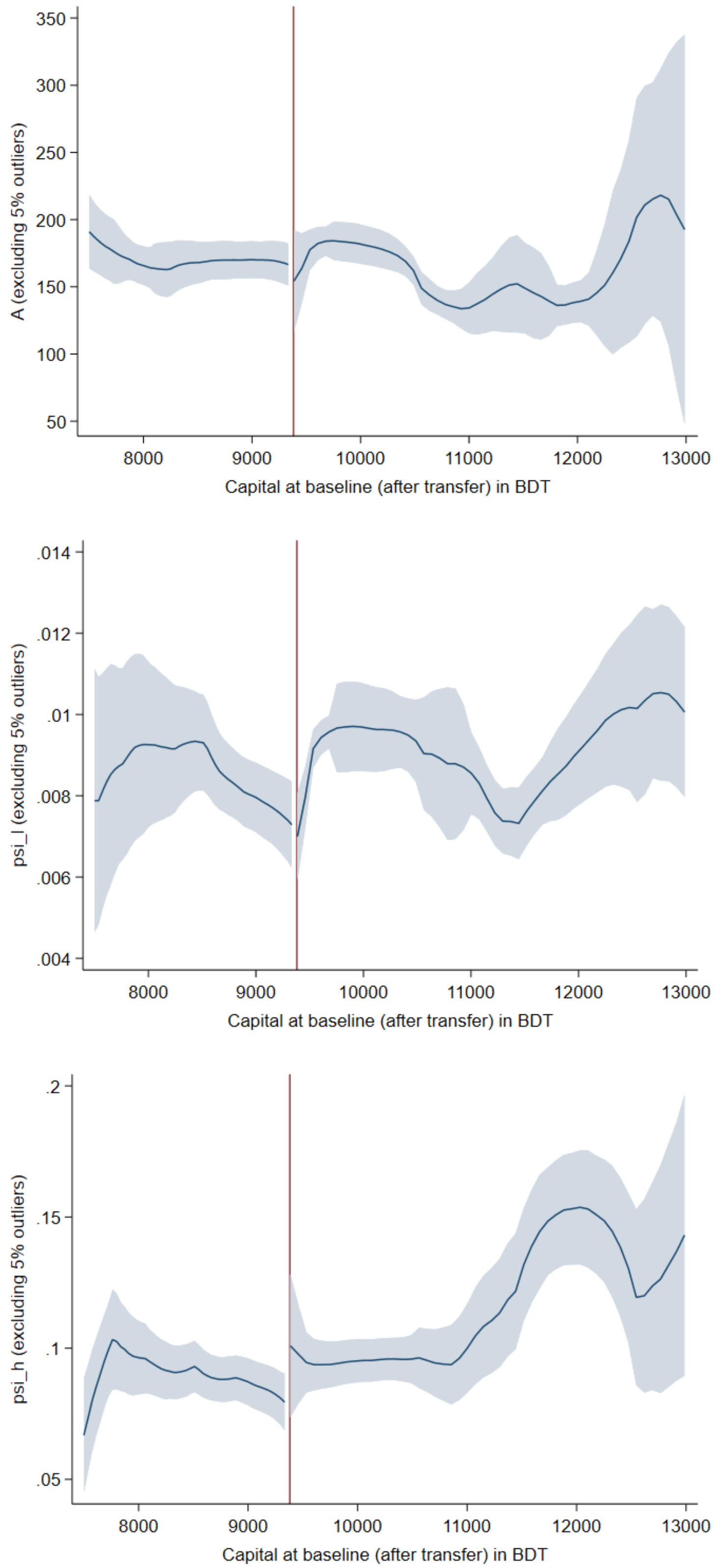
(a) Below median age (35)



(b) Above median age (35)

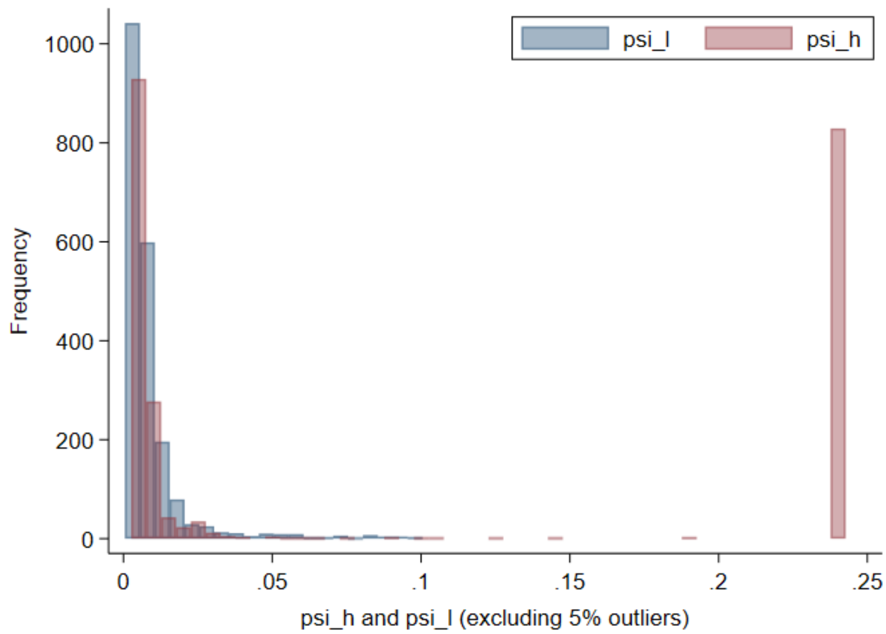
Notes:

Figure B.10: Calibrated productivity, disutility livestock rearing and disutility of wage labor as a function of baseline capital.



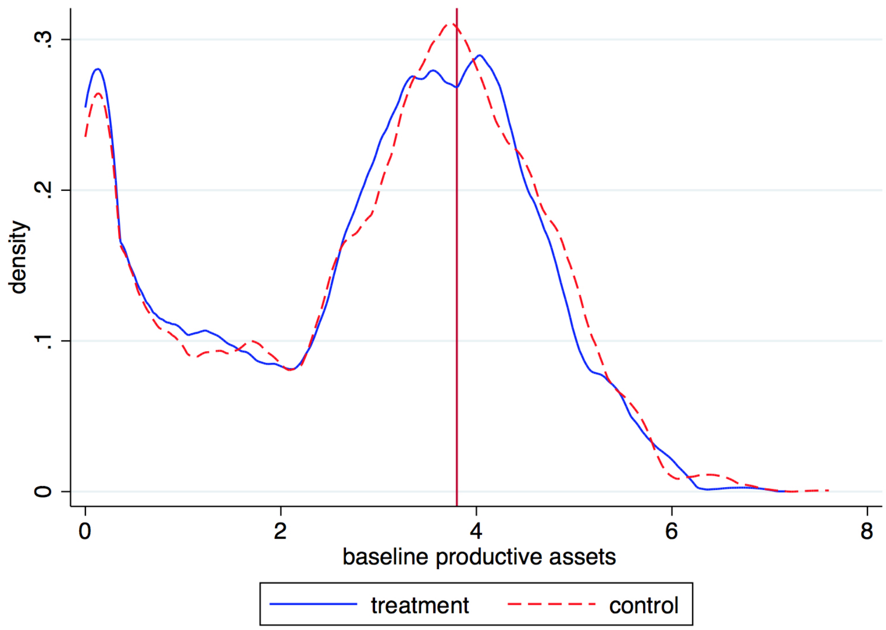
Notes: The graphs show calibrated values of individual-level parameters as a function of post-transfer baseline capital. The calibrated parameters shown are productivity in livestock rearing A (panel A), disutility of labor hours in livestock rearing (panel B), and disutility of wage labor hours (panel C). Five percent outliers are excluded. The vertical lines show the threshold level of capital. Local polynomial regressions are estimated separately on either side of the threshold. Ninety five percent asymptotic confidence intervals for the local polynomial regressions are shown.

Figure B.11: Frequency distribution of calibrated disutility of labor parameters



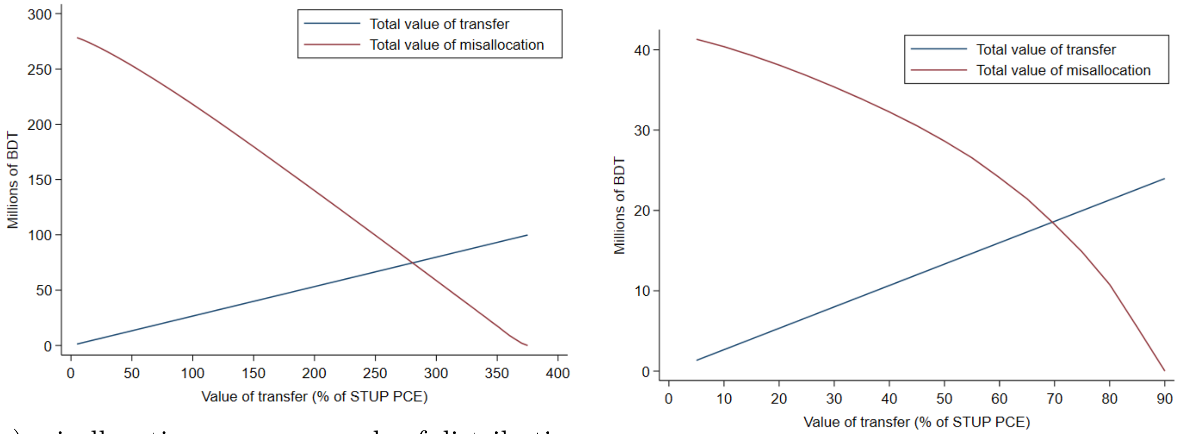
Notes: The frequency distributions shown are of calibrated individual-level parameters for disutility of livestock rearing hours (blue) and wage labor hours (red), excluding 5% outliers, for the 64% of ultra-poor individuals for whom individual-level parameters can be calibrated using baseline and/or year 2 data (as described in the text). The upper mode in the latter frequency distribution reflects the fact that individuals who do not work at baseline are assigned the maximum calibrated value of the disutility of wage labor hours parameter.

Figure B.12: Distribution of Productive Assets excluding Land



Notes: The graph shows kernel density estimates of the distribution of baseline productive assets excluding land in the full sample of 21,839 households across all wealth classes in treatment and control villages. Productive assets without land include all livestock, poultry, and business assets owned by the household. Sample weights are used to account for different sampling probabilities across wealth classes. The weights are based on a census of all households in the 1,309 study villages.

Figure B.13: Model Based Estimates of Misallocation as a Function of Transfer Value



(a) misallocation vs upper mode of distribution of productive assets minus land

(b) misallocation vs unstable steady state

Notes: The graph shows the model-implied total value of misallocation (red) as transfers given to all households (blue) increase in increments of percentage of annual per capita consumption expenditure. In (a) Misallocation is measured against the maximum model-implied payoff available at the capital level corresponding to the upper mode of the distribution across all wealth classes of productive assets excluding land (43,701 BDT; 2,367 USD). In (b) misallocation is measured against the maximum model-implied payoff available at the unstable steady state capital level. The top 5% of individual misallocation values are top-coded at the 95th percentile in the simulations.

C Appendix Tables

Table C.1: Exploiting Individual Thresholds in Estimating Short-Term Responses to the Asset Transfer - Placebo Specifications

	(1) Earnings Potential	(2) Savings Rate	(3) No Anxiety	(4) Any Education
Above $\hat{k}_L$	-0.196	0.0111	-0.0219	-0.795***
	(-1.26)	(0.10)	(-0.17)	(-6.42)
Above $\hat{k}_H$	0.413***	0.350***	0.327***	0.331***
	(6.77)	(3.53)	(5.40)	(6.86)
Constant	-0.0343	-0.186**	-0.127	0.611***
	(-0.23)	(-2.80)	(-1.03)	(5.21)
N	1656	1542	1659	2842

Notes: *: $p < 0.1$, **: $p < 0.05$, ***: $p < 0.01$. Robust standard errors in parentheses. Sample: ultra-poor households in treatment villages with log baseline productive assets below 3. For each variable, the sample is further restricted to households facing the high threshold, that is those with below median earnings potential or savings rate or those who report having anxiety and no formal education. The dependent variable is the difference between log productive assets in 2011 and log of productive assets in 2007, where productive assets are defined as the total value of livestock, poultry, business assets (e.g. tools, vehicles and structures), and land. Above $\widehat{k}_L$ (Above $\widehat{k}_H$) equals 1 if the baseline asset stock plus the imputed transfer is larger than the low (high) threshold value based on the variable indicated at the top of each column (See Figure V). Earnings potential is computed as the residual (averaged at the branch level) from regressing livestock earnings on a constant and a second-order polynomial of the number of cows owned. Any education is an indicator equal to one if the respondent spent a positive number of years in formal schooling. Anxiety is an indicator equal to one if the respondent reports having mental anxiety that hampered daily activities.

Table C.2: Difference in Differences Estimates of Long-Run Dynamics: Additional Outcomes

	(1) Productive assets (constant prices)	(2) Other Assets	(3) Per-capita expenditure	(4) Per-capita food expenditure	(5) Below 1.90 USD/day
above $\hat{k}$	1,766*	2,011***	-365*	-346**	0.0332*
	(985)	(129)	(215)	(169)	(0.0182)
Year 2 × above $\hat{k}$	665	-1,268***	-423	-268	0.0292
	(771)	(154)	(281)	(242)	(0.0224)
Year 4 × above $\hat{k}$	3,595***	-1,146***	-119	64	0.0265
	(733)	(155)	(267)	(209)	(0.0235)
Year 7 × above $\hat{k}$	3,045**	-1,039***	354	-135	-0.0316
	(1,340)	(227)	(269)	(198)	(0.0238)
Year 11 × above $\hat{k}$	2,370*	-1,312***	795***	912***	-0.0689***
	(1,256)	(330)	(256)	(202)	(0.0246)
N	15713	15713	14988	14993	14988

Notes: *: $p < 0.1$, **: $p < 0.05$, ***: $p < 0.01$. Sample: ultra-poor households in treatment villages with log baseline productive assets below 3. Coefficients report the difference in outcomes between those above vs. below the threshold, relative to this difference at baseline. assets are constantly valued at the median prices withing BRAC branch at baseline. For the difference-in-differences estimates, we still determine whether a household is considered above or below the poverty threshold based on the reported asset value at baseline, as in all previous specifications). Other assets are defined as all productive assets minus livestock and land. Consumption is measured per-capita using adult-equivalent household size. Below 1.90 USD/ day is a household-level dummy equal to one if annual per capita expenditure converted to USD at PPP is below 1.90 * 365. All regressions control for sub-district fixed effects. Robust standard errors in parenthesis.

Table C.3: Difference in Differences Estimates of Long-Run Dynamics, in small window around $\hat{k}$

	(1) Productive assets	(2) Cows	(3) Land	(4) Cons.	(5) Net Earnings	(6) Net Earnings self-empl.	(7) Total hours	(8) Hours self-empl.
Year 2 × above $\hat{k}$	1,585	1,153**	1,150	-2,282*	-1,734***	-404	-130***	-20
	(1,152)	(464)	(1,011)	(1,191)	(376)	(282)	(47)	(18)
Year 4 × above $\hat{k}$	5,326***	4,106***	1,862	-1,325	-173	-139	171***	208***
	(1,705)	(611)	(1,503)	(1,298)	(423)	(320)	(49)	(21)
Year 7 × above $\hat{k}$	3,034	2,814***	970	2,468*	2,715***	2,155***	-79	0
	(1,897)	(405)	(1,698)	(1,388)	(488)	(374)	(52)	(24)
Year 11 × above $\hat{k}$	16,825**	2,603***	15,223**	3,733**	2,287**	759	114**	148***
	(7,445)	(456)	(7,299)	(1,568)	(1,044)	(607)	(50)	(21)
N	10064	10064	10064	9582	10064	10064	10064	10064
p-value year 2 vs. 4	0.062	< 0.01	0.688	0.517	< 0.01	0.502	< 0.01	< 0.01
p-value year 2 vs. 7	0.505	< 0.01	0.926	< 0.01	< 0.01	< 0.01	0.299	0.450
p-value year 2 vs. 11	0.043	0.024	0.056	< 0.01	< 0.01	0.074	< 0.01	< 0.01

Notes: *: $p < 0.1$, **: $p < 0.05$, ***: $p < 0.01$. Sample: ultra-poor households in treatment villages with log baseline productive assets in the interval (2.24, 2.44). Coefficients report the difference in outcomes between those above vs. below the threshold, relative to this difference at baseline. Assets are measured in levels by their reported value and deflated to 2007 using the Bangladesh rural CPI. Other assets comprise of poultry, goats, machines, tools, and vehicles. Consumption refers to total annual household expenditure in 2007 BDT. Income from assets refers to income generated through self-employed work such as livestock rearing. Total hours and self-employed hours worked are measured annually. All regressions control for sub-district fixed effects. Robust standard errors in parenthesis.

Table C.4: Life Cycle Effects and Long-Run Dynamics

	(1) Productive assets	(2) Cows	(3) Land	(4) Cons.	(5) Net Earnings	(6) Net Earnings self-empl.	(7) Total hours	(8) Hours self-empl.
Panel A: Below median age								
Year 2 × above $\hat{k}$	309	255	1,460	-1,693	-1,295***	-562	-195***	-102***
	(1,481)	(532)	(1,314)	(1,236)	(468)	(348)	(51)	(20)
Year 4 × above $\hat{k}$	6,769***	3,872***	3,993*	-1,639	-209	-406	98*	82***
	(2,441)	(717)	(2,244)	(1,392)	(506)	(391)	(54)	(24)
Year 7 × above $\hat{k}$	4,002	2,656***	2,600	3,340**	3,582***	3,093***	23	-18
	(2,485)	(417)	(2,283)	(1,489)	(659)	(588)	(55)	(26)
Year 11 × above $\hat{k}$	18,345**	2,482***	16,608*	4,191**	3,483***	2,079***	111**	91***
	(8,687)	(551)	(8,505)	(1,684)	(1,317)	(741)	(53)	(24)
N	8000	8000	8000	7689	8000	8000	8000	8000
Panel B: Above median age								
Year 2 × above $\hat{k}$	526	778	814	-2,758*	-2,298***	-942**	-198***	-121***
	(997)	(535)	(769)	(1,484)	(458)	(369)	(56)	(22)
Year 4 × above $\hat{k}$	79	2,730***	-1,470	845	-563	-9	103*	118***
	(2,379)	(577)	(2,220)	(1,555)	(460)	(349)	(59)	(26)
Year 7 × above $\hat{k}$	747	2,389***	-879	303	966*	707*	64	-7
	(4,655)	(739)	(4,530)	(1,598)	(544)	(402)	(63)	(29)
Year 11 × above $\hat{k}$	3,960	2,145***	3,551	3,304*	-151	-169	135**	68***
	(5,340)	(499)	(5,176)	(1,830)	(551)	(410)	(60)	(24)
N	7713	7713	7713	7299	7713	7713	7713	7713
p-value old vs. young in year 7	0.537	0.752	0.492	0.164	< 0.01	< 0.01	0.626	0.773
p-value old vs. young in year 11	0.158	0.650	0.189	0.721	0.011	< 0.01	0.766	0.505

Notes: *: $p < 0.1$, **: $p < 0.05$, ***: $p < 0.01$. Sample: ultra-poor households in treatment villages with log baseline productive assets below 3. The median age of this sample at baseline is 36. Coefficients report the difference in outcomes between those above vs. below the threshold, relative to this difference at baseline. Assets are measured in levels by their reported value and deflated to 2007 using the Bangladesh rural CPI. Other assets comprise of poultry, goats, machines, tools, and vehicles. Consumption refers to total annual household expenditure in 2007 BDT. Income from assets refers to income generated through self-employed work such as livestock rearing. Total hours and self-employed hours worked are measured annually. All regressions control for sub-district fixed effects. Robust standard errors in parentheses.