ANCOVA estimation of lending impacts

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11:24

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Contents

Need: packages lmtest, sandwich.

To reach to this file:

1. read_cleaned_data: This reads survey files. Corrects errors.

2. read_admin_data: This reads administrative file. Corrects errors, define TradGroup2 "NotReceivedLoan".

3. ReadFilesMergeAdminRoster: This merges survey files with admin file (e.g., AssetAdminData.rds). Create ar, arA and attach o800, o1600. Attrition in o800 is 92. Define BStatus.

In what follows,

1. Read RosterAdminData.rds, etc., create dummy interactions and trim observations if grepl("tw|dou", TradGroup) is true.

2. Summarise descriptive statistics, estimate ANCOVA, graph estimates and IGAs.

```
Warning in dir.create(pathprogramfigure <- paste0(pathprogram, "figure/EstimationMemo/")):
すでに存在します
```

```
Warning in dir.create(pathprogramtable <- paste0(pathprogram, "table/EstimationMemo/")):
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```

```
Warning in dir.create(pathsaveHere <- pathsaveEstimationMemo <- paste0(pathsave, : 'c:\dat
すでに存在します
```

This note uses ANCOVA as the estimator of choice. ANCOVA assumes the initial value of outcome variable is a pure nusissance that it only adds a noise and is uncorrelated with the main regressor of interest, hence uses it as a covariate. Under such assumptions, it is shown that ANCOVA is more efficient than DID as it renders data to control for baseline differences in outcomes (**?**). ANCOVA become numerically the same as DID if the estimated coefficient on the covariate is unity. As shown in the results, we see that it smaller and the claim that DID overcorrects for the initial values applies to our data.

Read: c:/data/GUK/analysis/save/EstimationMemo/AllMeetingsRosterAdminData.rds.

Further data preparations (trimming, adding shocks, round numbering, creating dummy vectors, interaction terms) for estimation. Produces files: SchoolingAdminDataUsedForEstimation.prn, AllMeetingsRepaymentAdminDataUsedForEstimation.prn, RepaymentAdminDataUsedForEstimation.prn, AssetAdminDataUsedForEstimation.prn, LivestockAdminDataUsedForEstimation.prn, LivestockLongAdminDataUsedForEstimation.prn, LivestockProductsAdminDataUsedForEstimation.prn, LabourIncomeAdminDataUsedForEstimation.prn, FarmIncomeAdminDataUsedForEstimation.prn, ConsumptionAdminDataUsedForEstimation.prn, OtherBorrowingAdminDataUsedForEstimation.prn.

```
 [1] "s1"   "arA"  "ar"   "ass"  "lvo"  "lvoL" "lvp"  "lab"  "far"  "con"
[11] "obr"
```

Check asset file entries. There are 797 households who respond at least once to asset questionnaire, but only 741 households respond at baseline (out of 800, response rate of 92.62%).

```
addmargins(table0(ass[o800 == 1L, .(Arm, survey, tee = 1:.N),
   by = .(hhid)][tee == 1, .(survey, Arm)]))
```

```
       Arm
survey traditional large large grace cattle  Sum
   1           184   189         189    179  741
   2            14    10          10     19   53
   3             0     1           0      2    3
 Sum           198   200         199    200  797
```

Among which, if we drop the sample in traditional arm who receive the loan only twice, we have:

```
addmargins(table0(ass[o800 == 1L & !grepl("tw|dou", TradGroup) &
  hhid %in% hhid[survey==1],
  .(Arm, tee = 1:.N), by = .(survey, hhid)][tee == 1, .(survey, Arm)]))
```

```
         Arm
survey traditional large large grace cattle   Sum
    1           162   189           189    179   719
    2           153   181           161    169   664
    3           154   182           164    169   669
    4           135   182           161    156   634
  Sum           604   734           675    673  2686
```

Add BStatus etc. to all files and save as c:/data/GUK/analysis/save/EstimationMemo/RepaymentTrimmed.rds for example. It is trimmed as we keep only grepl("old|iRej|^g", Mstatus) and drop grepl("tw|dou", TradGroup).

Drop members who received only 2 loans (twice and double in TradGroup) and save as an estimating sample. Save: c:/data/GUK/analysis/save/EstimationMemo/RepaymentInitialSample.rds. Save: c:/data/GUK/analysis/save/EstimationMemo/RepaymentTrimmed.rds keeps all 800 members which will be used in attrition and randomisation tests.

```
      AttritIn
Tee    2    3    4    9  Sum
  1   40    0    0    0   40
  2    0   14    0    0   14
  3    0    0   37    0   37
  4    0    0    0  681  681
 Sum  40   14   37  681  772
```

TABLE 1: DATA TRIMMING RESULTS

file	old|iRej|^g in Mstatus		No tw|dou in TradGroup	
all rounds				
s1	9007	⇒	6013	⇒	5677
arA	91344	⇒	66240	⇒	61200
ar	33223	⇒	24806	⇒	23210
ass	7869	⇒	5839	⇒	5437
lvo	7616	⇒	5661	⇒	5277
lvoL	22848	⇒	16983	⇒	15831
lvp	15964	⇒	11914	⇒	11088
lab	16004	⇒	12102	⇒	11307
far	589	⇒	411	⇒	391
con	5888	⇒	4360	⇒	4051
obr	7989	⇒	5958	⇒	5545
round 1 only				
s1	2582	⇒	1931	⇒	1827
arA	602	⇒	81	⇒	79
ar	2123	⇒	1600	⇒	1496
ass	1986	⇒	1486	⇒	1392
lvo	2073	⇒	1571	⇒	1467
lvoL	2099	⇒	1595	⇒	1491
lvp	2097	⇒	1595	⇒	1491
lab	2097	⇒	1593	⇒	1489
far	24	⇒	22	⇒	20
con	1980	⇒	1472	⇒	1369
obr	2097	⇒	1595	⇒	1491
original 800, round 1 only				
s1	964	⇒	964	⇒	937
arA	33	⇒	33	⇒	33
ar	800	⇒	800	⇒	776
ass	741	⇒	741	⇒	719
lvo	785	⇒	785	⇒	761
lvoL	796	⇒	796	⇒	772
lvp	796	⇒	796	⇒	772
lab	796	⇒	796	⇒	772
far	12	⇒	12	⇒	12
con	741	⇒	741	⇒	717
obr	796	⇒	796	⇒	772

Source: GUK survey data.

Notes:
1. Top panel is observations for all rounds. Middle panel is observations for round 1 only. Bottom panel is observations for original 800 households at round 1. old\|iRej\|^g in Mstatus are strings for old members, individual rejecters, group rejecters, group erosion. con\|^dro\|^rep in Mgroup indicates continuing, dropouts, replacing members. tw\|dou in TradGroup are members who received loans twice and double amount in the 2nd loans. They are omitted from analysis because they are under a different treatment arm.

2. ar lists all survey respondents, arA lists all loan recipients. There are 0 members in traditional arm who received loans twice, not three times. They will be omitted from ITT effects estimation. Consumption is sampled in round 2.

Tabulate number of obs in each files. Read: c:/data/GUK/analysis/save/EstimationMemo/AllMeetingsRepaym

Tabulate number of obs in each files for original 800 households.

```
x
traditional     large large grace      cattle       Sum
       168         192           171        177       708
x
traditional     large large grace      cattle       Sum
       168         191           170        176       705
```

TABLE 2: NUMBER OF OBSERVATIONS IN EACH FILE AT ROUND 1 FROM HHS WITH SINGLE TREATMENT

files	rounds	traditional	large	large grace	cattle	total
s1	1	728	622	618	614	2582
	2	610	501	452	496	2059
	3	555	474	433	449	1911
	4	488	427	393	388	1696
ar	1	605	504	507	507	2123
	2	590	491	457	485	2023
	3	583	487	453	473	1996
	4	539	482	447	442	1910
ass	1	602	503	506	505	2116
	2	588	490	457	483	2018
	3	580	484	452	463	1979
	4	497	457	416	381	1751
lvo	1	603	504	507	506	2120
	2	576	488	454	473	1991
	3	546	477	440	449	1912
	4	414	409	357	385	1565
lvp	1	601	504	507	507	2119
	2	588	491	457	485	2021
	3	581	487	453	472	1993
	4	538	483	447	444	1912
lab	1	601	504	507	507	2119
	2	588	491	457	485	2021
	3	581	487	453	472	1993
	4	534	481	443	433	1891
far	1	78	123	70	64	335
	2	35	68	39	30	172
	3	13	27	25	12	77
	4	2	1	2	1	6
con	2	590	490	457	484	2021
	3	581	484	453	470	1988
	4	536	477	435	428	1876
obr	1	1184	994	960	979	4117
	2	583	485	453	470	1991
	4	534	478	435	428	1875

Source: Estimated with GUK administrative and survey data.

Notes: 1. Sample is all households: Original 1600 and added households through new groups and individuals replacing opt-out members. All households in traditional arm who received more than one loan are excluded.

2.

TABLE 3: NUMBER OF OBSERVATIONS IN EACH FILE AT ROUND 1 FROM ORIGINAL 1600 HHs

files	rounds	traditional	large	large grace	cattle	total
s1	1	356	479	505	487	1827
	2	293	379	350	381	1403
	3	263	358	337	349	1307
	4	214	321	304	301	1140
ar	1	296	400	400	400	1496
	2	283	389	352	379	1403
	3	277	386	349	367	1379
	4	240	382	343	341	1306
ass	1	293	399	399	398	1489
	2	281	388	352	377	1398
	3	275	383	348	361	1367
	4	218	357	316	292	1183
lvo	1	294	400	400	399	1493
	2	274	386	349	368	1377
	3	256	377	339	350	1322
	4	183	317	282	303	1085
lvp	1	294	400	400	400	1494
	2	283	389	352	379	1403
	3	277	386	349	366	1378
	4	240	382	343	342	1307
lab	1	294	400	400	400	1494
	2	283	389	352	379	1403
	3	277	386	349	367	1379
	4	240	381	342	340	1303
far	1	19	96	52	57	224
	2	5	51	28	27	111
	3	2	22	17	12	53
	4	2	1	2	1	6
con	2	283	388	352	378	1401
	3	276	383	349	365	1373
	4	238	377	331	331	1277
obr	1	577	788	751	777	2893
	2	276	384	349	365	1374
	4	238	378	331	331	1278

Source: Estimated with GUK administrative and survey data.

Notes: 1. Sample is original 1600 households who agree to join the group. This includes households who later dropped out due to flood, group rejections, and individual rejections. All original 1600 households are tracked but some attrit from the sample.

2.

TABLE 4: NUMBER OF OBSERVATIONS IN EACH FILE AT ROUND 1 FROM ORIGINAL 800 HHS

files	rounds	traditional	large	large grace	cattle	total
s1	1	232	246	251	235	964
	2	180	197	177	191	745
	3	164	185	165	173	687
	4	134	171	147	143	595
ar	1	200	200	200	200	800
	2	190	191	172	190	743
	3	188	193	174	190	745
	4	168	192	171	177	708
ass	1	198	200	199	200	797
	2	190	194	177	195	756
	3	186	191	174	188	739
	4	154	179	155	151	639
lvo	1	199	200	200	199	798
	2	186	194	175	188	743
	3	177	188	168	180	713
	4	135	166	142	160	603
lvp	1	199	200	200	200	799
	2	192	195	177	195	759
	3	188	193	174	190	745
	4	168	192	171	177	708
lab	1	199	200	200	200	799
	2	192	195	177	195	759
	3	188	193	174	190	745
	4	168	191	170	175	704
far	1	12	46	24	25	107
	2	4	26	13	10	53
	3	2	9	8	4	23
	4	1	1	1	1	4
con	2	192	194	177	195	758
	3	187	191	174	190	742
	4	167	188	165	172	692
obr	1	199	199	199	199	796
	2	190	191	171	190	742
	4	168	192	171	177	708

Source: Estimated with GUK administrative and survey data.

Notes: 1. Sample is original 800 households who agree to join the group. This includes households who later dropped out due to flood, group rejections, and individual rejections. All original 800 households are tracked but some attrit from the sample.

2.

TABLE 5: NUMBER OF OBSERVATIONS IN EACH FILE AT ROUND 1 FROM ORIGINAL 800 HHS TRIMMED

files	rounds	traditional	large	large grace	cattle	total
s1	1	232	246	251	235	964
	2	180	197	177	191	745
	3	164	185	165	173	687
	4	134	171	147	143	595
ar	1	199	199	199	199	796
	2	190	190	171	189	740
	3	188	192	173	189	742
	4	168	191	170	176	705
ass	1	198	199	198	199	794
	2	190	193	176	194	753
	3	186	190	173	187	736
	4	154	179	155	151	639
lvo	1	199	199	188	199	785
	2	186	193	174	188	741
	3	177	187	168	180	712
	4	135	166	142	160	603
lvp	1	199	199	199	199	796
	2	192	194	176	194	756
	3	188	192	173	189	742
	4	168	191	170	176	705
lab	1	199	199	199	199	796
	2	192	194	176	194	756
	3	188	192	173	189	742
	4	168	191	170	175	704
far	1	12	46	24	25	107
	2	4	26	13	10	53
	3	2	9	8	4	23
	4	1	1	1	1	4
con	2	192	193	176	194	755
	3	187	190	173	189	739
	4	167	187	164	171	689
obr	1	199	199	199	199	796
	2	190	190	170	189	739
	4	168	191	170	176	705

Source: Estimated with GUK administrative and survey data.

Notes: 1. Sample is original 800 households who agree to join the group. This includes households who later dropped out due to flood, group rejections, and individual rejections. All original 800 households are tracked but some attrit from the sample.

2.

This file reads data from a list data_read_in_a_list_with_baseline_patched.rds, merge all non-roster files with admin-roster, and saves in c:/data/GUK/analysis/save/EstimationMemo.

I Summary

I.1 Definitions

(125*45*3) or, CumRepaid/(190*45*2)

Traditional A cash loan of Tk. 5600 with one year maturity. Repay Tk 125 * 45 weeks = 5625 each year for 3 years.

Large A cash loan of Tk. 16800 with three year maturity. Repay Tk 125 * 45 weeks * 3 years = 16875

Large Grace   A cash loan of Tk. 16800 with a one year grace period and three year maturity. Repay Tk 190 * 45 weeks * 2 years = 17100.

Cow   An in-kind loan of a cow worth Tk. 16800 with a one year grace period and three year maturity. Repay Tk 190 * 45 weeks * 2 years = 17100.

LargeSize   An indicator variable takes the value of 1 if the arm is Large, Large Grace, or Cow.

WithGrace   An indicator variable takes the value of 1 if the arm is Large Grace or Cow.

InKind   Same as Cow.

When one uses covariates Large, Large Grace, Cow in estimation, their estimates represent each arm's characteristics relative to Traditional. When one uses covariates LargeSize, WithGrace, InKind, their estimates represent their labeled names.

I.2   Inference

- First-difference estimators are used. This can be seen as an extension of DID to multi-periods (although historically the latter precedes the former). FD is used also for a binary indicator such as schooling.

- All the standard errors are clustered at the group (char) level.

- To aid the understanding if the data is more suited to the assumption of first-difference rather than fixed-effects, I used a check suggested by **?**, 10.71. It is an AR(1) regression of FD residuals. Most of results show low autocorrelations which is consistent with the assumption of FD estimator. The use of cluster-robust standard errors gives consistent estimates of SEs, so it boils down to efficiency.

- I rely more on the formulation using LargeSize, WithGrace, InKind than Large, LargeGrace, Cow due to an ease in interpretation. Numerically, both are equivalent.

- A caution on reading the estimates: All are estimates on increments. If LargeSize has an estimate of 10, then it is a 10 unit larger change than the baseline (traditional). If the interaction of LargeSize with rd 2-3 is 10, then it is a 10 unit larger change than rd 2-3 change of baseline. If the estimated value of intercept is 10 and rd 2-3 is 10, then rd 2-3 change is 20 for baseline, 30 for LargeSize.

I.3   Findings

Overall, the intervention reveals that larger sized loans accerelate the timing of becoming an owner of large livestock without adversely affecting the repayments. This applies to both the ultra poor and the moderately poor. A loan amount seems to have convex returns at a low level of assets. Higher growths come at a cost of slower school progression of older girls and smaller increases in consumption for the arm of in-kind, so the welfare implication is mixed. In addition, given that the number of cows per owner remains the similar after 2 years, it does not provide evidence for accelerated growth of livestock after becoming an owner in this short window. Another note is that the loan repayment was poor for unknown reasons so, in the hindsight, the risks required a higher margin for this type of lending to the target population, which could have reduced participation.

Net saving and repayments   Sample uses administrative records of all borrowers in the original 800 households. Smaller net saving for traditional arm. Period of rds 2, 3 saw a positive net saving, then became negative in rd 4 for LargeGrace, Cow. Repayment is greater for Large, LargeGrace, Cow in rds 2, 3. In rd 4, repayment of Large becomes statistically the

same with Traditional while LargeGrace, Cow are greater (TABLE **??**). TABLE **??** (1) reveals LargeSize have larger net saving while (2) shows WithGrace has a faster decline in rds 2, 3, 4. Repayment is larger with LargeSize but smaller with WithGrace in (3). (4) shows rd 2-3 have larger repayment for WithGrace, which is by design. Repayment is positively autocorrelated and is negatively correlated with previous net saving. The ultra poor repaid just as much as the moderately poor, (TABLE **??**). This is evidence against the popular belief that the ultra poor are riskier.

Schooling   Enrollment changes are larger for primary school girls in Large and Cow arms for primary but smaller for junior in rd 1 vs rd 4 comparisons (TABLE 16). When seen by attributes in TABLE 17, LargeSize shows smaller changes especially for primary school boys. Primary school girls in LargeSize and InKind show larger changes, while junior and high school girls in LargeSize show smaller changes than boys. This indicates that large sized arms have detrimetal impacts on older girls' schooling but promotional impacts on primary school aged girls. No decline in enrollment changes when repaying for the arms of WithGrace, despite the larger installments.

Assets   Household assets increased in all arms. Asset values initially increased then decreased, but do not fully cancel out and remain increased. There might have been liquidation of assets to repay the loans. Productive assets declined consecutively. Flood in rd 1 makes the increase in household assets smaller. Productive assets see a major decline among Large during rd 3-4 period (TABLE **??**). Comparison by attributes (TABLE **??**) or of rd 2 and rd 4 gives the same picture (TABLE **??**). Comparison against the loan non-recipients shows that they also experience a similar, increase-increase-decrease pattern. This indicates that the pattern observed among the loan recipients may be a systemic pattern of the area, not necessarily reflecting the repayment burdern (TABLE **??**). Comparison of productive asset holding of loan recipients (FIGURE **??**) and loan nonrecipients (FIGURE **??**) reveals that productive asset holding declined at the top end of loan nonrecipients in all arms (they only save or left the program). This indicates that the decline in productive asset holding among the loan recipients are not due to the repayment burden but a general pattern of the area.

Livestock   Larger increases in holding values in rd 1-2, smaller increases in rd 2-3, no change in rd 3-4. Previous cow owners show a smaller increase in rd 1-2 while not rd 3-4 or rd 2-3 in the Cow arm (TABLE **??**). Figures show that cow ownership increased for all arms but the traditional arm (see FIGURE **??**). TABLE **??** shows baseline trend is a large increse in rd 1-2, a small increase in rd 2-3, a small decline in rd 3-4, while LargeSize sees an even larger increase in rd 1-2 and similar trend as baseline afterwards. This shows that member who received a larger sized disbursement could hold on to its level of livestock accumulation. TABLE **??** shows, albeit at p values around 10%, the ultra poor has a larger increase relative to the moderately poor, which is another manifestation against the popular notion that the ultra poor are riskier.

Total asset values   Similar resulsts as assets.

Labour incomes   Small sample. Increased during rd 2-3 in all arms (TABLE **??**).

Consumption   Increased during rd 2-3 in all arms, a decrese in rd 3-4 (TABLE **??**). Another notable result is that InKind reduced the consumption in rd 3-4 even further than the baseline loan (TABLE **??**).

IGAs   Multiple IGAs for Tradtional arm. Everyone else chose to invest in cows, suggesting entrepreneurship does not seem to matter in the uptake of loans. It is consistent with the presence of a poverty trap induced by a liquidity constraint and convexity in livestock production technology.

Project choice   Traditional arm has a smaller rate of second investments, and second investment

amounts are generally smaller (FIGURE **??**). This confirms that most of Traditional arm members do not use own fund to increase the size of investments even after a few years into the program.

One sees changes in investment choices when one compares traditional and all other arms. However, consumption does not seem to differ. Repayments and asset holding are greater in all other arms. These are consistent with households are enforcing the repayment disciplines and reinvesting the proceeds rather than increasing consumption.

```
Warning in `[.data.table`(s1xR, , `:=`(c("Age_1", grepout("Primary", colnames(s1xR)))), : (
```

```
Dropped 902 obs due to NA.
Dropped 902 obs due to NA.
Dropped 184 obs due to T<2.
Dropped 616 obs due to NA.
```

Enrollment pattern in original schooling panel. 'n' indicates NA (either attrition or not reported).

```
          SchPattern
ObPattern 0000 0001 000n 0011 001n 00n0 00n1 00nn 010n 0111 011n 01nn 0n00 0n0n
     0111    0    0    0    0    0    0    0    0    0    0    0    0    0    0
     1000    0    0    0    0    0    0    0    0    0    0    0    0    0    0
     1010    0    0    0    0    0    0    0    0    0    0    0    0    0    1
     1011    0    0    0    0    0    0    0    0    0    0    0    0    0    0
     1100    0    0    0    0    0    0    0    0    0    0    0    3    0    0
     1110    0    0    5    0    2    0    0    1    0    0    3    0    0    0
     1111   21    2   16   12    1    4    1   25    1   83    4    4    1    0
          SchPattern
ObPattern 0n11 0n1n 0nn0 0nn1 0nnn 1000 1001 100n 1011 101n 10n1 10nn 1100 1101
     0111    2    1    0    0    2    0    0    0    0    0    0    0    0    0
     1000    0    0    0    0   32    0    0    0    0    0    0    0    0    0
     1010    0    0    0    0    2    0    0    0    0    0    0    0    0    0
     1011    0    0    0    0    0    0    0    0    0    0    0    0    0    0
     1100    0    0    0    0    1    0    0    0    0    0    0    0    0    0
     1110    0    0    0    0    2    0    0    1    0    1    0    0    0    0
     1111    4    1    3    1   68    5    1    3    6    1    1    8    8    1
          SchPattern
ObPattern 110n 1110 1111 111n 11n1 11nn 1n00 1n01 1n0n 1n11 1n1n 1nn0 1nn1 1nnn
     0111    0    0    0    0    0    0    0    0    0    6    0    0    0    1
     1000    0    0    0    0    0    0    0    0    0    0    0    0    0   22
     1010    0    0    0    0    0    0    0    0    0    0    1    0    0    2
     1011    0    0    0    0    0    0    0    0    0    0    0    0    0    0
     1100    0    0    0    0    0    6    0    0    0    0    0    0    0    0
     1110    0    0    0   25    0    2    0    0    0    0    1    0    0    0
     1111    9    3  397   30    4   26    1    1    1    8    1    1    2   42
```

Left panel is before dropping nnn, right panel is after: Original panel.

```
Error in eval(jsub, SDenv, parent.frame()): オブジェクト 'RArm' がありません
```

sch has 2913 rows. Drop 174 observations in sch with nnn in SchPattern.

With OLS, 89, 135, 539 individuals are repeatedly observed for 2, 3, 4 times, respectively. With FD, sch is reduced to 1837 rows after first-differencing with 64, 106, 499 individuals with repeatedly observed for 1, 2, 3 times, respectively. Individuals with NAs in Enrolled: 0 obs for sch. Check missingness in schooling level information.

```
x
   0    1
1575 1164
```

Drop 1575 obs without school level information.

11

```
Dropped 902 obs due to NA.
Dropped 902 obs due to NA.
Dropped 184 obs due to T<2.
Dropped 616 obs due to NA.
```

```
Error in dimnames(tab) <- dimnames(est[[i]]): 'dimnames' の長さ [1] が配列の大きさと
違っています
```

II   Data preparation

II.1   Define initial sample

Initial Sample is marked as the members with o800==1. This is derived from Trimmed Sample and is produced by dropping 26 HHs of traditional arm.   (Drop members who received only 2 loans (twice and double in TradGroup) and save as an estimating sample.   Save: c:/data/GUK/analysis/save/EstimationMemo/RepaymentInitialSample.rds.   Save: c:/data/GUK/analysis/save/EstimationMemo/RepaymentTrimmed.rds keeps all 800 members which will be used in attrition and randomisation tests.)

```
      AttritIn
Tee    2    3    4    9  Sum
  1   40    0    0    0   40
  2    0   14    0    0   14
  3    0    0   37    0   37
  4    0    0    0  681  681
  Sum  40   14   37  681  772
```

The study followed the stepped wedge design within each group due to administrative and budgetary constraints. Our initial identification strategy was comaprison between arms and did not use the stepped wedge design to estimate impacts because of possible spillovers within a group and a relatively short period for outcomes to change before the control gets treated [We can estimate within-group, we may just have underestimated impacts]. A half of members in a group, approximately 800 in total, are assigned initially as the treated and then the rest was treated in the following months. So the number of the treated increased as time passes.

We restrict ourselves to this initial 800 members in estimating the impacts. We do so because of possible spill overs within groups. We compare between arms, not individuals in a group. One can see how impacts may differ if we compare between-group and within-group estimates. Such comparison is left as future exercises.

We will add a binary indicator function o800 to indicate the initial sample. In below, we first use the roster-administrative data to choose the households of o800, because it has the most complete record. Then, I look for these households in other files and create o800 variable in them.

Correct NAs in LoanYear to -1 when members start repayment before disbursement.

II.2   Descriptive statistics

The majority of descriptive statistics are related to assets. We base our descriptive statistics on the asset data.

```
Number of obs by Arm and attrition
            AttritIn
Arm               2    3    4    9  Sum
  traditional     6    4   20  144  174
  large           5    2    1  191  199
  large grace    22    3    3  170  198
  cattle          5    5   13  176  199
  Sum            38   14   37  681  770


Number of obs by membership status and attrition
                  AttritIn
```

```
BStatus                 2    3    4    9  Sum
  borrower              8    6    8  575  597
  pure saver            0    0    0    0    0
  individual rejection  9    4    1   75   89
  group rejection       9    4    0   55   68
  rejection by flood   12    0   28    0   40
  Sum                  38   14   37  705  794
```

There are 24 members with TradGroup = twice, double. They were dropped from estimation sample. If UseTrimmedSample==T, attrition is based on all 800 members, if F, attrition is analysed using 776 members. We use the 'initial' sample (has only 776 members after dropping members who received loans only twice), not the 'trimmed' sample (has all 800 members).

```
if (!UseTrimmedSample) ar ← ar[!grepl("tw|dou", TradGroup), ]
addmargins(table0(ar[o800 == 1L & tee == 1, .(Tee, AttritIn)]))
```

```
       AttritIn
Tee     2    3    4    9  Sum
  1    40    0    0    0   40
  2     0   14    0    0   14
  3     0    0   37    0   37
  4     0    0    0  681  681
  Sum  40   14   37  681  772
```

Out of 772 members, there are 91 members who attrited.

```
                    AttritIn
BStatus              2   3   4  Sum
  borrower           8   6   8   22
  pure saver         0   0   0    0
  individual rejection 9   4   1   14
  group rejection   11   4   0   15
  rejection by flood 12   0  28   40
  Sum               40  14  37   91
```

```
            AttritIn
Arm           2   3   4    9  Sum
  traditional 7   4  20  144  175
  large       5   2   1  191  199
  large grace 23  3   3  170  199
  cattle      5   5  13  176  199
  Sum        40  14  37  681  772
```

```
            Attrited
Arm           0    1  Sum
  traditional 144  31  175
  large       191   8  199
  large grace 170  29  199
  cattle      176  23  199
  Sum         681  91  772
```

Variable	Traditional	Large	Large grace	Cattle	Overall
HeadLiteracy	0.097	0.111	0.106	0.151	0.117
	(0.297)	(0.314)	(0.308)	(0.359)	(0.321)
HeadAge	38.477	37.452	38.376	38.015	38.066
	(10.124)	(10.189)	(9.283)	(10.746)	(10.087)
HHsize	4.097	4.302	4.241	4.121	4.193
	(1.449)	(1.507)	(1.495)	(1.369)	(1.456)
FloodInRd1	0.463	0.618	0.407	0.497	0.497
	(0.500)	(0.487)	(0.493)	(0.501)	(0.500)
NLHAssetAmount	1428	1244	1308	1546	1378
	(922)	(714)	(692)	(1170)	(898)
PAssetAmount	1020	1232	2031	1032	1335
	(1724)	(2335)	(9387)	(2577)	(5127)
TotalImputedValue	4343	6131	5319	4121	4993
	(11116)	(13802)	(13139)	(10304)	(12195)
NumCows	0.217	0.307	0.266	0.206	0.250
	(0.556)	(0.690)	(0.657)	(0.515)	(0.610)
NetValue	8011	9550	9677	5811	8273
	(14877)	(15314)	(21603)	(11658)	(16255)
BroadNetValue	9012	10312	9894	7115	9093
	(15030)	(15556)	(21460)	(12817)	(16498)
Attrited	0.177	0.040	0.146	0.116	0.118
	(0.383)	(0.197)	(0.354)	(0.321)	(0.323)
IRejected	0.171	0.045	0.065	0.186	0.115
	(0.378)	(0.208)	(0.248)	(0.390)	(0.320)
GRejected	0.229	0.101	0.050	0.000	0.091
	(0.421)	(0.301)	(0.219)	(0.000)	(0.287)
Non-attriting borrowers	0.474	0.819	0.799	0.734	0.714
	(0.501)	(0.386)	(0.402)	(0.443)	(0.452)
RiskPrefVal	115	108	114	110	111
	(31)	(32)	(36)	(32)	(33)
TimePref1Val	374	374	377	409	384
	(132)	(152)	(147)	(141)	(144)
TimePref2Val	483	486	477	512	490
	(127)	(137)	(156)	(121)	(136)
PresentBias	0.470	0.453	0.482	0.455	0.464
	(0.501)	(0.499)	(0.501)	(0.499)	(0.499)
N	175	199	199	199	772

Source: Estimated with GUK administrative and survey data at the baseline. Survey respondents include nonparticipants to the experiments.

Notes: 1. Information of original 800 households. Values are means, values in brackets are standard deviations.

2 HeadLiteracy, HeadAge are literacy and ages of household heads. HHsize is total number of household members. Flood-InRd1 is flood exposure at baseline. NLHAssetAmount is non-land household asset holding value, PAssetAmount is productive asset holding value, TotalImputedAmount is imputed value of livestock holding. NumCows is cattle holding per household. NetValue is net asset values per houseold for asset items observed in all 4 rounds given by NLHAssetAmount+PAssetAmount+TotalImputedAmount - total debt. BroadNetValue is net asset values per houseold for all asset items. All asset values are expressed in BDT. Attrited indicates attrition rates in the household survey, and GRejected and IRejected show group rejection rates and individual rejection rates to the lending program. Active indicates the nonattrited borrower ratios. Because attrition and rejection are separate events, a household can reject and attrit, so active members ⩾ total - (rejected members + attrited members). Risk preference is the respondent's choice of the acceptable minimum excess monetary value of the risky option over a certainty option. Lower values indicate a greater risk tolerance. Time preference 1 is the respondent's choice of the acceptable minimum excess monetary value in 3 months that is no smaller than present monetary benefit, and Time preference 2 is the the minimum excess value in 1 year and 3 months that is no smaller than monetary benefits of 1 year from now. Lower values indicate a greater patience. If a respondent's Time preference 1 is greater than Time preference 2, the respondent is considered to be present-biased. Present bias is an indicator function that takes the value of 1 if the respondent is considered to be present-biased, 0 otherwise.

II.3 Changes in assets

After winsorising cassette players, radios, and bicycles, there is no HH with anomalous asset values (changes in narrow net asset values < -50000).

```
Key: <hhid>
          Arm      hhid      t              type   amount      H      BH NLHAssetNum
        <fctr>    <num>  <num>            <char>  <int>  <int>  <int>        <int>
1: traditional 8169717      1          tubewell   1500   1500   1500            1
2: traditional 8169717      2          tubewell   1600   1600   7600            1
3: traditional 8169717      2  residential land   6000   1600   7600            1
4: traditional 8169717      3          tubewell   1200  82600 121600            3
5: traditional 8169717      3   almirah/cabinet   2600  82600 121600            3
```

```
 6:  traditional 8169717       3              jewelry     400 82600 121600                3
 7:  traditional 8169717       3         mobile phone    1400 82600 121600                3
 8:  traditional 8169717       3   residential land     36000 82600 121600                3
 9:  traditional 8169717       3         rickshaw/van    80000 82600 121600                3
10:  traditional 8169717       4             tubewell      400  3300  46400                3
11:  traditional 8169717       4      almirah/cabinet     2500  3300  46400                3
12:  traditional 8169717       4              jewelry      600  3300  46400                3
13:  traditional 8169717       4   residential land     40000  3300  46400                3
14:  traditional 8169717       4              bicycle     2500  3300  46400                3
15:  traditional 8169717       4         mobile phone      400  3300  46400                3
```

II.4 Error bar graphs of outcomes

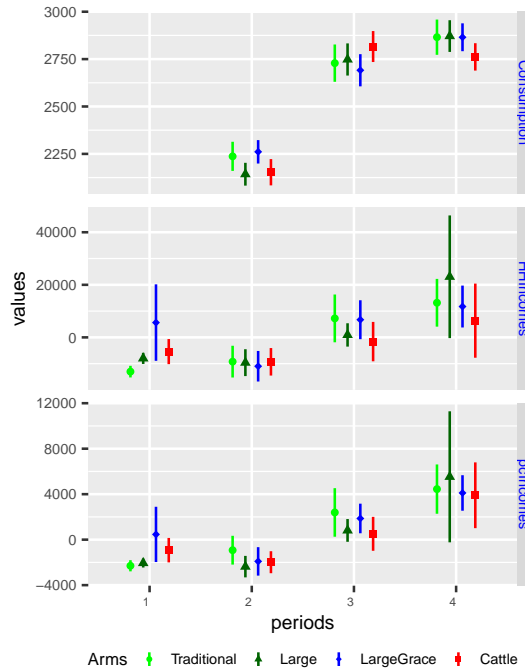FIGURE 1: MEAN OUTCOMES BY ARM AND PERIOD
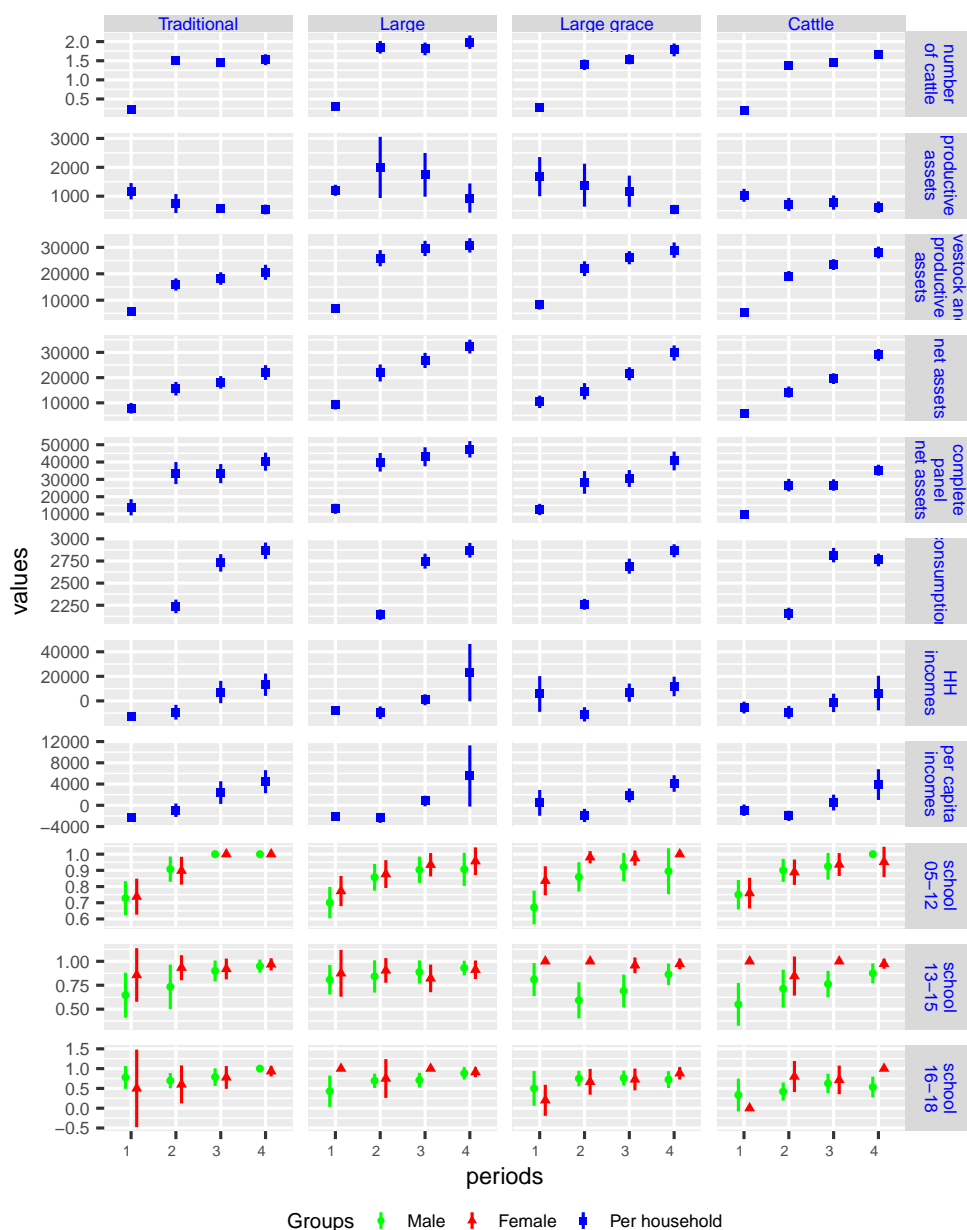
Note: Points indicate means, vertical bars indicate 95% confidence intervals. NumCows is number of cattle owned. NetValue is net asset values per housheold for asset items observed in all 4 rounds. Consumption is annualised per capita consumption in Taka. Per capita consumption is a total of food, hygiene, social, and energy expenditure divided by the number of household members. In-kind consumption of home made products is imputed at median prices. HHIncomes is labour incomes of household, pcHHIncomes is per capita housheold labour incomes. Sch0512, Sch1315, Sch1618 are enrollment at primary, secondary, and tertiary levels. Female and Male are female and male enrollment, respectively.

FIGURE 2: MEAN ASSET OUTCOMES BY ARM AND PERIOD

FIGURE 3: MEAN INCOME AND CONSUMPTION OUTCOMES BY ARM AND PERIOD

18

II.5 Graphs of repayments

In TABLE 10, one sees that later receivers of large grace and cattle arm members could prepare better by saving before disbursement.

```
Number of obs by Arm and attrition
            AttritIn
Arm              2    3    4    9  Sum
  traditional    6    4   20  144  174
  large          5    2    1  191  199
  large grace   22    3    3  170  198
  cattle         5    5   13  176  199
  Sum           38   14   37  681  770


Number of obs by membership status and attrition
                  AttritIn
BStatus               2    3    4    9  Sum
  borrower            8    6    8  575  597
  pure saver          0    0    0    0    0
  individual rejection 9    4    1   75   89
  group rejection     9    4    0   55   68
  rejection by flood 12    0   28    0   40
  Sum                38   14   37  705  794
```

One also sees that traditional has lower repayment rates in the 2nd and 3rd loan years. This can be due to lower returns on small assets, or, moral hazard that they get new disbursements irrespective of loan delinquency.

```
ar : Number of member entries are less than 12 per year (good).
[1] "Year"     "LoanYear" "MtgYear"  "LYear"
arA : Number of member entries are less than 12 per year (good).
[1] "Year"     "LoanYear" "MtgYear"  "LYear"
arACompletePanel : Number of member entries are less than 12 per year (good).
[1] "Year"     "LoanYear" "MtgYear"  "LYear"
```

One may worry if flood affected repayments. Split sample into flood affected and unaffected. Affected by flood does not seem to change the repayment numbers.

```
ar
arA
Flood dummy = 0
             variables traditional    large large grace    cattle   stat
                <char>      <char>   <char>      <char>    <char> <char>
1: repay in Loan Year-1       56.47    35.57        0.00      0.00    sum
2:  repay in Loan Year1     3238.29  4253.51      566.28    597.21    sum
3:  repay in Loan Year2     2218.53  3924.16     4998.00   4973.81    sum
4:  repay in Loan Year3     2046.90  3836.48     5403.50   4679.49    sum
5:  repay in Loan Year4     3046.93  2820.97     3031.19   2764.97    sum
6:      Total repayment    10607.12 14870.69    13998.96  13015.47    sum
Flood dummy = 1
             variables traditional    large large grace    cattle   stat
                <char>      <char>   <char>      <char>    <char> <char>
1: repay in Loan Year-1       41.30    50.65        0.00      0.00    sum
2:  repay in Loan Year1     3244.31  4355.89      528.25    497.85    sum
3:  repay in Loan Year2     2052.53  3716.43     4879.90   4303.48    sum
4:  repay in Loan Year3     1920.05  3813.12     5007.63   4362.31    sum
5:  repay in Loan Year4     3190.27  3259.28     2787.62   4714.35    sum
```

```
6:    Total repayment    10448.48 15195.37    13203.41 13878.00    sum
arACompletePanel
Flood dummy = 0
            variables traditional    large large grace    cattle   stat
              <char>      <char>    <char>      <char>    <char> <char>
1: repay in Loan Year-1    55.32    40.54      0.00      0.00    sum
2:  repay in Loan Year1  2941.92  4347.92    590.32    494.34    sum
3:  repay in Loan Year2  2104.38  3927.98    5139.65   5210.10    sum
4:  repay in Loan Year3  2004.32  3972.16    5451.62   5197.27    sum
5:  repay in Loan Year4  3126.27  2625.90    3052.12   2553.86    sum
6:    Total repayment  10232.21 14914.50    14233.71 13455.58    sum
Flood dummy = 1
            variables traditional    large large grace    cattle   stat
              <char>      <char>    <char>      <char>    <char> <char>
1: repay in Loan Year-1    12.50    55.75      0.00      0.00    sum
2:  repay in Loan Year1  3399.77  4511.78    526.88    572.72    sum
3:  repay in Loan Year2  2580.30  3827.31    4804.22   4219.91    sum
4:  repay in Loan Year3  2220.68  3858.15    4630.91   3776.60    sum
5:  repay in Loan Year4  3371.37  3057.95    2818.86   4915.04    sum
6:    Total repayment  11584.61 15310.94    12780.87 13484.27    sum
```

Combine descriptive statistics and produce LATEXtables.

TABLE 7: DESCRIPTIVE STATISTICS BY ARM FOR ALL HOUSEHOLDS INCLUDING NONPARTICIPANTS

variables	traditional	large	large grace	cattle
Head Literacy	0.10	0.11	0.11	0.15
Head Age	38.48	37.45	38.38	38.02
Household size	4.10	4.30	4.24	4.12
Flood in round 1	0.46	0.62	0.41	0.50
Repaid amount in Loan Year1	1964	1244	0	0
Repaid amount in Loan Year2	229	944	1960	1553
Repaid amount in Loan Year3	989	1743	2293	2074
Repaid amount in Loan Year4	3899	3046	2327	3201
Total repaid sum	7082	6976	6580	6828
Net saving + repaid amount in Loan Year1	2186	1502	1464	682
Net saving + repaid amount in Loan Year2	356	1124	2062	1641
Net saving + repaid amount in Loan Year3	1188	1811	2361	2194
Net saving + repaid amount in Loan Year4	3979	3257	2355	3447
Net saving + total repaid sum	7709	7695	8242	7965
Number of members	175	199	199	199

Source: Estimated with GUK administrative and survey data. Based on data ar which has all survey respondents. Survey respondents include nonparticipants to the experimental part of study.

Notes: 1. Information of original 776 households. Net saving as percentage of loan amount is a mean over loan recipients whose first disbursement is in 2013. Effective repayment is a sum of repayment and net saving.

TABLE 8: DESCRIPTIVE STATISTICS BY ARM FOR BORROWERS

variables	traditional	large	large grace	cattle
Head Literacy	0.12	0.11	0.10	0.14
Head Age	38.46	37.95	38.62	38.12
Household size	4.12	4.37	4.17	4.08
Flood in round 1	0.52	0.58	0.36	0.50
Net saving (% of loan) in 2013	4.40	4.04	5.46	6.67
Repaid amount in Loan Year-1	119	70	0	0
Repaid amount in Loan Year1	4178	5046	518	455
Repaid amount in Loan Year2	1938	3279	5553	5035
Repaid amount in Loan Year3	2571	4065	6466	6074
Repaid amount in Loan Year4	3344	3138	2941	3546
Total repaid sum	12151	15597	15478	15110
Net saving + repaid amount in Loan Year-1	405	929	913	1181
Net saving + repaid amount in Loan Year1	4806	5915	2562	2546
Net saving + repaid amount in Loan Year2	2401	3842	5986	5457
Net saving + repaid amount in Loan Year3	3067	4585	6803	6428
Net saving + repaid amount in Loan Year4	3633	3381	3075	3723
Net saving + total repaid sum	14312	18652	19340	19334
Number of loan receiving members	139	179	179	189

Source: Estimated with GUK administrative and survey data. Based on arA which has only borrowers and does not include nonparticipants.

Notes: 1. Information of borrowing members among original 776 households. Net saving as percentage of loan amount is a mean over loan recipients whose first disbursement is in 2013. Effective repayment is a sum of repayment and net saving.

2. Loan year -1 is preparation period for loan disbursement when only saving is allowed.

TABLE 9: DESCRIPTIVE STATISTICS BY ARM FOR BORROWERS, COMPLETE PANEL

variables	traditional	large	large grace	cattle
Head Literacy	0.15	0.11	0.16	0.16
Head Age	39.65	38.76	37.96	38.63
Household size	4.60	4.70	4.48	4.36
Flood in round 1	0.48	0.50	0.31	0.42
Net saving (% of loan) in 2013	5.62	3.72	4.47	6.27
Repaid amount in Loan Year-1	84	66	0	0
Repaid amount in Loan Year1	4047	5190	587	462
Repaid amount in Loan Year2	2209	3559	5765	5397
Repaid amount in Loan Year3	2776	4081	6506	6234
Repaid amount in Loan Year4	3449	2791	2968	3079
Total repaid sum	12565	15687	15826	15171
Net saving + repaid amount in Loan Year-1	452	860	671	1010
Net saving + repaid amount in Loan Year1	4717	6066	2509	2629
Net saving + repaid amount in Loan Year2	2692	4149	6205	5821
Net saving + repaid amount in Loan Year3	3303	4602	6867	6601
Net saving + repaid amount in Loan Year4	3746	3070	3143	3240
Net saving + total repaid sum	14909	18747	19394	19302
Number of loan receiving members	60	108	93	91

Source: Estimated with GUK administrative and survey data. Based on arACompletePanel which has only non-attriting members who were surveyed at baseline.

Notes: 1. Information of borrowing members among original 776 households. Net saving as percentage of loan amount is a mean over loan recipients whose first disbursement is in 2013. Effective repayment is a sum of repayment and net saving.

2. Loan year -1 is preparation period for loan disbursement when only saving is allowed.

TABLE 10: DESCRIPTIVE STATISTICS BY ARM FOR ALL MEMBERS AND BORROWING MEMBERS

variables	traditional	large	large grace	cattle
All members				
Head Literacy	0.10	0.11	0.11	0.15
Head Age	38.48	37.45	38.38	38.02
Household size	4.10	4.30	4.24	4.12
Flood in round 1	0.46	0.62	0.41	0.50
Number of members	175	199	199	199
Only loan receiving members				
Head Literacy	0.12	0.11	0.10	0.14
Head Age	38.46	37.95	38.62	38.12
Household size	4.12	4.37	4.17	4.08
Flood in round 1	0.52	0.58	0.36	0.50
Net saving (% of loan) in 2013	4.40	4.04	5.46	6.67
Repaid amount in Loan Year-1	119	70	0	0
Repaid amount in Loan Year1	4178	5046	518	455
Repaid amount in Loan Year2	1938	3279	5553	5035
Repaid amount in Loan Year3	2571	4065	6466	6074
Repaid amount in Loan Year4	3344	3138	2941	3546
Total repaid sum	12151	15597	15478	15110
Net saving + repaid amount in Loan Year-1	405	929	913	1181
Net saving + repaid amount in Loan Year1	4806	5915	2562	2546
Net saving + repaid amount in Loan Year2	2401	3842	5986	5457
Net saving + repaid amount in Loan Year3	3067	4585	6803	6428
Net saving + repaid amount in Loan Year4	3633	3381	3075	3723
Net saving + total repaid sum	14312	18652	19340	19334
Number of loan receiving members	139	179	179	189

Source: Estimated with GUK administrative and survey data. Based on data ar which has all survey respondents.

Note: All members are 776 households. Survey respondents include nonparticipants to the experimental part of study.

III Estimation using initial sample HHs

III.1 Repayment and net saving

In estimating impacts on repayment and saving, we use borrower only data arA.

```
              used    (Mb) gc trigger    (Mb) limit (Mb)   max used    (Mb)
Ncells     3205721   171.3    4711329   251.7        NA    4711329   251.7
Vcells   620165535  4731.5  911587133  6954.9     56320  911577900  6954.8
```

By survey rounds, in repayment and saving file, there are 28, 558, 552, 551 observations of households in rounds 1, 2, 3, 4, respectively. This is smaller than the InitialSample size of 772 in the survey roster file because the survey includes rejecters and residents whose houses are washed away by flood, while repayment is defined only for the borrowers.

Saving started in rd 1. Repayment and saving are more frequent than survey rounds. In repayment and saving regressions, we aggregate the data at survey rounds. This is because we have no household survey information at the monthly frequency that we can attribute the causes of monthly repayment and saving fluctuations.

TABLE 11: INITIAL SAMPLE BY ARM IN ADMINISTRATIVE DATA

	initial sample					all sample				
	traditional	large	large grace	cattle	total	traditional	large	large grace	cattle	total
borrower	85	170	166	152	573	123	348	338	308	1117
pure saver	0	0	0	0	0	0	0	0	0	0
individual rejection	30	9	13	37	89	53	12	22	72	159
group rejection	40	20	10	0	70	80	40	20	0	140
rejection by flood	20	0	10	10	40	40	0	20	20	80
total	175	199	199	199	772	296	400	400	400	1496

Source: Estimated with GUK administrative and survey data.

Notes: 1. Number of individuals who received a loan/cow. Left panel are initial 800 members who were offered at the first round, including individuals who declined or left the group. Right panel also includes members who were offered on a later date.

	initial sample					all sample				
	traditional	large	large grace	cattle	total	traditional	large	large grace	cattle	total
borrower	85	170	166	152	573	96	348	338	308	1090
pure saver	0	0	0	0	0	26	0	0	0	26
individual rejection	30	9	13	37	89	53	12	22	72	159
group rejection	0	0	0	0	0	0	0	0	0	0
rejection by flood	0	0	0	0	0	0	0	0	0	0
total	115	179	179	189	662	175	360	360	380	1275

Source: Estimated with GUK administrative and survey data.

Notes: 1. Number of individuals who received a loan/cow. Left panel in TABLE 12 is initial 800 members who were offered at the first round, including individuals who declined or left the group. Right panel also includes members who were offered on a later date.

TABLE 11 shows the tabuation of InitisalSample by arms. Left panel are InitialSample including borrowers, pure savers, group rejecters, flood victims, and members who left the group. Right panel includes late borrowers who were initially assigned as the control. One can see that traditional arm members have the highest proportion of group-rejecters and individual rejecters. This shows stronger reluctance of traditional arm members in borrowing the small loans.

Read administrative meeting data attached with HH information AllMeetingsRepayment (arA). Note all binary interaction terms are demeaned and then interacted.

```
Error in file(filename, "r", encoding = encoding): コネクションを開くことができません
```

Tabulation at rd 1 (12th month):

```
            Arm
Mstatus      traditional large large grace cattle  Sum
  gErosion             0     0           0      0    0
  gRejection           0     0           0      0    0
  iRejection           0     0           0      0    0
  iReplacement         0     0           0      0    0
  newGroup             0     0           0      0    0
  oldMember           85   170         166    152  573
  Sum                 85   170         166    152  573
```
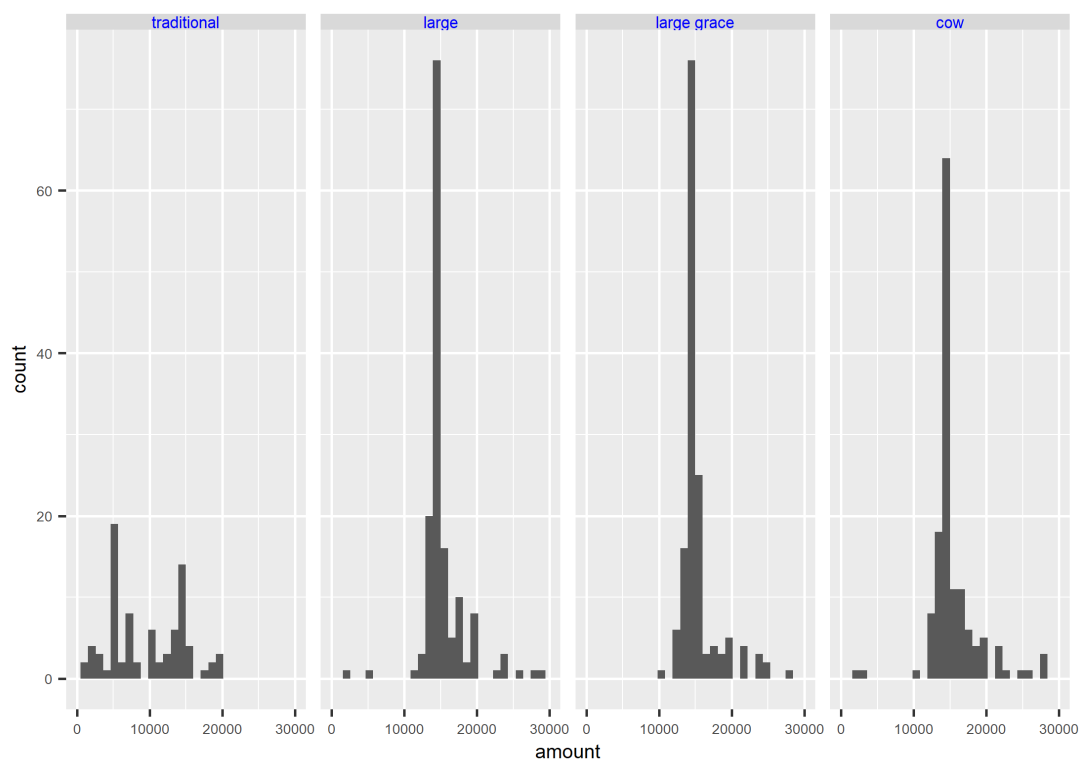
```
Error in library(gridExtra): 'gridExtra' という名前のパッケージはありません
```

```
Error in grid.arrange(g1, g2, heights = c(2, 2.5), ncol = 1): 関数 "grid.arrange"
を見つけることができませんでした
```

FIGURE 4: WEEKLY NET SAVING AND CUMULATIVE REPAYMENT

Note: Each dot represents weekly observations. Only members who received loans are shown. Each panel shows weekly net saving (saving - withdrawal) or cumulative repayment against weeks after first disbursement. Lines are smoothed lines with a penalized cubic regression spline in ggplot2::geom_smooth function, originally from mgcv::gam with bs='cs'.

FIGURE 5: CUMULATIVE WEEKLY NET REPAYMENT RATES
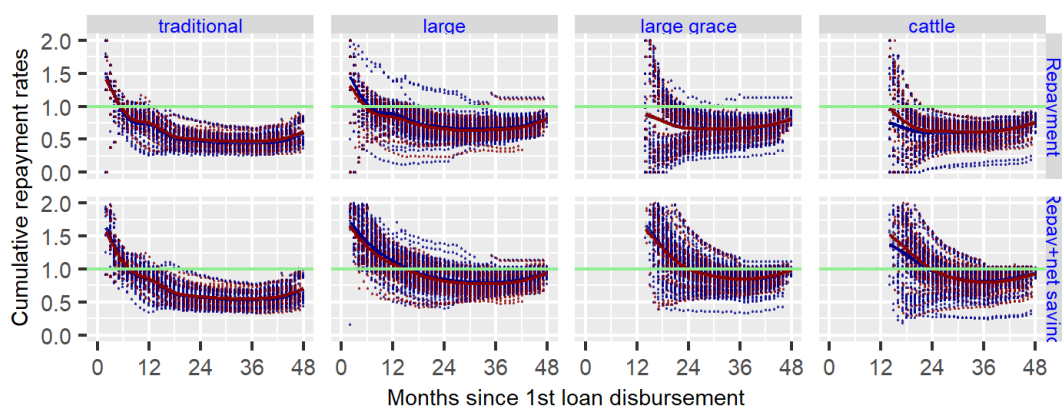
Note: Each dot represents weekly observations. Only members who received loans are shown. Each panel shows ratios of cumulative repayment against cumulative due amount, sum of cumulative repayment and cumulative net saving (saving - withdrawal) against cumulative due amount, against weeks after first disbursement. Lines are smoothed lines with a penalized cubic regression spline in ggplot2::geom_smooth function, originally from mgcv::gam with bs='cs'.

```
[1] excl
[[1]]
NetSaving ~ dummyLarge + dummyLargeGrace + dummyCattle


[[2]]
NetSaving ~ LY2 + LY3 + LY4 + dummyLarge + dummyLargeGrace +
    dummyCattle


[[3]]
NetSaving ~ dummyLarge + dummyLargeGrace + dummyCattle + NetSaving0


[[4]]
```

24

```
NetSaving ~ LY2 + LY3 + LY4 + dummyLarge + dummyLargeGrace +
    dummyCattle + NetSaving0

[[5]]
NetSaving ~ FloodInRd1 + LY2 + LY3 + LY4 + dummyLarge + dummyLargeGrace +
    dummyCattle + HeadLiteracy0 + HHsize0 + NetSaving0

[[6]]
Repaid ~ dummyLarge + dummyLargeGrace + dummyCattle

[[7]]
Repaid ~ LY2 + LY3 + LY4 + dummyLarge + dummyLargeGrace + dummyCattle

[[8]]
Repaid ~ dummyLarge + dummyLargeGrace + dummyCattle + Repaid0

[[9]]
Repaid ~ LY2 + LY3 + LY4 + dummyLarge + dummyLargeGrace + dummyCattle +
    Repaid0

[[10]]
Repaid ~ FloodInRd1 + LY2 + LY3 + LY4 + dummyLarge + dummyLargeGrace +
    dummyCattle + HeadLiteracy0 + HHsize0 + Repaid0

[[11]]
Repaid ~ FloodInRd1 + LY2 + LY3 + LY4 + dummyLarge + dummyLargeGrace +
    dummyCattle + HeadLiteracy0 + HHsize0 + Repaid0 + NetSaving0

[1] exclP
[[1]]
NetSaving ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
NetSaving ~ LY2 + LY3 + LY4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
NetSaving ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NetSaving0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[4]]
NetSaving ~ LY2 + LY3 + LY4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + NetSaving0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[5]]
NetSaving ~ FloodInRd1 + LY2 + LY3 + LY4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HeadLiteracy0 + HHsize0 +
    NetSaving0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[6]]
Repaid ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[7]]
Repaid ~ LY2 + LY3 + LY4 + dummyUltraPoor + dummyLargeSize +
```

```
        dummyWithGrace + dummyInKind + dummyLargeSize.UltraPoor +
        dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[8]]
Repaid ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace + dummyInKind +
    Repaid0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[9]]
Repaid ~ LY2 + LY3 + LY4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + Repaid0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[10]]
Repaid ~ FloodInRd1 + LY2 + LY3 + LY4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HeadLiteracy0 + HHsize0 +
    Repaid0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[11]]
Repaid ~ FloodInRd1 + LY2 + LY3 + LY4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HeadLiteracy0 + HHsize0 +
    Repaid0 + NetSaving0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[1] excla
[[1]]
NetSaving ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NetSaving ~ LY2 + LY3 + LY4 + dummyLargeSize + dummyWithGrace +
    dummyInKind

[[3]]
NetSaving ~ dummyLargeSize + dummyWithGrace + dummyInKind + NetSaving0

[[4]]
NetSaving ~ LY2 + LY3 + LY4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + NetSaving0

[[5]]
NetSaving ~ FloodInRd1 + LY2 + LY3 + LY4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HeadLiteracy0 + HHsize0 + NetSaving0

[[6]]
Repaid ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[7]]
Repaid ~ LY2 + LY3 + LY4 + dummyLargeSize + dummyWithGrace +
    dummyInKind

[[8]]
Repaid ~ dummyLargeSize + dummyWithGrace + dummyInKind + Repaid0

[[9]]
Repaid ~ LY2 + LY3 + LY4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + Repaid0

[[10]]
Repaid ~ FloodInRd1 + LY2 + LY3 + LY4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HeadLiteracy0 + HHsize0 + Repaid0
```

```
[[11]]
Repaid ~ FloodInRd1 + LY2 + LY3 + LY4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HeadLiteracy0 + HHsize0 + Repaid0 + NetSaving0

[1] exclT
[[1]]
NetSaving ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
NetSaving ~ LY3 + LY4 + dummyLarge + dummyLargeGrace + dummyCattle

[[3]]
NetSaving ~ dummyLarge + dummyLargeGrace + dummyCattle + NetSaving0

[[4]]
NetSaving ~ LY3 + LY4 + dummyLarge + dummyLargeGrace + dummyCattle +
    NetSaving0

[[5]]
NetSaving ~ FloodInRd1 + LY3 + LY4 + dummyLarge + dummyLargeGrace +
    dummyCattle + HeadLiteracy0 + HHsize0 + NetSaving0

[[6]]
Repaid ~ dummyLarge + dummyLargeGrace + dummyCattle

[[7]]
Repaid ~ LY3 + LY4 + dummyLarge + dummyLargeGrace + dummyCattle

[[8]]
Repaid ~ dummyLarge + dummyLargeGrace + dummyCattle + Repaid0

[[9]]
Repaid ~ LY3 + LY4 + dummyLarge + dummyLargeGrace + dummyCattle +
    Repaid0

[[10]]
Repaid ~ FloodInRd1 + LY3 + LY4 + dummyLarge + dummyLargeGrace +
    dummyCattle + HeadLiteracy0 + HHsize0 + Repaid0

[[11]]
Repaid ~ FloodInRd1 + LY3 + LY4 + dummyLarge + dummyLargeGrace +
    dummyCattle + HeadLiteracy0 + HHsize0 + Repaid0 + NetSaving0

[1] exclTP
[[1]]
NetSaving ~ dummyLargeSize.LY3 + dummyWithGrace.LY3 + dummyInKind.LY3 +
    dummyUltraPoor.LY3 + dummyLargeSize.LY4 + dummyWithGrace.LY4 +
    dummyInKind.LY4 + dummyUltraPoor.LY4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.LY3 +
    dummyLargeSize.UltraPoor.LY4 + dummyWithGrace.UltraPoor.LY3 +
    dummyWithGrace.UltraPoor.LY4 + dummyInKind.UltraPoor.LY3 +
    dummyInKind.UltraPoor.LY4

[[2]]
NetSaving ~ LY3 + LY4 + dummyLargeSize.LY3 + dummyWithGrace.LY3 +
    dummyInKind.LY3 + dummyUltraPoor.LY3 + dummyLargeSize.LY4 +
    dummyWithGrace.LY4 + dummyInKind.LY4 + dummyUltraPoor.LY4 +
    dummyUltraPoor + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
```

```
        dummyLargeSize.UltraPoor.LY3 + dummyLargeSize.UltraPoor.LY4 +
        dummyWithGrace.UltraPoor.LY3 + dummyWithGrace.UltraPoor.LY4 +
        dummyInKind.UltraPoor.LY3 + dummyInKind.UltraPoor.LY4

[[3]]
NetSaving ~ dummyLargeSize.LY3 + dummyWithGrace.LY3 + dummyInKind.LY3 +
    dummyUltraPoor.LY3 + dummyLargeSize.LY4 + dummyWithGrace.LY4 +
    dummyInKind.LY4 + dummyUltraPoor.LY4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + NetSaving0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.LY3 +
    dummyLargeSize.UltraPoor.LY4 + dummyWithGrace.UltraPoor.LY3 +
    dummyWithGrace.UltraPoor.LY4 + dummyInKind.UltraPoor.LY3 +
    dummyInKind.UltraPoor.LY4

[[4]]
NetSaving ~ LY3 + LY4 + dummyLargeSize.LY3 + dummyWithGrace.LY3 +
    dummyInKind.LY3 + dummyUltraPoor.LY3 + dummyLargeSize.LY4 +
    dummyWithGrace.LY4 + dummyInKind.LY4 + dummyUltraPoor.LY4 +
    dummyUltraPoor + dummyLargeSize + dummyWithGrace + dummyInKind +
    NetSaving0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.LY3 + dummyLargeSize.UltraPoor.LY4 +
    dummyWithGrace.UltraPoor.LY3 + dummyWithGrace.UltraPoor.LY4 +
    dummyInKind.UltraPoor.LY3 + dummyInKind.UltraPoor.LY4

[[5]]
NetSaving ~ FloodInRd1 + LY3 + LY4 + dummyLargeSize.LY3 + dummyWithGrace.LY3 +
    dummyInKind.LY3 + dummyUltraPoor.LY3 + dummyLargeSize.LY4 +
    dummyWithGrace.LY4 + dummyInKind.LY4 + dummyUltraPoor.LY4 +
    dummyUltraPoor + dummyLargeSize + dummyWithGrace + dummyInKind +
    HeadLiteracy0 + HHsize0 + NetSaving0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.LY3 +
    dummyLargeSize.UltraPoor.LY4 + dummyWithGrace.UltraPoor.LY3 +
    dummyWithGrace.UltraPoor.LY4 + dummyInKind.UltraPoor.LY3 +
    dummyInKind.UltraPoor.LY4

[[6]]
Repaid ~ dummyLargeSize.LY3 + dummyWithGrace.LY3 + dummyInKind.LY3 +
    dummyUltraPoor.LY3 + dummyLargeSize.LY4 + dummyWithGrace.LY4 +
    dummyInKind.LY4 + dummyUltraPoor.LY4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.LY3 +
    dummyLargeSize.UltraPoor.LY4 + dummyWithGrace.UltraPoor.LY3 +
    dummyWithGrace.UltraPoor.LY4 + dummyInKind.UltraPoor.LY3 +
    dummyInKind.UltraPoor.LY4

[[7]]
Repaid ~ LY3 + LY4 + dummyLargeSize.LY3 + dummyWithGrace.LY3 +
    dummyInKind.LY3 + dummyUltraPoor.LY3 + dummyLargeSize.LY4 +
    dummyWithGrace.LY4 + dummyInKind.LY4 + dummyUltraPoor.LY4 +
    dummyUltraPoor + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.LY3 + dummyLargeSize.UltraPoor.LY4 +
    dummyWithGrace.UltraPoor.LY3 + dummyWithGrace.UltraPoor.LY4 +
    dummyInKind.UltraPoor.LY3 + dummyInKind.UltraPoor.LY4

[[8]]
Repaid ~ dummyLargeSize.LY3 + dummyWithGrace.LY3 + dummyInKind.LY3 +
    dummyUltraPoor.LY3 + dummyLargeSize.LY4 + dummyWithGrace.LY4 +
    dummyInKind.LY4 + dummyUltraPoor.LY4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + Repaid0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.LY3 +
```

```
    dummyLargeSize.UltraPoor.LY4 + dummyWithGrace.UltraPoor.LY3 +
    dummyWithGrace.UltraPoor.LY4 + dummyInKind.UltraPoor.LY3 +
    dummyInKind.UltraPoor.LY4

[[9]]
Repaid ~ LY3 + LY4 + dummyLargeSize.LY3 + dummyWithGrace.LY3 +
    dummyInKind.LY3 + dummyUltraPoor.LY3 + dummyLargeSize.LY4 +
    dummyWithGrace.LY4 + dummyInKind.LY4 + dummyUltraPoor.LY4 +
    dummyUltraPoor + dummyLargeSize + dummyWithGrace + dummyInKind +
    Repaid0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.LY3 + dummyLargeSize.UltraPoor.LY4 +
    dummyWithGrace.UltraPoor.LY3 + dummyWithGrace.UltraPoor.LY4 +
    dummyInKind.UltraPoor.LY3 + dummyInKind.UltraPoor.LY4

[[10]]
Repaid ~ FloodInRd1 + LY3 + LY4 + dummyLargeSize.LY3 + dummyWithGrace.LY3 +
    dummyInKind.LY3 + dummyUltraPoor.LY3 + dummyLargeSize.LY4 +
    dummyWithGrace.LY4 + dummyInKind.LY4 + dummyUltraPoor.LY4 +
    dummyUltraPoor + dummyLargeSize + dummyWithGrace + dummyInKind +
    HeadLiteracy0 + HHsize0 + Repaid0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.LY3 +
    dummyLargeSize.UltraPoor.LY4 + dummyWithGrace.UltraPoor.LY3 +
    dummyWithGrace.UltraPoor.LY4 + dummyInKind.UltraPoor.LY3 +
    dummyInKind.UltraPoor.LY4

[[11]]
Repaid ~ FloodInRd1 + LY3 + LY4 + dummyLargeSize.LY3 + dummyWithGrace.LY3 +
    dummyInKind.LY3 + dummyUltraPoor.LY3 + dummyLargeSize.LY4 +
    dummyWithGrace.LY4 + dummyInKind.LY4 + dummyUltraPoor.LY4 +
    dummyUltraPoor + dummyLargeSize + dummyWithGrace + dummyInKind +
    HeadLiteracy0 + HHsize0 + Repaid0 + NetSaving0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.LY3 +
    dummyLargeSize.UltraPoor.LY4 + dummyWithGrace.UltraPoor.LY3 +
    dummyWithGrace.UltraPoor.LY4 + dummyInKind.UltraPoor.LY3 +
    dummyInKind.UltraPoor.LY4

[1] exclTa
[[1]]
NetSaving ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NetSaving ~ LY3 + LY4 + dummyLargeSize + dummyWithGrace + dummyInKind

[[3]]
NetSaving ~ dummyLargeSize + dummyWithGrace + dummyInKind + NetSaving0

[[4]]
NetSaving ~ LY3 + LY4 + dummyLargeSize + dummyWithGrace + dummyInKind +
    NetSaving0

[[5]]
NetSaving ~ FloodInRd1 + LY3 + LY4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HeadLiteracy0 + HHsize0 + NetSaving0

[[6]]
Repaid ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[7]]
Repaid ~ LY3 + LY4 + dummyLargeSize + dummyWithGrace + dummyInKind

[[8]]
```

```
Repaid ~ dummyLargeSize + dummyWithGrace + dummyInKind + Repaid0

[[9]]
Repaid ~ LY3 + LY4 + dummyLargeSize + dummyWithGrace + dummyInKind +
    Repaid0

[[10]]
Repaid ~ FloodInRd1 + LY3 + LY4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HeadLiteracy0 + HHsize0 + Repaid0

[[11]]
Repaid ~ FloodInRd1 + LY3 + LY4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HeadLiteracy0 + HHsize0 + Repaid0 + NetSaving0
```

```
              used    (Mb) gc trigger    (Mb) limit (Mb)   max used     (Mb)
Ncells     3212636   171.6    4711329   251.7        NA    4711329    251.7
Vcells   624218828  4762.5  911587133  6954.9     56320  911585152   6954.9
```

TABLE 13: ANCOVA ESTIMATION OF NET SAVING AND REPAYMENT

covariates	mean/std	Net saving					Repayment				
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(Intercept)		39.8 (0.0)	107.2 (0.0)	39.0 (0.0)	106.3 (0.0)	104.1 (0.0)	250.8 (0.0)	130.8 (0.0)	251.8 (0.0)	132.5 (0.0)	138.4 (0.0)
Large	0.297 (0.46)	7.0 (4.3)	6.4 (6.6)	5.3 (14.1)	4.6 (19.9)	4.6 (20.2)	80.1 (0.0)	80.5 (0.0)	79.7 (0.0)	80.0 (0.0)	80.3 (0.0)
LargeGrace	0.291 (0.45)	21.0 (0.0)	20.5 (0.0)	17.9 (0.0)	17.5 (0.0)	17.8 (0.0)	81.3 (0.0)	81.8 (0.0)	80.4 (0.0)	80.2 (0.0)	78.1 (0.0)
Cattle	0.264 (0.44)	22.6 (0.0)	22.0 (0.0)	19.8 (0.0)	19.1 (0.0)	19.2 (0.0)	75.5 (0.0)	75.9 (0.0)	74.6 (0.0)	74.2 (0.0)	73.0 (0.0)
LY2	0.258 (0.44)		−81.2 (0.0)		−81.2 (0.0)	−81.2 (0.0)		148.5 (0.0)		148.6 (0.0)	148.6 (0.0)
LY3	0.258 (0.44)		−85.8 (0.0)		−85.7 (0.0)	−85.7 (0.0)		222.9 (0.0)		222.9 (0.0)	222.9 (0.0)
LY4	0.233 (0.42)		−102.0 (0.0)		−102.1 (0.0)	−102.0 (0.0)		101.6 (0.1)		101.7 (0.1)	101.6 (0.1)
FloodInRd1	0.477 (0.50)					1.5 (64.7)					−11.7 (2.1)
Head literate0	0.122 (0.33)					1.8 (45.5)					10.2 (12.5)
net saving0	355.719 (513.67)			0.0 (3.6)	0.0 (3.4)	0.0 (4.5)					
HHsize0	4.241 (1.38)					0.3 (64.9)					−0.2 (89.9)
Repaid0	98.890 (195.66)								−0.0 (82.4)	−0.0 (69.7)	−0.0 (72.0)
mean of dependent variable $\bar{R}^2$		54 0.008	54 0.164	54 0.009	54 0.165	54 0.165	318 0.005	318 0.051	318 0.005	318 0.051	318 0.051
N	26627	26627	26627	26627	26627	26627	26627	26627	26627	26627	26627

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Saving and repayment information is taken from administrative data. Net saving is saving - withdrawal. LY2, LY3, LY4 are dummy variables for second, third, and fourth year into borrowing. Repayment starts from the year 1 for traditional and large arms, from the year 2 for large grace and cattle arms. The first regression of repayment gives a mean monthly repayment for each arms. Mean monthly repayment is zero in the year 1 for large grace and cattle arms.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 14: ANCOVA ESTIMATION OF NET SAVING AND REPAYMENT BY ATTRIBUTES

covariates	mean/std	Net saving					Repayment				
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(Intercept)		39.8 (0.0)	107.2 (0.0)	39.0 (0.0)	106.3 (0.0)	104.1 (0.0)	250.8 (0.0)	130.8 (0.0)	251.8 (0.0)	132.5 (0.0)	138.4 (0.0)
Upfront	0.851 (0.36)	7.0 (4.3)	6.4 (6.6)	5.3 (14.1)	4.6 (19.9)	4.6 (20.2)	80.1 (0.0)	80.5 (0.0)	79.7 (0.0)	80.0 (0.0)	80.3 (0.0)
WithGrace	0.555 (0.50)	14.0 (0.5)	14.1 (0.4)	12.7 (0.8)	12.8 (0.7)	13.3 (0.4)	1.3 (90.0)	1.3 (89.7)	0.6 (95.1)	0.2 (98.4)	−2.2 (81.9)
InKind	0.264 (0.44)	1.6 (80.4)	1.4 (82.3)	1.8 (76.9)	1.6 (78.8)	1.4 (81.9)	−5.8 (59.3)	−6.0 (58.2)	−5.8 (59.2)	−6.0 (58.0)	−5.1 (62.2)
LY2	0.258 (0.44)		−81.2 (0.0)		−81.2 (0.0)	−81.2 (0.0)		148.5 (0.0)		148.6 (0.0)	148.6 (0.0)
LY3	0.258 (0.44)		−85.8 (0.0)		−85.7 (0.0)	−85.7 (0.0)		222.9 (0.0)		222.9 (0.0)	222.9 (0.0)
LY4	0.233 (0.42)		−102.0 (0.0)		−102.1 (0.0)	−102.0 (0.0)		101.6 (0.1)		101.7 (0.1)	101.6 (0.1)
FloodInRd1	0.477 (0.50)					1.5 (64.7)					−11.7 (2.1)
Head literate0	0.122 (0.33)					1.8 (45.5)					10.2 (12.5)
net saving0	355.719 (513.67)			0.0 (3.6)	0.0 (3.4)	0.0 (4.5)					
HHsize0	4.241 (1.38)					0.3 (64.9)					−0.2 (89.9)
Repaid0	98.890 (195.66)								−0.0 (82.4)	−0.0 (69.7)	−0.0 (72.0)
mean of dependent variable		54	54	54	54	54	318	318	318	318	318
R^2		0.008	0.164	0.009	0.165	0.165	0.005	0.051	0.005	0.051	0.051
N	26627	26627	26627	26627	26627	26627	26627	26627	26627	26627	26627

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Saving and repayment information is taken from administrative data. Net saving is saving - withdrawal. LY2, LY3, LY4 are dummy variables for second, third, and fourth year into borrowing. Repayment starts from the year 2 for WithGrace functional attributes. The first regression of repayment gives a mean monthly repayment for each arms. Mean monthly repayment is zero in the year 1 for WithGrace functional attributes.

2. P values in percentages in parentheses. Standard errors are clustered at group (village) level.

TABLE 15: ANCOVA estimation of net saving and repayment, ultra poor vs. moderately poor

covariates	mean/std	Net saving					Repayment				
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(Intercept)		28.5 (0.0)	54.7 (0.0)	27.7 (0.0)	53.9 (0.0)	51.4 (0.0)	265.0 (0.0)	218.5 (0.0)	265.7 (0.0)	219.3 (0.0)	225.3 (0.0)
Upfront	0.851 (0.36)	10.6 (8.0)	10.6 (1.5)	8.9 (15.1)	8.8 (4.9)	8.8 (4.9)	93.5 (0.0)	93.3 (0.0)	93.2 (0.0)	93.0 (0.0)	93.4 (0.0)
WithGrace	0.555 (0.50)	25.1 (0.2)	25.5 (0.0)	23.8 (0.3)	24.1 (0.0)	24.5 (0.0)	−33.2 (5.4)	−33.6 (3.9)	−33.7 (5.3)	−34.2 (3.7)	−36.7 (2.0)
InKind	0.264 (0.44)	−1.1 (91.4)	0.6 (95.2)	−0.9 (93.0)	0.8 (92.7)	0.5 (95.0)	−13.0 (45.5)	−15.7 (33.9)	−13.0 (45.5)	−15.8 (33.8)	−14.9 (35.0)
UltraPoor	0.714 (0.45)	3.5 (2.8)	2.6 (6.9)	3.5 (3.2)	2.6 (7.6)	2.8 (5.6)	−5.0 (15.5)	−3.6 (25.9)	−5.0 (15.7)	−3.6 (26.5)	−3.2 (34.2)
Upfront × UltraPoor	0.609 (0.49)	−7.7 (7.8)	−7.3 (8.0)	−7.5 (9.4)	−7.1 (9.6)	−6.7 (11.8)	17.2 (15.5)	16.6 (14.9)	17.3 (15.5)	16.8 (14.8)	17.0 (17.5)
WithGrace × UltraPoor	0.401 (0.49)	4.3 (25.9)	3.1 (39.6)	4.7 (24.2)	3.4 (35.8)	3.2 (37.5)	−9.2 (28.4)	−7.2 (36.8)	−9.1 (28.5)	−7.2 (37.0)	−8.0 (32.0)
InKind × UltraPoor	0.191 (0.39)	6.1 (17.2)	6.1 (11.8)	5.2 (24.0)	5.1 (17.8)	5.3 (15.6)	−5.4 (58.4)	−5.1 (56.8)	−5.4 (58.4)	−5.1 (56.7)	−4.8 (58.2)
LY3	0.258 (0.44)		−45.9 (0.0)		−45.9 (0.0)	−45.9 (0.0)		154.7 (0.0)		154.7 (0.0)	154.7 (0.0)
Upfront × LY3	0.220 (0.41)	−12.9 (47.0)	−13.8 (3.6)	−12.9 (47.1)	−13.8 (3.7)	−13.8 (3.7)	26.2 (66.5)	29.8 (14.4)	26.2 (66.5)	29.8 (14.4)	29.7 (14.5)
WithGrace × LY3	0.143 (0.35)	−54.3 (0.5)	−55.4 (0.0)	−54.3 (0.5)	−55.4 (0.0)	−55.4 (0.0)	284.7 (0.0)	288.6 (0.0)	284.7 (0.0)	288.6 (0.0)	288.6 (0.0)
InKind × LY3	0.069 (0.25)	8.4 (69.6)	1.5 (91.5)	8.3 (69.7)	1.5 (91.5)	1.5 (91.5)	−32.2 (60.0)	−9.3 (75.5)	−32.2 (60.0)	−9.3 (75.5)	−9.2 (75.6)
UltraPoor × LY3	0.184 (0.39)	−5.2 (9.7)	−1.8 (46.8)	−5.2 (9.7)	−1.8 (46.7)	−1.8 (46.8)	16.5 (5.6)	4.8 (48.9)	16.5 (5.6)	4.8 (48.9)	4.8 (48.9)
Upfront × UltraPoor × LY3	0.157 (0.36)	9.5 (24.0)	8.2 (29.1)	9.5 (23.9)	8.2 (29.1)	8.2 (29.1)	−9.6 (67.0)	−5.5 (74.5)	−9.6 (67.0)	−5.5 (74.5)	−5.5 (74.6)
WithGrace × UltraPoor × LY3	0.104 (0.30)	−15.3 (3.8)	−10.3 (10.2)	−15.3 (3.7)	−10.3 (10.2)	−10.3 (10.2)	21.8 (29.2)	4.7 (80.0)	21.8 (29.2)	4.7 (80.0)	4.8 (80.0)
InKind × UltraPoor × LY3	0.050 (0.22)	−3.3 (72.0)	−2.4 (69.1)	−3.2 (72.2)	−2.4 (69.3)	−2.4 (69.3)	40.2 (12.5)	37.0 (6.3)	40.2 (12.5)	37.0 (6.3)	37.1 (6.3)
LY4	0.233 (0.42)		−62.1 (0.0)		−62.2 (0.0)	−62.2 (0.0)		29.6 (21.6)		29.6 (21.5)	29.6 (21.6)
Upfront × LY4	0.198 (0.40)	−17.7 (46.1)	−20.0 (1.7)	−17.7 (46.0)	−20.1 (1.7)	−20.0 (1.7)	−129.2 (3.1)	−129.4 (2.7)	−129.2 (3.1)	−129.4 (2.7)	−129.7 (2.6)
WithGrace × LY4	0.129 (0.34)	−49.5 (4.2)	−50.6 (0.0)	−49.5 (4.3)	−50.5 (0.0)	−50.6 (0.0)	66.0 (28.9)	67.0 (27.5)	65.9 (29.0)	66.9 (27.6)	67.0 (27.5)
InKind × LY4	0.061 (0.24)	14.9 (58.2)	4.6 (76.7)	14.7 (58.8)	4.4 (77.8)	4.4 (77.7)	84.1 (21.5)	88.0 (19.5)	84.1 (21.5)	88.0 (19.5)	88.0 (19.5)
UltraPoor × LY4	0.166 (0.37)	−5.3 (17.0)	−0.5 (84.7)	−5.4 (16.7)	−0.5 (83.9)	−0.5 (83.9)	−26.1 (7.4)	−28.2 (5.0)	−26.1 (7.4)	−28.2 (5.1)	−28.2 (5.0)
Upfront × UltraPoor × LY4	0.142 (0.35)	13.3 (15.8)	12.1 (8.8)	13.3 (15.7)	12.1 (8.7)	12.1 (8.8)	−33.7 (52.8)	−32.6 (54.6)	−33.7 (52.8)	−32.6 (54.6)	−32.7 (54.4)
WithGrace × UltraPoor × LY4	0.093 (0.29)	−13.0 (16.6)	−5.9 (43.7)	−13.1 (16.3)	−5.9 (43.1)	−5.9 (43.3)	12.1 (71.0)	9.0 (78.0)	12.1 (71.0)	9.0 (78.0)	9.1 (77.8)
InKind × UltraPoor × LY4	0.044 (0.21)	−16.1 (15.5)	−14.0 (3.4)	−16.0 (15.7)	−13.9 (3.5)	−13.9 (3.5)	12.8 (73.6)	12.7 (73.4)	12.8 (73.6)	12.7 (73.4)	12.7 (73.6)
FloodInRd1	0.477 (0.50)					1.4 (66.0)					−11.9 (2.0)
Head literate0	0.122 (0.33)					2.1 (39.1)					9.9 (15.0)
net saving0	355.719 (513.67)			0.0 (3.7)	0.0 (3.2)	0.0 (4.2)					
HHsize0	4.241 (1.38)					0.3 (61.7)					−0.2 (85.1)
Repaid0	98.890 (195.66)								−0.0 (85.9)	−0.0 (83.8)	−0.0 (86.2)
mean of dependent variable		54	54	54	54	54	318	318	318	318	318
$\bar{R}^2$		0.026	0.101	0.027	0.102	0.102	0.032	0.061	0.032	0.061	0.061
N	26627	26627	26627	26627	26627	26627	26627	26627	26627	26627	26627

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. UltraPoor is an indicator variable if the household is classified as the ultra poor. Saving and repayment information is taken from administrative data. Net saving is saving - withdrawal. LY2, LY3, LY4 are dummy variables for second, third, and fourth year into borrowing. Repayment starts from the year 2 for WithGrace functional attributes. The first regression of repayment gives a mean monthly repayment for each arms. Mean monthly repayment is zero in the year 1 for WithGrace functional attributes.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

Finding III.1 TABLE 13 shows regression results for net saving, repayment, and effective repayment (net saving + repayment) using monthly administrative data. Monthly mean repayment is given by 48 times the estimated values in colum (5). One sees that traditional has the lowest mean repayment. It is shown that they repaid loan year 2 and 3

```
            FullyRepaid
Arm              0   1 sum
  traditional   85   0  85
  large        166   4 170
  large grace  162   4 166
  cattle       151   1 152
  sum          564   9 573
```

Finding III.2 FIGURE 4 visually presents that repayment is no different between the ultra poor and the moderately poor. The subsequent regression table econometrically confirms this (TABLE ??).

III.2   Schooling

ANCOVA is a model that controls for preexisting differences by including initial values of *y* as a covariate, traditionally for a continuous variable as a nuissance to estimated impacts of a categorical variable (treated/control). In enrollment regressions, initial enrollment is informative only for school age children at the initial period. ANCOVA estimates should be used only to school age children in 2012 who are not old enough that they may naturally stop schooling by the endline.

```
Dropped 902 obs due to NA.
Dropped 902 obs due to NA.
Dropped 184 obs due to T<2.
Dropped 616 obs due to NA.
```

Enrollment pattern in original schooling panel. 'n' indicates NA (either attrition or not reported).

	SchPattern													
ObPattern	0000	0001	000n	0011	001n	00n0	00n1	00nn	010n	0111	011n	01nn	0n00	0n0n
0111	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1010	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1011	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	0	0	0	0	0	0	0	0	0	0	0	3	0	0
1110	0	0	5	0	2	0	0	1	0	0	3	0	0	0
1111	21	2	16	12	1	4	1	25	1	83	4	4	1	0

	SchPattern													
ObPattern	0n11	0n1n	0nn0	0nn1	0nnn	1000	1001	100n	1011	101n	10n1	10nn	1100	1101
0111	2	1	0	0	2	0	0	0	0	0	0	0	0	0
1000	0	0	0	0	32	0	0	0	0	0	0	0	0	0
1010	0	0	0	0	2	0	0	0	0	0	0	0	0	0
1011	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1110	0	0	0	0	2	0	0	1	0	1	0	0	0	0
1111	4	1	3	1	68	5	1	3	6	1	1	8	8	1

	SchPattern													
ObPattern	110n	1110	1111	111n	11n1	11nn	1n00	1n01	1n0n	1n11	1n1n	1nn0	1nn1	1nnn
0111	0	0	0	0	0	0	0	0	0	6	0	0	0	1
1000	0	0	0	0	0	0	0	0	0	0	0	0	0	22

1010	0	0	0	0	0	0	0	0	0	0	1	0	0	2
1011	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	0	0	0	0	0	6	0	0	0	0	0	0	0	0
1110	0	0	0	25	0	2	0	0	0	0	1	0	0	0
1111	9	3	397	30	4	26	1	1	1	8	1	1	2	42

Left panel is before dropping nnn, right panel is after: Original panel.

	traditional	large	large grace	cattle	traditional	large	large grace	cattle
1	205	246	251	235	166	208	186	203
2	161	197	177	191	161	197	177	191
3	148	185	165	173	148	185	165	173
4	118	171	147	143	118	171	147	143

sch has 2913 rows. Drop 174 observations in sch with nnn in SchPattern.

With OLS, 89, 135, 539 individuals are repeatedly observed for 2, 3, 4 times, respectively. Number of individuals with NAs in Enrolled: 0 obs for sch. Check missingness in junior or high school level information at baseline.

```
table0(apply(s1x[o800 == 1L & tee == 1, .(dummyJunior, dummyHigh)], 1, sum))
```

```
x
  0   1
610 153
```

Drop 610 obs without school level information.

```
               used     (Mb)  gc trigger    (Mb) limit (Mb)   max used     (Mb)
Ncells    3212688   171.6     4711329   251.7         NA    4711329    251.7
Vcells  621990758  4745.5   911587133  6954.9      56320  911585152   6954.9
```

```
[1] excl
[[1]]
Enrolled ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
Enrolled ~ dummyLarge + dummyLargeGrace + dummyCattle + Enrolled0

[[3]]
Enrolled ~ dummyLarge + dummyLargeGrace + dummyCattle + dummyJunior +
    dummyHigh + dummyLarge.dummyJunior + dummyLargeGrace.dummyJunior +
    dummyCattle.dummyJunior + dummyLarge.dummyHigh + dummyLargeGrace.dummyHigh +
    dummyCattle.dummyHigh + Enrolled0

[[4]]
Enrolled ~ FloodInRd1 + ChildAgeOrderAtRd1 + EldestSon + EldestDaughter +
    dummyLarge + dummyLargeGrace + dummyCattle + dummyJunior +
    dummyHigh + dummyLarge.dummyJunior + dummyLargeGrace.dummyJunior +
    dummyCattle.dummyJunior + dummyLarge.dummyHigh + dummyLargeGrace.dummyHigh +
    dummyCattle.dummyHigh + HHsize0 + HeadLiteracy0 + HeadAge0 +
    Enrolled0

[[5]]
Enrolled ~ dummyLarge + dummyLargeGrace + dummyCattle + dummyJunior +
    dummyHigh + Female + dummyLarge.dummyJunior + dummyLargeGrace.dummyJunior +
    dummyCattle.dummyJunior + dummyLarge.dummyHigh + dummyLargeGrace.dummyHigh +
    dummyCattle.dummyHigh + dummyLarge.Female + dummyLargeGrace.Female +
    dummyCattle.Female + dummyJunior.Female + dummyHigh.Female +
    dummyLarge.dummyJunior.Female + dummyLargeGrace.dummyJunior.Female +
    dummyCattle.dummyJunior.Female + dummyLarge.dummyHigh.Female +
    dummyLargeGrace.dummyHigh.Female + dummyCattle.dummyHigh.Female +
    Enrolled0
```

```
[[6]]
Enrolled ~ FloodInRd1 + ChildAgeOrderAtRd1 + EldestSon + EldestDaughter +
    dummyLarge + dummyLargeGrace + dummyCattle + dummyJunior +
    dummyHigh + Female + dummyLarge.dummyJunior + dummyLargeGrace.dummyJunior +
    dummyCattle.dummyJunior + dummyLarge.dummyHigh + dummyLargeGrace.dummyHigh +
    dummyCattle.dummyHigh + dummyLarge.Female + dummyLargeGrace.Female +
    dummyCattle.Female + dummyJunior.Female + dummyHigh.Female +
    dummyLarge.dummyJunior.Female + dummyLargeGrace.dummyJunior.Female +
    dummyCattle.dummyJunior.Female + dummyLarge.dummyHigh.Female +
    dummyLargeGrace.dummyHigh.Female + dummyCattle.dummyHigh.Female +
    HHsize0 + HeadLiteracy0 + HeadAge0 + Enrolled0

[1] excla
[[1]]
Enrolled ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
Enrolled ~ dummyLargeSize + dummyWithGrace + dummyInKind + Enrolled0

[[3]]
Enrolled ~ dummyLargeSize + dummyWithGrace + dummyInKind + dummyJunior +
    dummyHigh + dummyWithGrace.dummyJunior + dummyLargeSize.dummyJunior +
    dummyInKind.dummyJunior + dummyWithGrace.dummyHigh + dummyLargeSize.dummyHigh +
    dummyInKind.dummyHigh + Enrolled0

[[4]]
Enrolled ~ FloodInRd1 + ChildAgeOrderAtRd1 + EldestSon + EldestDaughter +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyJunior +
    dummyHigh + dummyWithGrace.dummyJunior + dummyLargeSize.dummyJunior +
    dummyInKind.dummyJunior + dummyWithGrace.dummyHigh + dummyLargeSize.dummyHigh +
    dummyInKind.dummyHigh + HHsize0 + HeadLiteracy0 + HeadAge0 +
    Enrolled0

[[5]]
Enrolled ~ dummyLargeSize + dummyWithGrace + dummyInKind + dummyJunior +
    dummyHigh + Female + dummyJunior.Female + dummyHigh.Female +
    dummyWithGrace.dummyJunior + dummyLargeSize.dummyJunior +
    dummyInKind.dummyJunior + dummyWithGrace.dummyHigh + dummyLargeSize.dummyHigh +
    dummyInKind.dummyHigh + dummyWithGrace.Female + dummyLargeSize.Female +
    dummyInKind.Female + dummyWithGrace.dummyJunior.Female +
    dummyLargeSize.dummyJunior.Female + dummyInKind.dummyJunior.Female +
    dummyWithGrace.dummyHigh.Female + dummyLargeSize.dummyHigh.Female +
    dummyInKind.dummyHigh.Female + Enrolled0

[[6]]
Enrolled ~ FloodInRd1 + ChildAgeOrderAtRd1 + EldestSon + EldestDaughter +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyJunior +
    dummyHigh + Female + dummyJunior.Female + dummyHigh.Female +
    dummyWithGrace.dummyJunior + dummyLargeSize.dummyJunior +
    dummyInKind.dummyJunior + dummyWithGrace.dummyHigh + dummyLargeSize.dummyHigh +
    dummyInKind.dummyHigh + dummyWithGrace.Female + dummyLargeSize.Female +
    dummyInKind.Female + dummyWithGrace.dummyJunior.Female +
    dummyLargeSize.dummyJunior.Female + dummyInKind.dummyJunior.Female +
    dummyWithGrace.dummyHigh.Female + dummyLargeSize.dummyHigh.Female +
    dummyInKind.dummyHigh.Female + HHsize0 + HeadLiteracy0 +
    HeadAge0 + Enrolled0

[1] exclP
[[1]]
Enrolled ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
```

```
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyJunior.UltraPoor + dummyHigh.UltraPoor

[[2]]
Enrolled ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + Enrolled0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyJunior.UltraPoor + dummyHigh.UltraPoor

[[3]]
Enrolled ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyJunior + dummyHigh + dummyWithGrace.dummyJunior +
    dummyLargeSize.dummyJunior + dummyInKind.dummyJunior + dummyWithGrace.dummyHigh +
    dummyLargeSize.dummyHigh + dummyInKind.dummyHigh + Enrolled0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyJunior.UltraPoor + dummyHigh.UltraPoor

[[4]]
Enrolled ~ FloodInRd1 + ChildAgeOrderAtRd1 + EldestSon + EldestDaughter +
    dummyUltraPoor + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyJunior + dummyHigh + dummyWithGrace.dummyJunior + dummyLargeSize.dummyJunior +
    dummyInKind.dummyJunior + dummyWithGrace.dummyHigh + dummyLargeSize.dummyHigh +
    dummyInKind.dummyHigh + HHsize0 + HeadLiteracy0 + HeadAge0 +
    Enrolled0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyJunior.UltraPoor + dummyHigh.UltraPoor

[[5]]
Enrolled ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyJunior + dummyHigh + Female + dummyJunior.Female +
    dummyHigh.Female + dummyWithGrace.dummyJunior + dummyLargeSize.dummyJunior +
    dummyInKind.dummyJunior + dummyWithGrace.dummyHigh + dummyLargeSize.dummyHigh +
    dummyInKind.dummyHigh + dummyWithGrace.Female + dummyLargeSize.Female +
    dummyInKind.Female + dummyWithGrace.dummyJunior.Female +
    dummyLargeSize.dummyJunior.Female + dummyInKind.dummyJunior.Female +
    dummyWithGrace.dummyHigh.Female + dummyLargeSize.dummyHigh.Female +
    dummyInKind.dummyHigh.Female + Enrolled0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyJunior.UltraPoor +
    dummyHigh.UltraPoor + dummyFemale.UltraPoor

[[6]]
Enrolled ~ FloodInRd1 + ChildAgeOrderAtRd1 + EldestSon + EldestDaughter +
    dummyUltraPoor + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyJunior + dummyHigh + Female + dummyJunior.Female + dummyHigh.Female +
    dummyWithGrace.dummyJunior + dummyLargeSize.dummyJunior +
    dummyInKind.dummyJunior + dummyWithGrace.dummyHigh + dummyLargeSize.dummyHigh +
    dummyInKind.dummyHigh + dummyWithGrace.Female + dummyLargeSize.Female +
    dummyInKind.Female + dummyWithGrace.dummyJunior.Female +
    dummyLargeSize.dummyJunior.Female + dummyInKind.dummyJunior.Female +
    dummyWithGrace.dummyHigh.Female + dummyLargeSize.dummyHigh.Female +
    dummyInKind.dummyHigh.Female + HHsize0 + HeadLiteracy0 +
    HeadAge0 + Enrolled0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyJunior.UltraPoor + dummyHigh.UltraPoor +
    dummyFemale.UltraPoor

[1] exclT
[[1]]
Enrolled ~ dummyLarge + dummyLargeGrace + dummyCattle + dummyJunior +
    dummyHigh + Time.3 + Time.4 + dummyLarge.dummyJunior + dummyLargeGrace.dummyJunior +
    dummyCattle.dummyJunior + dummyLarge.dummyHigh + dummyLargeGrace.dummyHigh +
    dummyCattle.dummyHigh + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyJunior.Time3 + dummyJunior.Time4 +
```

```
    dummyHigh.Time3 + dummyHigh.Time4 + dummyLarge.dummyJunior.Time3 +
    dummyLargeGrace.dummyJunior.Time3 + dummyCattle.dummyJunior.Time3 +
    dummyLarge.dummyHigh.Time3 + dummyLargeGrace.dummyHigh.Time3 +
    dummyCattle.dummyHigh.Time3 + dummyLarge.dummyJunior.Time4 +
    dummyLargeGrace.dummyJunior.Time4 + dummyCattle.dummyJunior.Time4 +
    dummyLarge.dummyHigh.Time4 + dummyLargeGrace.dummyHigh.Time4 +
    dummyCattle.dummyHigh.Time4

[[2]]
Enrolled ~ dummyLarge + dummyLargeGrace + dummyCattle + dummyJunior +
    dummyHigh + Time.3 + Time.4 + dummyLarge.dummyJunior + dummyLargeGrace.dummyJunior +
    dummyCattle.dummyJunior + dummyLarge.dummyHigh + dummyLargeGrace.dummyHigh +
    dummyCattle.dummyHigh + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyJunior.Time3 + dummyJunior.Time4 +
    dummyHigh.Time3 + dummyHigh.Time4 + dummyLarge.dummyJunior.Time3 +
    dummyLargeGrace.dummyJunior.Time3 + dummyCattle.dummyJunior.Time3 +
    dummyLarge.dummyHigh.Time3 + dummyLargeGrace.dummyHigh.Time3 +
    dummyCattle.dummyHigh.Time3 + dummyLarge.dummyJunior.Time4 +
    dummyLargeGrace.dummyJunior.Time4 + dummyCattle.dummyJunior.Time4 +
    dummyLarge.dummyHigh.Time4 + dummyLargeGrace.dummyHigh.Time4 +
    dummyCattle.dummyHigh.Time4 + Enrolled0

[[3]]
Enrolled ~ dummyLarge + dummyLargeGrace + dummyCattle + dummyJunior +
    dummyHigh + Time.3 + Time.4 + dummyLarge.dummyJunior + dummyLargeGrace.dummyJunior +
    dummyCattle.dummyJunior + dummyLarge.dummyHigh + dummyLargeGrace.dummyHigh +
    dummyCattle.dummyHigh + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyJunior.Time3 + dummyJunior.Time4 +
    dummyHigh.Time3 + dummyHigh.Time4 + dummyLarge.dummyJunior.Time3 +
    dummyLargeGrace.dummyJunior.Time3 + dummyCattle.dummyJunior.Time3 +
    dummyLarge.dummyHigh.Time3 + dummyLargeGrace.dummyHigh.Time3 +
    dummyCattle.dummyHigh.Time3 + dummyLarge.dummyJunior.Time4 +
    dummyLargeGrace.dummyJunior.Time4 + dummyCattle.dummyJunior.Time4 +
    dummyLarge.dummyHigh.Time4 + dummyLargeGrace.dummyHigh.Time4 +
    dummyCattle.dummyHigh.Time4 + Enrolled0

[[4]]
Enrolled ~ FloodInRd1 + ChildAgeOrderAtRd1 + EldestSon + EldestDaughter +
    dummyLarge + dummyLargeGrace + dummyCattle + dummyJunior +
    dummyHigh + Time.3 + Time.4 + dummyLarge.dummyJunior + dummyLargeGrace.dummyJunior +
    dummyCattle.dummyJunior + dummyLarge.dummyHigh + dummyLargeGrace.dummyHigh +
    dummyCattle.dummyHigh + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyJunior.Time3 + dummyJunior.Time4 +
    dummyHigh.Time3 + dummyHigh.Time4 + dummyLarge.dummyJunior.Time3 +
    dummyLargeGrace.dummyJunior.Time3 + dummyCattle.dummyJunior.Time3 +
    dummyLarge.dummyHigh.Time3 + dummyLargeGrace.dummyHigh.Time3 +
    dummyCattle.dummyHigh.Time3 + dummyLarge.dummyJunior.Time4 +
    dummyLargeGrace.dummyJunior.Time4 + dummyCattle.dummyJunior.Time4 +
    dummyLarge.dummyHigh.Time4 + dummyLargeGrace.dummyHigh.Time4 +
    dummyCattle.dummyHigh.Time4 + HHsize0 + HeadLiteracy0 + HeadAge0 +
    Enrolled0

[[5]]
Enrolled ~ dummyLarge + dummyLargeGrace + dummyCattle + dummyJunior +
    dummyHigh + Female + Time.3 + Time.4 + dummyLarge.dummyJunior +
    dummyLargeGrace.dummyJunior + dummyCattle.dummyJunior + dummyLarge.dummyHigh +
    dummyLargeGrace.dummyHigh + dummyCattle.dummyHigh + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyCattle.Time3 + dummyLarge.Time4 +
```

```
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyLarge.Female +
    dummyLargeGrace.Female + dummyCattle.Female + dummyJunior.Time3 +
    dummyJunior.Time4 + dummyHigh.Time3 + dummyHigh.Time4 + dummyJunior.Female +
    dummyHigh.Female + Female.Time3 + Female.Time4 + dummyJunior.Female.Time3 +
    dummyJunior.Female.Time4 + dummyHigh.Female.Time3 + dummyHigh.Female.Time4 +
    dummyLarge.dummyJunior.Female + dummyLargeGrace.dummyJunior.Female +
    dummyCattle.dummyJunior.Female + dummyLarge.dummyHigh.Female +
    dummyLargeGrace.dummyHigh.Female + dummyCattle.dummyHigh.Female +
    dummyLarge.Female.Time3 + dummyLargeGrace.Female.Time3 +
    dummyCattle.Female.Time3 + dummyLarge.Female.Time4 + dummyLargeGrace.Female.Time4 +
    dummyCattle.Female.Time4 + dummyLarge.dummyJunior.Time3 +
    dummyLargeGrace.dummyJunior.Time3 + dummyCattle.dummyJunior.Time3 +
    dummyLarge.dummyHigh.Time3 + dummyLargeGrace.dummyHigh.Time3 +
    dummyCattle.dummyHigh.Time3 + dummyLarge.dummyJunior.Time4 +
    dummyLargeGrace.dummyJunior.Time4 + dummyCattle.dummyJunior.Time4 +
    dummyLarge.dummyHigh.Time4 + dummyLargeGrace.dummyHigh.Time4 +
    dummyCattle.dummyHigh.Time4 + dummyLarge.dummyJunior.Female.Time3 +
    dummyLargeGrace.dummyJunior.Female.Time3 + dummyCattle.dummyJunior.Female.Time3 +
    dummyLarge.dummyHigh.Female.Time3 + dummyLargeGrace.dummyHigh.Female.Time3 +
    dummyCattle.dummyHigh.Female.Time3 + dummyLarge.dummyJunior.Female.Time4 +
    dummyLargeGrace.dummyJunior.Female.Time4 + dummyCattle.dummyJunior.Female.Time4 +
    dummyLarge.dummyHigh.Female.Time4 + dummyLargeGrace.dummyHigh.Female.Time4 +
    dummyCattle.dummyHigh.Female.Time4 + Enrolled0

[[6]]
Enrolled ~ FloodInRd1 + ChildAgeOrderAtRd1 + EldestSon + EldestDaughter +
    dummyLarge + dummyLargeGrace + dummyCattle + dummyJunior +
    dummyHigh + Female + Time.3 + Time.4 + dummyLarge.dummyJunior +
    dummyLargeGrace.dummyJunior + dummyCattle.dummyJunior + dummyLarge.dummyHigh +
    dummyLargeGrace.dummyHigh + dummyCattle.dummyHigh + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyCattle.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyLarge.Female +
    dummyLargeGrace.Female + dummyCattle.Female + dummyJunior.Time3 +
    dummyJunior.Time4 + dummyHigh.Time3 + dummyHigh.Time4 + dummyJunior.Female +
    dummyHigh.Female + Female.Time3 + Female.Time4 + dummyJunior.Female.Time3 +
    dummyJunior.Female.Time4 + dummyHigh.Female.Time3 + dummyHigh.Female.Time4 +
    dummyLarge.dummyJunior.Female + dummyLargeGrace.dummyJunior.Female +
    dummyCattle.dummyJunior.Female + dummyLarge.dummyHigh.Female +
    dummyLargeGrace.dummyHigh.Female + dummyCattle.dummyHigh.Female +
    dummyLarge.Female.Time3 + dummyLargeGrace.Female.Time3 +
    dummyCattle.Female.Time3 + dummyLarge.Female.Time4 + dummyLargeGrace.Female.Time4 +
    dummyCattle.Female.Time4 + dummyLarge.dummyJunior.Time3 +
    dummyLargeGrace.dummyJunior.Time3 + dummyCattle.dummyJunior.Time3 +
    dummyLarge.dummyHigh.Time3 + dummyLargeGrace.dummyHigh.Time3 +
    dummyCattle.dummyHigh.Time3 + dummyLarge.dummyJunior.Time4 +
    dummyLargeGrace.dummyJunior.Time4 + dummyCattle.dummyJunior.Time4 +
    dummyLarge.dummyHigh.Time4 + dummyLargeGrace.dummyHigh.Time4 +
    dummyCattle.dummyHigh.Time4 + dummyLarge.dummyJunior.Female.Time3 +
    dummyLargeGrace.dummyJunior.Female.Time3 + dummyCattle.dummyJunior.Female.Time3 +
    dummyLarge.dummyHigh.Female.Time3 + dummyLargeGrace.dummyHigh.Female.Time3 +
    dummyCattle.dummyHigh.Female.Time3 + dummyLarge.dummyJunior.Female.Time4 +
    dummyLargeGrace.dummyJunior.Female.Time4 + dummyCattle.dummyJunior.Female.Time4 +
    dummyLarge.dummyHigh.Female.Time4 + dummyLargeGrace.dummyHigh.Female.Time4 +
    dummyCattle.dummyHigh.Female.Time4 + HHsize0 + HeadLiteracy0 +
    HeadAge0 + Enrolled0

[1] exclTa
[[1]]
Enrolled ~ dummyLargeSize + dummyWithGrace + dummyInKind + dummyJunior +
    dummyHigh + Time.3 + Time.4 + dummyJunior.Time3 + dummyJunior.Time4 +
    dummyHigh.Time3 + dummyHigh.Time4 + dummyWithGrace.dummyJunior +
```

```
    dummyLargeSize.dummyJunior + dummyInKind.dummyJunior + dummyWithGrace.dummyHigh +
    dummyLargeSize.dummyHigh + dummyInKind.dummyHigh + dummyWithGrace.Time3 +
    dummyLargeSize.Time3 + dummyInKind.Time3 + dummyWithGrace.Time4 +
    dummyLargeSize.Time4 + dummyInKind.Time4 + dummyWithGrace.dummyJunior.Time3 +
    dummyLargeSize.dummyJunior.Time3 + dummyInKind.dummyJunior.Time3 +
    dummyWithGrace.dummyHigh.Time3 + dummyLargeSize.dummyHigh.Time3 +
    dummyInKind.dummyHigh.Time3 + dummyWithGrace.dummyJunior.Time4 +
    dummyLargeSize.dummyJunior.Time4 + dummyInKind.dummyJunior.Time4 +
    dummyWithGrace.dummyHigh.Time4 + dummyLargeSize.dummyHigh.Time4 +
    dummyInKind.dummyHigh.Time4

[[2]]
Enrolled ~ dummyLargeSize + dummyWithGrace + dummyInKind + dummyJunior +
    dummyHigh + Time.3 + Time.4 + dummyJunior.Time3 + dummyJunior.Time4 +
    dummyHigh.Time3 + dummyHigh.Time4 + dummyWithGrace.dummyJunior +
    dummyLargeSize.dummyJunior + dummyInKind.dummyJunior + dummyWithGrace.dummyHigh +
    dummyLargeSize.dummyHigh + dummyInKind.dummyHigh + dummyWithGrace.Time3 +
    dummyLargeSize.Time3 + dummyInKind.Time3 + dummyWithGrace.Time4 +
    dummyLargeSize.Time4 + dummyInKind.Time4 + dummyWithGrace.dummyJunior.Time3 +
    dummyLargeSize.dummyJunior.Time3 + dummyInKind.dummyJunior.Time3 +
    dummyWithGrace.dummyHigh.Time3 + dummyLargeSize.dummyHigh.Time3 +
    dummyInKind.dummyHigh.Time3 + dummyWithGrace.dummyJunior.Time4 +
    dummyLargeSize.dummyJunior.Time4 + dummyInKind.dummyJunior.Time4 +
    dummyWithGrace.dummyHigh.Time4 + dummyLargeSize.dummyHigh.Time4 +
    dummyInKind.dummyHigh.Time4 + Enrolled0

[[3]]
Enrolled ~ dummyLargeSize + dummyWithGrace + dummyInKind + dummyJunior +
    dummyHigh + Time.3 + Time.4 + dummyJunior.Time3 + dummyJunior.Time4 +
    dummyHigh.Time3 + dummyHigh.Time4 + dummyWithGrace.dummyJunior +
    dummyLargeSize.dummyJunior + dummyInKind.dummyJunior + dummyWithGrace.dummyHigh +
    dummyLargeSize.dummyHigh + dummyInKind.dummyHigh + dummyWithGrace.Time3 +
    dummyLargeSize.Time3 + dummyInKind.Time3 + dummyWithGrace.Time4 +
    dummyLargeSize.Time4 + dummyInKind.Time4 + dummyWithGrace.dummyJunior.Time3 +
    dummyLargeSize.dummyJunior.Time3 + dummyInKind.dummyJunior.Time3 +
    dummyWithGrace.dummyHigh.Time3 + dummyLargeSize.dummyHigh.Time3 +
    dummyInKind.dummyHigh.Time3 + dummyWithGrace.dummyJunior.Time4 +
    dummyLargeSize.dummyJunior.Time4 + dummyInKind.dummyJunior.Time4 +
    dummyWithGrace.dummyHigh.Time4 + dummyLargeSize.dummyHigh.Time4 +
    dummyInKind.dummyHigh.Time4 + Enrolled0

[[4]]
Enrolled ~ FloodInRd1 + ChildAgeOrderAtRd1 + EldestSon + EldestDaughter +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyJunior +
    dummyHigh + Time.3 + Time.4 + dummyJunior.Time3 + dummyJunior.Time4 +
    dummyHigh.Time3 + dummyHigh.Time4 + dummyWithGrace.dummyJunior +
    dummyLargeSize.dummyJunior + dummyInKind.dummyJunior + dummyWithGrace.dummyHigh +
    dummyLargeSize.dummyHigh + dummyInKind.dummyHigh + dummyWithGrace.Time3 +
    dummyLargeSize.Time3 + dummyInKind.Time3 + dummyWithGrace.Time4 +
    dummyLargeSize.Time4 + dummyInKind.Time4 + dummyWithGrace.dummyJunior.Time3 +
    dummyLargeSize.dummyJunior.Time3 + dummyInKind.dummyJunior.Time3 +
    dummyWithGrace.dummyHigh.Time3 + dummyLargeSize.dummyHigh.Time3 +
    dummyInKind.dummyHigh.Time3 + dummyWithGrace.dummyJunior.Time4 +
    dummyLargeSize.dummyJunior.Time4 + dummyInKind.dummyJunior.Time4 +
    dummyWithGrace.dummyHigh.Time4 + dummyLargeSize.dummyHigh.Time4 +
    dummyInKind.dummyHigh.Time4 + HHsize0 + HeadLiteracy0 + HeadAge0 +
    Enrolled0

[[5]]
Enrolled ~ dummyLargeSize + dummyWithGrace + dummyInKind + dummyJunior +
    dummyHigh + Female + Time.3 + Time.4 + dummyJunior.Time3 +
```

```
    dummyJunior.Time4 + dummyHigh.Time3 + dummyHigh.Time4 + dummyJunior.Female +
    dummyHigh.Female + Female.Time3 + Female.Time4 + dummyJunior.Female.Time3 +
    dummyJunior.Female.Time4 + dummyHigh.Female.Time3 + dummyHigh.Female.Time4 +
    dummyWithGrace.dummyJunior + dummyLargeSize.dummyJunior +
    dummyInKind.dummyJunior + dummyWithGrace.dummyHigh + dummyLargeSize.dummyHigh +
    dummyInKind.dummyHigh + dummyWithGrace.Time3 + dummyLargeSize.Time3 +
    dummyInKind.Time3 + dummyWithGrace.Time4 + dummyLargeSize.Time4 +
    dummyInKind.Time4 + dummyWithGrace.Female + dummyLargeSize.Female +
    dummyInKind.Female + dummyWithGrace.dummyJunior.Female +
    dummyLargeSize.dummyJunior.Female + dummyInKind.dummyJunior.Female +
    dummyWithGrace.dummyHigh.Female + dummyLargeSize.dummyHigh.Female +
    dummyInKind.dummyHigh.Female + dummyWithGrace.Female.Time3 +
    dummyLargeSize.Female.Time3 + dummyInKind.Female.Time3 +
    dummyWithGrace.Female.Time4 + dummyLargeSize.Female.Time4 +
    dummyInKind.Female.Time4 + dummyWithGrace.dummyJunior.Time3 +
    dummyLargeSize.dummyJunior.Time3 + dummyInKind.dummyJunior.Time3 +
    dummyWithGrace.dummyHigh.Time3 + dummyLargeSize.dummyHigh.Time3 +
    dummyInKind.dummyHigh.Time3 + dummyWithGrace.dummyJunior.Time4 +
    dummyLargeSize.dummyJunior.Time4 + dummyInKind.dummyJunior.Time4 +
    dummyWithGrace.dummyHigh.Time4 + dummyLargeSize.dummyHigh.Time4 +
    dummyInKind.dummyHigh.Time4 + dummyWithGrace.dummyJunior.Female.Time3 +
    dummyLargeSize.dummyJunior.Female.Time3 + dummyInKind.dummyJunior.Female.Time3 +
    dummyWithGrace.dummyHigh.Female.Time3 + dummyLargeSize.dummyHigh.Female.Time3 +
    dummyInKind.dummyHigh.Female.Time3 + dummyWithGrace.dummyJunior.Female.Time4 +
    dummyLargeSize.dummyJunior.Female.Time4 + dummyInKind.dummyJunior.Female.Time4 +
    dummyWithGrace.dummyHigh.Female.Time4 + dummyLargeSize.dummyHigh.Female.Time4 +
    dummyInKind.dummyHigh.Female.Time4 + Enrolled0

[[6]]
Enrolled ~ FloodInRd1 + ChildAgeOrderAtRd1 + EldestSon + EldestDaughter +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyJunior +
    dummyHigh + Female + Time.3 + Time.4 + dummyJunior.Time3 +
    dummyJunior.Time4 + dummyHigh.Time3 + dummyHigh.Time4 + dummyJunior.Female +
    dummyHigh.Female + Female.Time3 + Female.Time4 + dummyJunior.Female.Time3 +
    dummyJunior.Female.Time4 + dummyHigh.Female.Time3 + dummyHigh.Female.Time4 +
    dummyWithGrace.dummyJunior + dummyLargeSize.dummyJunior +
    dummyInKind.dummyJunior + dummyWithGrace.dummyHigh + dummyLargeSize.dummyHigh +
    dummyInKind.dummyHigh + dummyWithGrace.Time3 + dummyLargeSize.Time3 +
    dummyInKind.Time3 + dummyWithGrace.Time4 + dummyLargeSize.Time4 +
    dummyInKind.Time4 + dummyWithGrace.Female + dummyLargeSize.Female +
    dummyInKind.Female + dummyWithGrace.dummyJunior.Female +
    dummyLargeSize.dummyJunior.Female + dummyInKind.dummyJunior.Female +
    dummyWithGrace.dummyHigh.Female + dummyLargeSize.dummyHigh.Female +
    dummyInKind.dummyHigh.Female + dummyWithGrace.Female.Time3 +
    dummyLargeSize.Female.Time3 + dummyInKind.Female.Time3 +
    dummyWithGrace.Female.Time4 + dummyLargeSize.Female.Time4 +
    dummyInKind.Female.Time4 + dummyWithGrace.dummyJunior.Time3 +
    dummyLargeSize.dummyJunior.Time3 + dummyInKind.dummyJunior.Time3 +
    dummyWithGrace.dummyHigh.Time3 + dummyLargeSize.dummyHigh.Time3 +
    dummyInKind.dummyHigh.Time3 + dummyWithGrace.dummyJunior.Time4 +
    dummyLargeSize.dummyJunior.Time4 + dummyInKind.dummyJunior.Time4 +
    dummyWithGrace.dummyHigh.Time4 + dummyLargeSize.dummyHigh.Time4 +
    dummyInKind.dummyHigh.Time4 + dummyWithGrace.dummyJunior.Female.Time3 +
    dummyLargeSize.dummyJunior.Female.Time3 + dummyInKind.dummyJunior.Female.Time3 +
    dummyWithGrace.dummyHigh.Female.Time3 + dummyLargeSize.dummyHigh.Female.Time3 +
    dummyInKind.dummyHigh.Female.Time3 + dummyWithGrace.dummyJunior.Female.Time4 +
    dummyLargeSize.dummyJunior.Female.Time4 + dummyInKind.dummyJunior.Female.Time4 +
    dummyWithGrace.dummyHigh.Female.Time4 + dummyLargeSize.dummyHigh.Female.Time4 +
    dummyInKind.dummyHigh.Female.Time4 + HHsize0 + HeadLiteracy0 +
    HeadAge0 + Enrolled0
```

TABLE 16: FD ESTIMATION OF SCHOOL ENROLLMENT, ROUND 1 VS. ROUND 4 DIFFERENCES

covariates	(1)	(2)	(3)	(4)
(Intercept)	0.57***	0.73***	0.74***	0.74***
	(0.13)	(0.10)	(0.10)	(0.10)
Secondary	−0.44***	−0.46***	−0.46***	−0.46***
	(0.12)	(0.10)	(0.10)	(0.10)
College	−0.50***	−0.50***	−0.50***	−0.50***
	(0.13)	(0.12)	(0.12)	(0.12)
Large	−0.15	−0.16**	−0.16**	−0.16**
	(0.09)	(0.08)	(0.08)	(0.08)
LargeGrace	−0.11	−0.12	−0.12	−0.12
	(0.10)	(0.09)	(0.08)	(0.08)
Large × Secondary	−0.03	−0.02	−0.02	−0.02
	(0.15)	(0.14)	(0.14)	(0.14)
LargeGrace × Secondary	−0.07	−0.07	−0.07	−0.07
	(0.14)	(0.13)	(0.13)	(0.13)
Cattle × Secondary	0.05	0.07	0.07	0.07
	(0.15)	(0.14)	(0.14)	(0.14)
Large × College	0.01	− 0.00	0.00	0.00
	(0.17)	(0.16)	(0.16)	(0.16)
LargeGrace × College	−0.02	−0.03	−0.03	−0.03
	(0.16)	(0.16)	(0.16)	(0.16)
Cattle × College	−0.01	0.01	0.01	0.01
	(0.19)	(0.17)	(0.17)	(0.17)
Female		−0.31***	−0.31***	−0.31***
		(0.08)	(0.08)	(0.08)
Secondary × Female		0.62***	0.63***	0.63***
		(0.16)	(0.16)	(0.16)
College × Female		0.54***	0.53***	0.53***
		(0.14)	(0.14)	(0.14)
Large × Female		0.29**	0.29**	0.29**
		(0.12)	(0.12)	(0.12)
LargeGrace × Female		0.21*	0.20*	0.20*
		(0.11)	(0.11)	(0.11)
Cattle × Female		0.39***	0.38***	0.38***
		(0.11)	(0.11)	(0.11)
Large × Secondary × Female		−0.52**	−0.52**	−0.52**
		(0.21)	(0.21)	(0.21)
LargeGrace × Secondary × Female		−0.41**	−0.41**	−0.41**
		(0.20)	(0.20)	(0.20)
Cattle × Secondary × Female		−0.60***	−0.60***	−0.60***
		(0.22)	(0.22)	(0.22)
Large × College × Female		−0.39**	−0.39**	−0.39**
		(0.19)	(0.19)	(0.19)
LargeGrace × College × Female		−0.11	−0.10	−0.10
		(0.21)	(0.21)	(0.21)
Cattle × College × Female		−0.47**	−0.46**	−0.46**
		(0.23)	(0.23)	(0.23)
HadCows	0.11**	0.11**	0.11**	0.11**
	(0.05)	(0.05)	(0.05)	(0.05)
FloodInRd1			−0.01	−0.01
			(0.03)	(0.03)
EldestSon			−0.01	−0.01
			(0.04)	(0.04)
EldestDaughter			− 0.00	− 0.00
			(0.05)	(0.05)
BStatusindividual rejection	−0.11*	−0.10*	−0.09*	−0.09*
	(0.06)	(0.06)	(0.06)	(0.06)
BStatusgroup rejection	−0.02	−0.04	−0.04	−0.04
	(0.06)	(0.05)	(0.05)	(0.05)
Cattle	−0.13	−0.15*	−0.15*	−0.15*
	(0.10)	(0.09)	(0.09)	(0.09)
HHsize	0.02	0.05	0.05	0.05
	(0.02)	(0.03)	(0.03)	(0.03)
ChildAgeOrderAtRd1		−0.05	−0.06	−0.06
		(0.04)	(0.04)	(0.04)
$\bar{R}^2$	0.227	0.24	0.236	0.236
N	542	542	542	542

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4).

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 17: FD ESTIMATION OF SCHOOL ENROLLMENT, ROUND 1 VS. ROUND 4 DIFFERENCES BY ATTRIBUTES

covariates	(1)	(2)	(3)	(4)
(Intercept)	0.56***	0.70***	0.68***	0.68***
	(0.06)	(0.09)	(0.13)	(0.13)
Secondary	−0.45***	−0.45***	−0.46***	−0.46***
	(0.05)	(0.10)	(0.10)	(0.10)
College	−0.50***	−0.49***	−0.49***	−0.49***
	(0.06)	(0.12)	(0.13)	(0.13)
Upfront	−0.15***	−0.14*	−0.15**	−0.15**
	(0.05)	(0.07)	(0.07)	(0.07)
WithGrace	0.03	0.05	0.06	0.06
	(0.05)	(0.07)	(0.07)	(0.07)
InKind	− 0.00	−0.04	−0.05	−0.05
	(0.06)	(0.08)	(0.08)	(0.08)
WithGrace × Secondary		−0.04	−0.06	−0.06
		(0.12)	(0.12)	(0.12)
WithGrace × College		−0.03	−0.05	−0.05
		(0.15)	(0.15)	(0.15)
Upfront × Secondary		−0.03	−0.03	−0.03
		(0.14)	(0.14)	(0.14)
Upfront × College		−0.01	−0.01	−0.01
		(0.16)	(0.16)	(0.16)
InKind × Secondary		0.14	0.16	0.16
		(0.12)	(0.12)	(0.12)
InKind × College		0.03	0.05	0.05
		(0.15)	(0.15)	(0.15)
Female		−0.32***	−0.32***	−0.32***
		(0.08)	(0.08)	(0.08)
Secondary × Female		0.63***	0.62***	0.62***
		(0.16)	(0.16)	(0.16)
College × Female		0.54***	0.53***	0.53***
		(0.14)	(0.15)	(0.15)
WithGrace × Female		−0.08	−0.09	−0.09
		(0.12)	(0.13)	(0.13)
Upfront × Female		0.30**	0.29**	0.29**
		(0.12)	(0.12)	(0.12)
InKind × Female		0.18	0.19	0.19
		(0.11)	(0.12)	(0.12)
WithGrace × Secondary × Female		0.11	0.14	0.14
		(0.18)	(0.19)	(0.19)
WithGrace × College × Female		0.29	0.32	0.32
		(0.20)	(0.21)	(0.21)
Upfront × Secondary × Female		−0.53**	−0.53**	−0.53**
		(0.21)	(0.21)	(0.21)
Upfront × College × Female		−0.41**	−0.39*	−0.39*
		(0.20)	(0.20)	(0.20)
InKind × Secondary × Female		−0.18	−0.21	−0.21
		(0.20)	(0.20)	(0.20)
InKind × College × Female		−0.35	−0.40*	−0.40*
		(0.24)	(0.24)	(0.24)
HadCows	0.12**	0.12**	0.12**	0.12**
	(0.05)	(0.05)	(0.05)	(0.05)
FloodInRd1			−0.01	−0.01
			(0.03)	(0.03)
Head literate			−0.05	−0.05
			(0.07)	(0.07)
Head age			0.00	0.00
			(0.00)	(0.00)
EldestSon			− 0.00	− 0.00
			(0.04)	(0.04)
EldestDaughter			− 0.00	− 0.00
			(0.05)	(0.05)
HHsize	0.02	0.05	0.05	0.05
	(0.02)	(0.03)	(0.03)	(0.03)
ChildAgeOrderAtRd1		−0.06	−0.06	−0.06
		(0.04)	(0.05)	(0.05)
$\bar{R}^2$	0.231	0.24	0.236	0.236
N	542	542	539	539

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		0.91 (0.0)	0.69 (0.0)	0.75 (0.0)	0.89 (0.0)	0.73 (0.0)	0.86 (0.0)
Secondary	0.338 (0.47)			−0.11 (0.0)	−0.09 (0.0)	−0.11 (0.0)	−0.09 (0.0)
College	0.172 (0.38)			−0.21 (0.0)	−0.18 (0.0)	−0.20 (0.0)	−0.18 (0.0)
Large	0.272 (0.44)	−0.03 (38.5)	−0.04 (20.0)	−0.04 (15.0)	−0.04 (13.6)	−0.04 (16.8)	−0.04 (14.3)
LargeGrace	0.247 (0.43)	−0.04 (21.6)	−0.05 (12.1)	−0.04 (12.5)	−0.05 (9.7)	−0.04 (13.4)	−0.04 (11.3)
Cattle	0.257 (0.44)	−0.05 (16.7)	−0.06 (5.5)	−0.06 (2.3)	−0.06 (3.1)	−0.06 (2.7)	−0.05 (3.9)
Large × Secondary	0.085 (0.28)			−0.01 (90.6)	0.00 (92.5)	−0.00 (95.1)	0.01 (89.4)
LargeGrace × Secondary	0.083 (0.28)			−0.07 (12.8)	−0.08 (11.6)	−0.07 (15.5)	−0.08 (11.0)
Cattle × Secondary	0.088 (0.28)			−0.01 (77.3)	−0.01 (80.0)	−0.01 (82.5)	−0.01 (83.0)
Large × College	0.049 (0.22)			0.03 (68.1)	0.04 (58.4)	0.04 (51.3)	0.06 (34.0)
LargeGrace × College	0.049 (0.22)			−0.02 (72.4)	−0.04 (59.1)	−0.02 (78.6)	−0.03 (68.8)
Cattle × College	0.035 (0.18)			−0.11 (16.2)	−0.13 (8.3)	−0.07 (28.4)	−0.09 (19.7)
Female	0.450 (0.50)					0.05 (2.9)	0.05 (4.9)
Secondary × Female	0.152 (0.36)					0.08 (0.4)	0.08 (0.9)
College × Female	0.059 (0.24)					0.12 (2.0)	0.10 (6.4)
Large × Female	0.121 (0.33)					0.01 (92.1)	0.03 (64.1)
LargeGrace × Female	0.114 (0.32)					0.08 (10.5)	0.06 (19.0)
Cattle × Female	0.114 (0.32)					0.07 (16.0)	0.08 (11.3)
Large × Secondary × Female	0.041 (0.20)					−0.09 (34.0)	−0.11 (20.0)
LargeGrace × Secondary × Female	0.036 (0.19)					0.10 (26.7)	0.12 (18.8)
Cattle × Secondary × Female	0.037 (0.19)					0.05 (58.0)	0.06 (52.9)
Large × College × Female	0.016 (0.12)					0.08 (58.1)	0.11 (46.2)
LargeGrace × College × Female	0.018 (0.13)					−0.03 (84.5)	0.01 (95.2)
Cattle × College × Female	0.010 (0.10)					0.18 (25.5)	0.17 (30.8)
FloodInRd1	0.464 (0.50)				−0.04 (4.8)		−0.05 (3.6)
EldestSon	0.267 (0.44)				0.00 (89.8)		0.04 (31.8)
EldestDaughter	0.188 (0.39)				0.04 (23.9)		0.01 (77.2)
Head literate0	0.108 (0.31)				0.06 (1.8)		0.06 (1.8)
Head age0	39.153 (7.38)				−0.00 (7.7)		−0.00 (7.6)
Enrolled0	0.760 (0.43)		0.29 (0.0)	0.32 (0.0)	0.29 (0.0)	0.31 (0.0)	0.29 (0.0)
ChildAgeOrderAtRd1	1.826 (0.98)				0.02 (21.7)		0.02 (24.6)
HHsize0	4.974 (1.15)				−0.02 (21.5)		−0.01 (32.9)
mean of dependent variable		0.88	0.88	0.88	0.88	0.88	0.88
T = 2		75	75	75	63	75	63
T = 3		112	112	112	103	112	103
T = 4		539	539	539	500	539	500
$\bar{R}^2$		0.002	0.15	0.208	0.2	0.222	0.209
N	1841	1976	1976	1976	1841	1976	1841

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Secondary and College are indicator variables of secondary schooling (ages 13-15) and tertiary schooling (ages 16-18), both at the time of baseline. Default category is primary (ages 05-12). Interaction terms of dummy variables are demeaned before interacting. The first column gives mean and standard deviation (in parenthesises) of each covariates before demeaning.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		0.91 (0.0)	0.69 (0.0)	0.75 (0.0)	0.89 (0.0)	0.73 (0.0)	0.86 (0.0)
Secondary	0.338 (0.47)			−0.11 (0.0)	−0.09 (0.0)	−0.11 (0.0)	−0.09 (0.0)
College	0.172 (0.38)			−0.21 (0.0)	−0.18 (0.0)	−0.20 (0.0)	−0.18 (0.0)
Upfront	0.776 (0.42)	−0.03 (38.5)	−0.04 (20.0)	−0.04 (15.0)	−0.04 (13.6)	−0.04 (16.8)	−0.04 (14.3)
WithGrace	0.504 (0.50)	−0.01 (81.4)	−0.01 (76.5)	0.00 (99.6)	−0.00 (97.6)	−0.00 (96.0)	−0.00 (98.2)
InKind	0.257 (0.44)	−0.01 (86.0)	−0.01 (83.9)	−0.02 (53.1)	−0.01 (66.5)	−0.02 (62.8)	−0.01 (73.9)
WithGrace × Secondary	0.171 (0.38)			−0.07 (9.4)	−0.09 (6.1)	−0.07 (10.5)	−0.09 (5.9)
Upfront × Secondary	0.255 (0.44)			−0.01 (90.6)	0.00 (92.5)	−0.00 (95.1)	0.01 (89.4)
InKind × Secondary	0.088 (0.28)			0.06 (15.6)	0.07 (14.0)	0.06 (16.2)	0.07 (12.5)
WithGrace × College	0.084 (0.28)			−0.05 (40.1)	−0.07 (26.0)	−0.06 (34.4)	−0.09 (17.3)
Upfront × College	0.134 (0.34)			0.03 (68.1)	0.04 (58.4)	0.04 (51.3)	0.06 (34.0)
InKind × College	0.035 (0.18)			−0.08 (24.8)	−0.09 (21.2)	−0.05 (42.5)	−0.06 (39.7)
Female	0.450 (0.50)					0.05 (2.9)	0.05 (4.9)
Secondary × Female	0.152 (0.36)					0.08 (0.4)	0.08 (0.9)
College × Female	0.059 (0.24)					0.12 (2.0)	0.10 (6.4)
WithGrace × Female	0.228 (0.42)					0.08 (22.3)	0.04 (57.7)
Upfront × Female	0.349 (0.48)					0.01 (92.1)	0.03 (64.1)
InKind × Female	0.114 (0.32)					−0.01 (84.0)	0.02 (79.7)
WithGrace × Secondary × Female	0.074 (0.26)					0.19 (0.5)	0.23 (0.1)
Upfront × Secondary × Female	0.115 (0.32)					−0.09 (34.0)	−0.11 (20.0)
InKind × Secondary × Female	0.037 (0.19)					−0.05 (51.7)	−0.06 (45.0)
WithGrace × College × Female	0.028 (0.17)					−0.11 (40.6)	−0.10 (48.3)
Upfront × College × Female	0.044 (0.21)					0.08 (58.1)	0.11 (46.2)
InKind × College × Female	0.010 (0.10)					0.21 (15.9)	0.16 (32.2)
FloodInRd1	0.464 (0.50)				−0.04 (4.8)		−0.05 (3.6)
EldestSon	0.267 (0.44)				0.00 (89.8)		0.04 (31.8)
EldestDaughter	0.188 (0.39)				0.04 (23.9)		0.01 (77.2)
Head literate0	0.108 (0.31)				0.06 (1.8)		0.06 (1.8)
Head age0	39.153 (7.38)				−0.00 (7.7)		−0.00 (7.6)
Enrolled0	0.760 (0.43)		0.29 (0.0)	0.32 (0.0)	0.29 (0.0)	0.31 (0.0)	0.29 (0.0)
ChildAgeOrderAtRd1	1.826 (0.98)				0.02 (21.7)		0.02 (24.6)
HHsize0	4.974 (1.15)				−0.02 (21.5)		−0.01 (32.9)
mean of dependent variable		0.88	0.88	0.88	0.88	0.88	0.88
T = 2		75	75	75	63	75	63
T = 3		112	112	112	103	112	103
T = 4		539	539	539	500	539	500
$\bar{R}^2$		0.002	0.15	0.208	0.2	0.222	0.209
N	1841	1976	1976	1976	1841	1976	1841

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Secondary and College are indicator variables of secondary schooling (ages 13-15) and tertiary schooling (ages 16-18), both at the time of baseline. Default category is primary (ages 05-12). Interaction terms of dummy variables are demeaned before interacting. The first column gives mean and standard deviation (in parenthesises) of each covariates before demeaning.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		0.93 (0.0)	0.70 (0.0)	0.76 (0.0)	0.90 (0.0)	0.74 (0.0)	0.86 (0.0)
Secondary	0.338 (0.47)			−0.11 (0.0)	−0.09 (0.0)	−0.11 (0.0)	−0.09 (0.0)
College	0.172 (0.38)			−0.21 (0.0)	−0.18 (0.0)	−0.19 (0.0)	−0.18 (0.0)
Upfront	0.776 (0.42)	−0.05 (17.7)	−0.04 (10.8)	−0.05 (8.2)	−0.05 (8.6)	−0.04 (10.5)	−0.05 (9.4)
WithGrace	0.504 (0.50)	−0.01 (81.7)	−0.01 (76.7)	−0.00 (98.7)	−0.00 (92.8)	−0.00 (91.9)	−0.00 (91.6)
InKind	0.257 (0.44)	−0.01 (81.2)	−0.01 (75.6)	−0.02 (47.5)	−0.02 (64.0)	−0.02 (54.6)	−0.01 (68.0)
UltraPoor	0.612 (0.49)	0.04 (10.6)	0.03 (22.0)	0.03 (21.2)	0.03 (22.9)	0.03 (21.2)	0.03 (20.4)
WithGrace × Secondary	0.171 (0.38)			−0.07 (9.3)	−0.09 (5.4)	−0.06 (11.4)	−0.08 (5.9)
Upfront × Secondary	0.255 (0.44)			−0.00 (99.2)	0.01 (84.5)	−0.00 (97.5)	0.01 (88.4)
InKind × Secondary	0.088 (0.28)			0.06 (14.5)	0.07 (11.8)	0.06 (13.2)	0.08 (9.1)
WithGrace × College	0.084 (0.28)			−0.05 (41.1)	−0.07 (26.0)	−0.05 (37.0)	−0.08 (18.0)
Upfront × College	0.134 (0.34)			0.01 (80.2)	0.03 (68.4)	0.02 (69.4)	0.05 (46.2)
InKind × College	0.035 (0.18)			−0.09 (23.0)	−0.10 (18.3)	−0.05 (40.2)	−0.06 (38.8)
Upfront × UltraPoor	0.514 (0.50)	−0.04 (69.1)	−0.02 (78.1)	−0.01 (91.1)	0.00 (99.2)	−0.01 (89.1)	−0.00 (97.8)
WithGrace × UltraPoor	0.350 (0.48)	−0.02 (79.2)	0.00 (97.6)	0.00 (96.9)	0.02 (74.1)	−0.01 (94.1)	0.01 (84.9)
InKind × UltraPoor	0.186 (0.39)	0.01 (80.0)	0.03 (58.3)	0.01 (77.4)	−0.02 (72.4)	0.03 (52.8)	0.01 (85.2)
Secondary × UltraPoor	0.215 (0.41)	−0.02 (59.5)	−0.04 (30.4)	−0.03 (36.1)	−0.03 (40.6)	−0.03 (32.4)	−0.03 (35.5)
College × UltraPoor	0.103 (0.30)	0.09 (19.8)	0.04 (48.4)	0.04 (40.1)	0.05 (39.5)	0.06 (25.6)	0.05 (32.4)
Female	0.450 (0.50)					0.05 (2.7)	0.05 (4.9)
Secondary × Female	0.152 (0.36)					0.08 (0.6)	0.08 (1.3)
College × Female	0.059 (0.24)					0.12 (1.3)	0.11 (4.4)
Female × UltraPoor	0.276 (0.45)					0.07 (7.3)	0.07 (7.2)
WithGrace × Female	0.228 (0.42)					0.07 (24.9)	0.03 (61.9)
Upfront × Female	0.349 (0.48)					−0.00 (96.2)	0.02 (74.8)
InKind × Female	0.114 (0.32)					−0.02 (76.0)	0.01 (87.5)
WithGrace × Secondary × Female	0.074 (0.26)					0.19 (0.6)	0.23 (0.1)
Upfront × Secondary × Female	0.115 (0.32)					−0.10 (27.1)	−0.12 (17.4)
InKind × Secondary × Female	0.037 (0.19)					−0.04 (61.7)	−0.04 (57.6)
WithGrace × College × Female	0.028 (0.17)					−0.09 (46.5)	−0.08 (57.4)
Upfront × College × Female	0.044 (0.21)					0.06 (63.9)	0.09 (53.4)
InKind × College × Female	0.010 (0.10)					0.22 (12.7)	0.18 (26.6)
FloodInRd1	0.464 (0.50)				−0.04 (4.4)		−0.05 (2.5)
EldestSon	0.267 (0.44)				0.00 (94.0)		0.04 (31.0)
EldestDaughter	0.188 (0.39)				0.04 (22.2)		0.01 (70.9)
Head literate0	0.108 (0.31)				0.06 (2.3)		0.05 (2.9)
Head age0	39.153 (7.38)				−0.00 (10.6)		−0.00 (11.1)
Enrolled0	0.760 (0.43)		0.29 (0.0)	0.32 (0.0)	0.29 (0.0)	0.31 (0.0)	0.29 (0.0)
ChildAgeOrderAtRd1	1.826 (0.98)				0.02 (22.9)		0.02 (27.4)
HHsize0	4.974 (1.15)				−0.02 (19.7)		−0.01 (36.0)
mean of dependent variable		0.88	0.88	0.88	0.88	0.88	0.88
T = 2		75	75	75	63	75	63
T = 3		112	112	112	103	112	103
T = 4		539	539	539	500	539	500
$\bar{R}^2$		0.008	0.151	0.209	0.201	0.225	0.212
N	1841	1976	1976	1976	1841	1976	1841

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle

TABLE 21: ANCOVA ESTIMATION OF SCHOOL ENROLLMENT BY TIME

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		0.92 (0.0)	0.70 (0.0)	0.70 (0.0)	0.81 (0.0)	0.69 (0.0)	0.78 (0.0)
Secondary	0.338 (0.47)	−0.08 (0.1)	−0.15 (0.0)	−0.15 (0.0)	−0.12 (0.0)	−0.14 (0.0)	−0.12 (0.0)
College	0.172 (0.38)	−0.21 (0.0)	−0.24 (0.0)	−0.24 (0.0)	−0.21 (0.0)	−0.22 (0.0)	−0.20 (0.0)
Large	0.272 (0.44)	−0.03 (43.5)	−0.04 (18.4)	−0.04 (18.4)	−0.04 (20.4)	−0.04 (25.1)	−0.03 (36.5)
LargeGrace	0.247 (0.43)	−0.04 (31.7)	−0.05 (14.7)	−0.05 (14.7)	−0.04 (12.7)	−0.04 (22.2)	−0.03 (24.3)
Cattle	0.257 (0.44)	−0.06 (13.6)	−0.07 (2.2)	−0.07 (2.2)	−0.06 (4.0)	−0.06 (4.1)	−0.05 (8.0)
Large × Secondary	0.085 (0.28)	0.06 (36.5)	0.03 (62.5)	0.03 (62.5)	0.05 (42.5)	0.04 (54.5)	0.06 (34.3)
LargeGrace × Secondary	0.083 (0.28)	−0.08 (27.6)	−0.08 (22.9)	−0.08 (22.9)	−0.07 (29.5)	−0.05 (45.4)	−0.05 (43.3)
Cattle × Secondary	0.088 (0.28)	−0.03 (67.5)	−0.02 (77.5)	−0.02 (77.5)	−0.01 (91.4)	−0.01 (87.1)	0.00 (98.8)
Large × College	0.049 (0.22)	0.05 (53.7)	0.04 (60.1)	0.04 (60.1)	0.06 (41.4)	0.07 (39.9)	0.15 (5.9)
LargeGrace × College	0.049 (0.22)	−0.00 (98.4)	0.00 (99.7)	0.00 (99.7)	−0.01 (91.5)	0.00 (99.2)	0.02 (83.9)
Cattle × College	0.035 (0.18)	−0.16 (17.4)	−0.09 (26.3)	−0.09 (26.3)	−0.11 (16.0)	−0.05 (57.5)	−0.05 (59.5)
Female	0.450 (0.50)					0.04 (5.3)	0.05 (5.1)
Secondary × Female	0.152 (0.36)					0.11 (0.4)	0.10 (0.6)
College × Female	0.059 (0.24)					0.07 (18.9)	0.08 (19.3)
Large × Female	0.121 (0.33)					0.02 (76.4)	0.04 (44.3)
LargeGrace × Female	0.114 (0.32)					0.10 (5.6)	0.08 (11.6)
Cattle × Female	0.114 (0.32)					0.06 (20.3)	0.07 (13.9)
Large × Secondary × Female	0.041 (0.20)					−0.14 (18.1)	−0.18 (4.9)
LargeGrace × Secondary × Female	0.036 (0.19)					0.09 (38.0)	0.09 (35.5)
Cattle × Secondary × Female	0.037 (0.19)					−0.05 (67.9)	−0.04 (75.9)
Large × College × Female	0.016 (0.12)					0.10 (58.1)	0.26 (15.8)
LargeGrace × College × Female	0.018 (0.13)					−0.04 (85.4)	0.06 (78.5)
Cattle × College × Female	0.010 (0.10)					0.23 (21.8)	0.25 (22.4)

TABLE 21: ANCOVA ESTIMATION OF SCHOOL ENROLLMENT BY TIME (CONTINUED)

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
rd 3	0.344 (0.48)	0.06 (0.0)	0.06 (0.0)	0.06 (0.0)	0.04 (0.0)	0.06 (0.0)	0.04 (0.1)
Secondary × rd 3	0.117 (0.32)	0.01 (86.0)	−0.02 (47.1)	−0.02 (47.1)	−0.04 (21.8)	−0.03 (35.9)	−0.05 (15.2)
College × rd 3	0.055 (0.23)	0.04 (34.6)	−0.02 (69.2)	−0.02 (69.2)	−0.03 (43.1)	−0.01 (73.0)	−0.04 (36.9)
Large × rd 3	0.091 (0.29)	−0.06 (8.6)	−0.05 (9.8)	−0.05 (9.8)	−0.06 (6.7)	−0.05 (13.7)	−0.07 (2.1)
LargeGrace × rd 3	0.086 (0.28)	−0.04 (34.1)	−0.05 (18.8)	−0.05 (18.8)	−0.07 (6.6)	−0.07 (8.5)	−0.08 (1.8)
Cattle × rd 3	0.090 (0.29)	−0.02 (54.9)	−0.03 (34.6)	−0.03 (34.6)	−0.04 (24.8)	−0.04 (26.7)	−0.06 (15.9)
Large × Secondary × rd 3	0.028 (0.16)	−0.05 (52.8)	−0.04 (63.4)	−0.04 (63.4)	−0.07 (36.0)	−0.04 (61.0)	−0.08 (32.9)
LargeGrace × Secondary × rd 3	0.028 (0.16)	0.08 (34.4)	0.08 (31.6)	0.08 (31.6)	0.04 (65.3)	0.02 (80.4)	−0.01 (90.9)
Cattle × Secondary × rd 3	0.032 (0.17)	0.08 (45.6)	0.08 (42.0)	0.08 (42.0)	0.04 (64.8)	0.08 (39.9)	0.05 (61.9)
Large × College × rd 3	0.015 (0.12)	0.02 (84.8)	−0.01 (92.4)	−0.01 (92.4)	−0.07 (56.1)	0.01 (95.3)	−0.13 (22.3)
LargeGrace × College × rd 3	0.017 (0.13)	−0.01 (89.8)	−0.00 (96.9)	−0.00 (96.9)	−0.02 (88.6)	−0.00 (98.8)	−0.05 (65.9)
Cattle × College × rd 3	0.012 (0.11)	0.11 (41.0)	0.02 (85.0)	0.02 (85.0)	−0.00 (96.9)	−0.04 (73.2)	−0.09 (50.3)
Female × rd 3	0.156 (0.36)					−0.01 (67.2)	−0.00 (85.0)
Large × Female × rd 3	0.041 (0.20)					0.03 (60.9)	0.02 (64.2)
LargeGrace × Female × rd 3	0.040 (0.20)					−0.02 (77.8)	0.01 (86.9)
Cattle × Female × rd 3	0.040 (0.20)					0.05 (44.9)	0.06 (39.3)
Large × Secondary × Female × rd 3	0.014 (0.12)					0.08 (64.2)	0.10 (51.1)
LargeGrace × Secondary × Female ×	0.012 (0.11)					0.10 (50.9)	0.14 (37.2)
Cattle × Secondary × Female × rd 3	0.012 (0.11)					0.31 (8.4)	0.24 (13.2)
Large × College × Female × rd 3	0.003 (0.06)					0.17 (38.3)	−0.06 (75.2)
LargeGrace × College × Female × rd 3	0.005 (0.07)					0.17 (37.1)	0.09 (67.6)
Cattle × College × Female × rd 3	0.003 (0.06)					−0.22 (36.4)	−0.27 (33.9)
Secondary × Female × rd 3	0.052 (0.22)					−0.05 (42.7)	−0.02 (74.4)
College × Female × rd 3	0.016 (0.13)					0.03 (69.1)	0.00 (99.3)

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Secondary and College are indicator variables of secondary schooling (ages 13-15) and tertiary schooling (ages 16-18), both at the time of baseline. Default category is primary (ages 05-12). rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Interaction terms of dummy variables are demeaned before interacting. The first column gives mean and standard deviation (in parenthesises) of each covariates before demeaning.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
rd 4	0.294 (0.46)	0.10 (0.0)	0.13 (0.0)	0.13 (0.0)	0.12 (0.0)	0.13 (0.0)	0.12 (0.0)
Secondary × rd 4	0.150 (0.36)	0.07 (11.6)	−0.03 (41.3)	−0.03 (41.3)	−0.05 (26.8)	−0.05 (26.4)	−0.06 (17.8)
College × rd 4	0.062 (0.24)	0.12 (0.8)	−0.02 (71.0)	−0.02 (71.0)	−0.03 (48.0)	−0.02 (57.6)	−0.04 (33.0)
WithGrace × rd 4	0.147 (0.35)	0.01 (75.9)	0.01 (76.2)	0.01 (76.2)	0.01 (73.3)	−0.00 (94.1)	0.02 (62.8)
Upfront × rd 4	0.232 (0.42)	−0.05 (19.3)	−0.06 (16.2)	−0.06 (16.2)	−0.07 (11.1)	−0.07 (11.1)	−0.09 (2.2)
InKind × rd 4	0.073 (0.26)	0.04 (37.8)	0.02 (67.8)	0.02 (67.8)	0.02 (69.2)	0.02 (49.6)	0.02 (58.2)
WithGrace × Secondary × rd 4	0.076 (0.27)	0.18 (9.1)	0.15 (10.3)	0.15 (10.3)	0.15 (11.9)	0.10 (28.7)	0.11 (24.3)
Upfront × Secondary × rd 4	0.114 (0.32)	−0.04 (69.7)	−0.03 (74.4)	−0.03 (74.4)	−0.09 (38.5)	−0.03 (71.3)	−0.09 (33.5)
InKind × Secondary × rd 4	0.040 (0.20)	−0.09 (46.8)	−0.05 (60.8)	−0.05 (60.8)	−0.05 (67.4)	−0.01 (93.7)	−0.01 (93.5)
WithGrace × College × rd 4	0.029 (0.17)	−0.09 (33.7)	−0.05 (59.9)	−0.05 (59.9)	−0.01 (87.8)	−0.02 (83.4)	0.07 (41.4)
Upfront × College × rd 4	0.049 (0.22)	−0.05 (72.9)	−0.05 (70.1)	−0.05 (70.1)	−0.08 (49.6)	−0.09 (46.1)	−0.22 (5.7)
InKind × College × rd 4	0.012 (0.11)	0.08 (50.1)	0.02 (83.1)	0.02 (83.1)	0.03 (79.2)	−0.02 (84.1)	0.01 (94.7)
Female × rd 4	0.142 (0.35)					−0.04 (6.1)	−0.04 (3.3)
WithGrace × Female × rd 4	0.071 (0.26)					−0.06 (20.5)	−0.07 (15.8)
Upfront × Female × rd 4	0.112 (0.32)					0.13 (1.3)	0.12 (2.6)
InKind × Female × rd 4	0.034 (0.18)					0.08 (26.4)	0.10 (14.9)
WithGrace × Secondary × Female × rd 4	0.037 (0.19)					−0.17 (33.2)	−0.14 (37.3)
Upfront × Secondary × Female × rd 4	0.054 (0.23)					−0.10 (56.6)	−0.00 (99.5)
InKind × Secondary × Female × rd 4	0.019 (0.14)					0.31 (10.3)	0.17 (33.5)
WithGrace × College × Female × rd 4	0.012 (0.11)					0.35 (5.4)	0.55 (0.1)
Upfront × College × Female × rd 4	0.023 (0.15)					−0.19 (40.3)	−0.50 (4.0)
InKind × College × Female × rd 4	0.004 (0.07)					−0.19 (46.6)	−0.15 (57.6)
Secondary × Female × rd 4	0.070 (0.26)					−0.04 (47.7)	−0.02 (69.5)
College × Female × rd 4	0.032 (0.17)					0.14 (11.0)	0.13 (15.6)
FloodInRd1	0.464 (0.50)				−0.05 (4.2)		−0.05 (2.8)
EldestSon	0.267 (0.44)				0.02 (62.9)		0.04 (22.2)
EldestDaughter	0.188 (0.39)				0.04 (28.3)		0.01 (84.8)
Head literate0	0.108 (0.31)				0.06 (2.7)		0.05 (2.9)
Head age0	39.153 (7.38)				−0.00 (26.3)		−0.00 (21.8)
Enrolled0	0.760 (0.43)		0.33 (0.0)	0.33 (0.0)	0.30 (0.0)	0.32 (0.0)	0.30 (0.0)
ChildAgeOrderAtRd1	1.826 (0.98)				0.02 (23.0)		0.02 (25.3)
HHsize0	4.974 (1.15)				−0.01 (25.6)		−0.01 (39.6)
mean of dependent variable		0.88	0.88	0.88	0.88	0.88	0.88
T = 2		75	75	75	63	75	63
T = 3		112	112	112	103	112	103
T = 4		539	539	539	500	539	500
$\bar{R}^2$		0.056	0.226	0.226	0.215	0.235	0.221
N	1841	1976	1976	1976	1841	1976	1841

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Secondary and College are indicator variables of secondary schooling (ages 13-15) and tertiary schooling (ages 16-18), both at the time of baseline. Default category is primary (ages 05-12). rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Interaction terms of dummy variables are demeaned before interacting. The first column gives mean and standard deviation (in parenthesises) of each covariates before demeaning.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 23: ANCOVA ESTIMATION OF SCHOOL ENROLLMENT BY ATTRIBUTES AND TIME

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		0.92 (0.0)	0.70 (0.0)	0.70 (0.0)	0.81 (0.0)	0.69 (0.0)	0.78 (0.0)
Secondary	0.338 (0.47)	−0.08 (0.1)	−0.15 (0.0)	−0.15 (0.0)	−0.12 (0.0)	−0.14 (0.0)	−0.12 (0.0)
College	0.172 (0.38)	−0.21 (0.0)	−0.24 (0.0)	−0.24 (0.0)	−0.21 (0.0)	−0.22 (0.0)	−0.20 (0.0)
Upfront	0.776 (0.42)	−0.03 (43.5)	−0.04 (18.4)	−0.04 (18.4)	−0.04 (20.4)	−0.04 (25.1)	−0.03 (36.5)
WithGrace	0.504 (0.50)	−0.01 (88.2)	−0.00 (91.3)	−0.00 (91.3)	−0.00 (90.4)	−0.00 (97.8)	−0.01 (87.4)
InKind	0.257 (0.44)	−0.02 (64.8)	−0.02 (55.5)	−0.02 (55.5)	−0.01 (63.7)	−0.02 (55.2)	−0.01 (60.9)
WithGrace × Secondary	0.171 (0.38)	−0.14 (3.2)	−0.11 (5.4)	−0.11 (5.4)	−0.13 (4.5)	−0.08 (13.6)	−0.11 (6.9)
Upfront × Secondary	0.255 (0.44)	0.06 (36.5)	0.03 (62.5)	0.03 (62.5)	0.05 (42.5)	0.04 (54.5)	0.06 (34.3)
InKind × Secondary	0.088 (0.28)	0.05 (50.8)	0.06 (31.6)	0.06 (31.6)	0.07 (31.8)	0.04 (54.6)	0.05 (41.8)
WithGrace × College	0.084 (0.28)	−0.06 (46.5)	−0.04 (53.7)	−0.04 (53.7)	−0.07 (31.0)	−0.06 (34.1)	−0.13 (4.6)
Upfront × College	0.134 (0.34)	0.05 (53.7)	0.04 (60.1)	0.04 (60.1)	0.06 (41.4)	0.07 (39.9)	0.15 (5.9)
InKind × College	0.035 (0.18)	−0.15 (14.9)	−0.09 (19.9)	−0.09 (19.9)	−0.10 (16.5)	−0.05 (51.8)	−0.06 (40.2)
Female	0.450 (0.50)					0.04 (5.3)	0.05 (5.1)
Secondary × Female	0.152 (0.36)					0.11 (0.4)	0.10 (0.6)
College × Female	0.059 (0.24)					0.07 (18.9)	0.08 (19.3)
WithGrace × Female	0.228 (0.42)					0.09 (19.5)	0.04 (58.3)
Upfront × Female	0.349 (0.48)					0.02 (76.4)	0.04 (44.3)
InKind × Female	0.114 (0.32)					−0.04 (57.7)	−0.01 (93.1)
WithGrace × Secondary × Female	0.074 (0.26)					0.23 (0.7)	0.28 (0.1)
Upfront × Secondary × Female	0.115 (0.32)					−0.14 (18.1)	−0.18 (4.9)
InKind × Secondary × Female	0.037 (0.19)					−0.14 (19.0)	−0.13 (21.6)
WithGrace × College × Female	0.028 (0.17)					−0.13 (36.5)	−0.20 (16.8)
Upfront × College × Female	0.044 (0.21)					0.10 (58.1)	0.26 (15.8)
InKind × College × Female	0.010 (0.10)					0.27 (10.0)	0.19 (26.7)

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
rd 3	0.344 (0.48)	0.06 (0.0)	0.06 (0.0)	0.06 (0.0)	0.04 (0.0)	0.06 (0.0)	0.04 (0.1)
Secondary × rd 3	0.117 (0.32)	0.01 (86.0)	−0.02 (47.1)	−0.02 (47.1)	−0.04 (21.8)	−0.03 (35.9)	−0.05 (15.2)
College × rd 3	0.055 (0.23)	0.04 (34.6)	−0.02 (69.2)	−0.02 (69.2)	−0.03 (43.1)	−0.01 (73.0)	−0.04 (36.9)
WithGrace × rd 3	0.175 (0.38)	0.01 (75.8)	0.00 (99.6)	0.00 (99.6)	−0.01 (80.2)	−0.02 (65.6)	−0.01 (68.9)
Upfront × rd 3	0.267 (0.44)	−0.06 (8.6)	−0.05 (9.8)	−0.05 (9.8)	−0.06 (6.7)	−0.05 (13.7)	−0.07 (2.1)
InKind × rd 3	0.090 (0.29)	0.02 (68.5)	0.02 (67.0)	0.02 (67.0)	0.03 (51.9)	0.02 (59.6)	0.03 (50.4)
WithGrace × Secondary × rd 3	0.059 (0.24)	0.13 (17.0)	0.11 (18.7)	0.11 (18.7)	0.11 (23.5)	0.06 (50.7)	0.07 (45.8)
Upfront × Secondary × rd 3	0.087 (0.28)	−0.05 (52.8)	−0.04 (63.4)	−0.04 (63.4)	−0.07 (36.0)	−0.04 (61.0)	−0.08 (32.9)
InKind × Secondary × rd 3	0.032 (0.17)	−0.00 (96.8)	−0.00 (98.7)	−0.00 (98.7)	0.01 (94.0)	0.06 (55.9)	0.06 (58.8)
WithGrace × College × rd 3	0.029 (0.17)	−0.04 (71.4)	0.01 (94.7)	0.01 (94.7)	0.06 (59.2)	−0.01 (93.6)	0.08 (31.6)
Upfront × College × rd 3	0.044 (0.21)	0.02 (84.8)	−0.01 (92.4)	−0.01 (92.4)	−0.07 (56.1)	0.01 (95.3)	−0.13 (22.3)
InKind × College × rd 3	0.012 (0.11)	0.12 (29.5)	0.03 (80.3)	0.03 (80.3)	0.01 (91.6)	−0.04 (72.6)	−0.04 (71.9)
Female × rd 3	0.156 (0.36)					−0.01 (67.2)	−0.00 (85.0)
WithGrace × Female × rd 3	0.080 (0.27)					−0.04 (45.8)	−0.01 (78.4)
Upfront × Female × rd 3	0.121 (0.33)					0.03 (60.9)	0.02 (64.2)
InKind × Female × rd 3	0.040 (0.20)					0.07 (35.2)	0.05 (47.7)
WithGrace × Secondary × Female × rd 3	0.025 (0.16)					0.02 (88.5)	0.05 (76.8)
Upfront × Secondary × Female × rd 3	0.039 (0.19)					0.08 (64.2)	0.10 (51.1)
InKind × Secondary × Female × rd 3	0.012 (0.11)					0.21 (23.0)	0.10 (57.4)
WithGrace × College × Female × rd 3	0.009 (0.09)					0.00 (97.9)	0.16 (33.2)
Upfront × College × Female × rd 3	0.012 (0.11)					0.17 (38.3)	−0.06 (75.2)
InKind × College × Female × rd 3	0.003 (0.06)					−0.39 (8.3)	−0.36 (14.7)
Secondary × Female × rd 3	0.052 (0.22)					−0.05 (42.7)	−0.02 (74.4)
College × Female × rd 3	0.016 (0.13)					0.03 (69.1)	0.00 (99.3)

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Secondary and College are indicator variables of secondary schooling (ages 13-15) and tertiary schooling (ages 16-18), both at the time of baseline. Default category is primary (ages 05-12). rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Interaction terms of dummy variables are demeaned before interacting. The first column gives mean and standard deviation (in parenthesises) of each covariates before demeaning.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 24: ANCOVA ESTIMATION OF SCHOOL ENROLLMENT BY ATTRIBUTES AND TIME (CONTINUED 2)

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
rd 4	0.294 (0.46)	0.10 (0.0)	0.13 (0.0)	0.13 (0.0)	0.12 (0.0)	0.13 (0.0)	0.12 (0.0)
Secondary × rd 4	0.150 (0.36)	0.07 (11.6)	−0.03 (41.3)	−0.03 (41.3)	−0.05 (26.8)	−0.05 (26.4)	−0.06 (17.8)
College × rd 4	0.062 (0.24)	0.12 (0.8)	−0.02 (71.0)	−0.02 (71.0)	−0.03 (48.0)	−0.02 (57.6)	−0.04 (33.0)
WithGrace × rd 4	0.147 (0.35)	0.01 (75.9)	0.01 (76.2)	0.01 (76.2)	0.01 (73.3)	−0.00 (94.1)	0.02 (62.8)
Upfront × rd 4	0.232 (0.42)	−0.05 (19.3)	−0.06 (16.2)	−0.06 (16.2)	−0.07 (11.1)	−0.07 (11.1)	−0.09 (2.2)
InKind × rd 4	0.073 (0.26)	0.04 (37.8)	0.02 (67.8)	0.02 (67.8)	0.02 (69.2)	0.02 (49.6)	0.02 (58.2)
WithGrace × Secondary × rd 4	0.076 (0.27)	0.18 (9.1)	0.15 (10.3)	0.15 (10.3)	0.15 (11.9)	0.10 (28.7)	0.11 (24.3)
Upfront × Secondary × rd 4	0.114 (0.32)	−0.04 (69.7)	−0.03 (74.4)	−0.03 (74.4)	−0.09 (38.5)	−0.03 (71.3)	−0.09 (33.5)
InKind × Secondary × rd 4	0.040 (0.20)	−0.09 (46.8)	−0.05 (60.8)	−0.05 (60.8)	−0.05 (67.4)	−0.01 (93.7)	−0.01 (93.5)
WithGrace × College × rd 4	0.029 (0.17)	−0.09 (33.7)	−0.05 (59.9)	−0.05 (59.9)	−0.01 (87.8)	−0.02 (83.4)	0.07 (41.4)
Upfront × College × rd 4	0.049 (0.22)	−0.05 (72.9)	−0.05 (70.1)	−0.05 (70.1)	−0.08 (49.6)	−0.09 (46.1)	−0.22 (5.7)
InKind × College × rd 4	0.012 (0.11)	0.08 (50.1)	0.02 (83.1)	0.02 (83.1)	0.03 (79.2)	−0.02 (84.1)	0.01 (94.7)
Female × rd 4	0.142 (0.35)					−0.04 (6.1)	−0.04 (3.3)
WithGrace × Female × rd 4	0.071 (0.26)					−0.06 (20.5)	−0.07 (15.8)
Upfront × Female × rd 4	0.112 (0.32)					0.13 (1.3)	0.12 (2.6)
InKind × Female × rd 4	0.034 (0.18)					0.08 (26.4)	0.10 (14.9)
WithGrace × Secondary × Female × rd 4	0.037 (0.19)					−0.17 (33.2)	−0.14 (37.3)
Upfront × Secondary × Female × rd	0.054 (0.23)					−0.10 (56.6)	−0.00 (99.5)
InKind × Secondary × Female × rd 4	0.019 (0.14)					0.31 (10.3)	0.17 (33.5)
WithGrace × College × Female × rd	0.012 (0.11)					0.35 (5.4)	0.55 (0.1)
Upfront × College × Female × rd 4	0.023 (0.15)					−0.19 (40.3)	−0.50 (4.0)
InKind × College × Female × rd 4	0.004 (0.07)					−0.19 (46.6)	−0.15 (57.6)
Secondary × Female × rd 4	0.070 (0.26)					−0.04 (47.7)	−0.02 (69.5)
College × Female × rd 4	0.032 (0.17)					0.14 (11.0)	0.13 (15.6)
FloodInRd1	0.464 (0.50)				−0.05 (4.2)		−0.05 (2.8)
EldestSon	0.267 (0.44)				0.02 (62.9)		0.04 (22.2)
EldestDaughter	0.188 (0.39)				0.04 (28.3)		0.01 (84.8)
Head literate0	0.108 (0.31)				0.06 (2.7)		0.05 (2.9)
Head age0	39.153 (7.38)				−0.00 (26.3)		−0.00 (21.8)
Enrolled0	0.760 (0.43)		0.33 (0.0)	0.33 (0.0)	0.30 (0.0)	0.32 (0.0)	0.30 (0.0)
ChildAgeOrderAtRd1	1.826 (0.98)				0.02 (23.0)		0.02 (25.3)
HHsize0	4.974 (1.15)				−0.01 (25.6)		−0.01 (39.6)
mean of dependent variable		0.88	0.88	0.88	0.88	0.88	0.88
T = 2		75	75	75	63	75	63
T = 3		112	112	112	103	112	103
T = 4		539	539	539	500	539	500
$\bar{R}^2$		0.056	0.226	0.226	0.215	0.235	0.221
N	1841	1976	1976	1976	1841	1976	1841

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Secondary and College are indicator variables of secondary schooling (ages 13-15) and tertiary schooling (ages 16-18), both at the time of baseline. Default category is primary (ages 05-12). rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Interaction terms of dummy variables are demeaned before interacting. The first column gives mean and standard deviation (in parenthesises) of each covariates before demeaning.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

III.3 Incomes

Income sources are mainly labour incomes (lab) and farm revenues (far) with 846 and 53 observations at baseline, respectively.

```
[1] excl
[[1]]
TotalHHLabourIncome ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
TotalHHLabourIncome ~ dummyLarge + dummyLargeGrace + dummyCattle +
    TotalHHLabourIncome0

[[3]]
TotalHHLabourIncome ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalHHLabourIncome0 +
    pcHHLabourIncome0

[1] excla
[[1]]
TotalHHLabourIncome ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
TotalHHLabourIncome ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    TotalHHLabourIncome0

[[3]]
TotalHHLabourIncome ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalHHLabourIncome0 +
    pcHHLabourIncome0

[1] exclP
[[1]]
TotalHHLabourIncome ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
TotalHHLabourIncome ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + TotalHHLabourIncome0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
TotalHHLabourIncome ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalHHLabourIncome0 + pcHHLabourIncome0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[1] exclT
[[1]]
TotalHHLabourIncome ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
TotalHHLabourIncome ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + TotalHHLabourIncome0
```

```
[[3]]
TotalHHLabourIncome ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalHHLabourIncome0 +
    pcHHLabourIncome0

[1] exclTa
[[1]]
TotalHHLabourIncome ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
TotalHHLabourIncome ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + TotalHHLabourIncome0

[[3]]
TotalHHLabourIncome ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalHHLabourIncome0 +
    pcHHLabourIncome0
```

```
[1] excl
[[1]]
TotalRevenue ~ dummyLarge + dummyLargeGrace

[[2]]
TotalRevenue ~ dummyLarge + dummyLargeGrace + TotalRevenue0

[[3]]
TotalRevenue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + HHsize0 +
    HeadLiteracy0 + TotalRevenue0

[1] excla
[[1]]
TotalRevenue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
TotalRevenue ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    TotalRevenue0

[[3]]
TotalRevenue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalRevenue0

[1] exclP
[[1]]
TotalRevenue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
TotalRevenue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + TotalRevenue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor
```

```
[[3]]
TotalRevenue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalRevenue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[1] exclT
[[1]]
TotalRevenue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4

[[2]]
TotalRevenue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + TotalRevenue0

[[3]]
TotalRevenue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + HHsize0 + HeadLiteracy0 + TotalRevenue0

[1] exclTa
[[1]]
TotalRevenue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
TotalRevenue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + TotalRevenue0

[[3]]
TotalRevenue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalRevenue0
```

A. Labour incomes

covariates	mean/std	(1)	(2)	(3)
(Intercept)		3467.90 (60.8)	4759.49 (47.5)	−53337.78 (0.0)
Large	0.278 (0.45)	1676.99 (84.7)	1240.15 (88.4)	−1789.41 (81.8)
LargeGrace	0.248 (0.43)	−853.52 (92.6)	−5616.09 (49.5)	−4655.97 (46.0)
Cattle	0.254 (0.44)	−5162.43 (54.6)	−6120.47 (46.6)	−5024.15 (47.9)
FloodInRd1	0.488 (0.50)			7315.54 (13.5)
Head literate0	0.113 (0.32)			−7030.59 (19.2)
household labour income$_1$	2397.862 (172385.37)		0.11 (0.0)	0.06 (13.1)
HHsize0	4.405 (1.53)			12620.31 (0.0)
pcHHLabourIncome0	15499.124 (29821.83)			0.15 (54.5)
mean of dependent variable		2410	2410	2410
$T = 2$		105	105	105
$T = 3$		83	83	83
$T = 4$		658	658	658
$\bar{R}^2$		0	0.051	0.106
N	2557	2557	2557	2557

B. Farm incomes

covariates	mean/std	(1)	(2)	(3)
(Intercept)		−2300.56 (24.0)	−4771.71 (9.1)	−33850.03 (11.4)
Large	0.468 (0.50)	2324.78 (53.5)	4927.78 (13.4)	2351.52 (53.7)
LargeGrace	0.273 (0.45)	27687.83 (18.1)	24706.80 (12.1)	23323.79 (7.9)
FloodInRd1	0.532 (0.50)			11079.15 (18.0)
Head literate0	0.156 (0.37)			−6527.84 (48.5)
farm revenue$_1$	2668.874 (15293.24)		0.77 (0.9)	0.51 (7.0)
HHsize0	5.013 (1.41)			5280.49 (18.7)
mean of dependent variable		6338	6338	6338
$T = 2$		30	30	30
$T = 3$		22	22	22
$T = 4$		1	1	1
$\bar{R}^2$		0.042	0.098	0.102
N	77	77	77	77

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Labour incomes are in 1000 Tk units and are a sum of all earned labour incomes of household members. Farm revenues are in 1000 Tk units and are a total of agricultural produce sales.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

A. Labour incomes

covariates	mean/std	(1)	(2)	(3)
(Intercept)		3467.90 (60.8)	4759.49 (47.5)	−53337.78 (0.0)
Upfront	0.779 (0.41)	1676.99 (84.7)	1240.15 (88.4)	−1789.41 (81.8)
WithGrace	0.502 (0.50)	−2530.52 (76.1)	−6856.24 (34.1)	−2866.56 (64.7)
InKind	0.254 (0.44)	−4308.91 (59.8)	−504.38 (94.3)	−368.18 (94.8)
FloodInRd1	0.488 (0.50)			7315.54 (13.5)
Head literate0	0.113 (0.32)			−7030.59 (19.2)
household labour income$_1$	2397.862 (172385.37)		0.11 (0.0)	0.06 (13.1)
HHsize0	4.405 (1.53)			12620.31 (0.0)
pcHHLabourIncome0	15499.124 (29821.83)			0.15 (54.5)
mean of dependent variable		2410	2410	2410
$T = 2$		105	105	105
$T = 3$		83	83	83
$T = 4$		658	658	658
$\bar{R}^2$		0	0.051	0.106
N	2557	2557	2557	2557

B. Farm incomes

covariates	mean/std	(1)	(2)	(3)
(Intercept)		3683.94 (26.3)	−11409.33 (25.4)	−42940.88 (11.2)
Upfront	0.922 (0.27)	−3659.72 (42.6)	11573.77 (25.6)	10386.47 (32.7)
WithGrace	0.455 (0.50)	25363.06 (22.6)	19424.19 (19.4)	20090.77 (13.0)
InKind	0.182 (0.39)	−30252.62 (14.6)	−21739.98 (14.3)	−19464.51 (10.2)
FloodInRd1	0.532 (0.50)			9792.53 (21.9)
Head literate0	0.156 (0.37)			−6265.76 (51.1)
farm revenue$_1$	2668.874 (15293.24)		0.82 (0.6)	0.59 (3.4)
HHsize0	5.013 (1.41)			5645.29 (17.8)
mean of dependent variable		6338	6338	6338
$T = 2$		30	30	30
$T = 3$		22	22	22
$T = 4$		1	1	1
$\bar{R}^2$		0.031	0.087	0.092
N	77	77	77	77

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Labour incomes are in 1000 Tk units and are a sum of all earned labour incomes of household members. Farm revenues are in 1000 Tk units and are a total of agricultural produce sales.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 27: ANCOVA ESTIMATION OF HOUSEHOLD LABOUR INCOMES AND FARM INCOMES BY PERIOD

A. Labour incomes

covariates	mean/std	(1)	(2)	(3)
(Intercept)		−8847.11 (11.5)	−7464.61 (17.8)	−64693.29 (0.0)
Large	0.278 (0.45)	193.34 (97.9)	−301.33 (96.7)	−4081.79 (52.3)
LargeGrace	0.248 (0.43)	−1516.59 (84.6)	−5950.50 (40.1)	−5749.56 (28.2)
Cattle	0.254 (0.44)	−2363.49 (75.1)	−3488.37 (62.5)	−3786.13 (51.9)
rd 3	0.343 (0.47)	12826.35 (0.0)	12726.78 (0.0)	12533.21 (0.0)
Large × rd 3	0.094 (0.29)	−5904.74 (34.9)	−5706.05 (36.0)	−3202.98 (57.7)
LargeGrace × rd 3	0.085 (0.28)	1243.65 (85.2)	545.72 (93.3)	2510.64 (66.8)
Cattle × rd 3	0.086 (0.28)	−8767.76 (27.3)	−7999.96 (30.0)	−4708.92 (50.0)
rd 4	0.326 (0.47)	23562.04 (0.0)	23314.19 (0.0)	23381.34 (0.0)
Large × rd 4	0.095 (0.29)	10278.34 (43.7)	10389.16 (43.1)	12187.73 (34.7)
LargeGrace × rd 4	0.082 (0.27)	313.08 (96.8)	−651.75 (93.1)	1415.67 (83.7)
Cattle × rd 4	0.081 (0.27)	−6744.19 (50.2)	−6607.35 (50.9)	−2208.07 (81.3)
FloodInRd1	0.488 (0.50)			7086.54 (14.6)
Head literate0	0.113 (0.32)			−6837.51 (20.9)
household labour income$_1$	2397.862 (172385.37)		0.10 (0.0)	0.06 (15.2)
HHsize0	4.405 (1.53)			12629.79 (0.0)
pcHHLabourIncome0	15499.124 (29821.83)			0.16 (52.9)
mean of dependent variable		2410	2410	2410
T = 2		105	105	105
T = 3		83	83	83
T = 4		658	658	658
$\bar{R}^2$		0.013	0.064	0.119
N	2557	2557	2557	2557

B. Farm incomes

covariates	mean/std	(1)	(2)	(3)
(Intercept)		6127.53 (20.2)	12149.79 (1.2)	−22113.92 (46.9)
Large	0.468 (0.50)	−2993.33 (26.1)	−4893.71 (24.4)	−12983.69 (7.2)
LargeGrace	0.273 (0.45)	6981.60 (68.6)	3214.09 (81.2)	4910.96 (71.6)
rd 3	0.468 (0.50)	1256.59 (90.4)	−4099.95 (62.4)	2343.54 (85.3)
Large × rd 3	0.234 (0.43)	4337.50 (52.0)	23571.16 (2.0)	43554.00 (4.9)
LargeGrace × rd 3	0.130 (0.34)	83932.50 (4.1)	91500.93 (1.1)	82676.16 (0.3)
rd 4	0.481 (0.50)	−2961.43 (50.9)	−11504.25 (1.1)	−4355.08 (36.9)
Large × rd 4	0.208 (0.41)	19012.16 (5.6)	31058.71 (0.1)	48196.78 (0.9)
LargeGrace × rd 4	0.130 (0.34)	52017.91 (0.0)	52383.76 (0.0)	42443.16 (0.0)
FloodInRd1	0.532 (0.50)			8486.41 (22.9)
Head literate0	0.156 (0.37)			−5041.53 (57.9)
farm revenue$_1$	2668.874 (15293.24)		0.84 (1.7)	0.63 (4.9)
HHsize0	5.013 (1.41)			5557.56 (26.4)
mean of dependent variable		6338	6338	6338
T = 2		30	30	30
T = 3		22	22	22
T = 4		1	1	1
$\bar{R}^2$		0.029	0.097	0.093
N	77	77	77	77

Source: Estimated with GUK administrative and survey data.

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Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of

TABLE 28: ANCOVA ESTIMATION OF HOUSEHOLD LABOUR INCOMES AND FARM INCOMES BY ATTRIBUTES AND PERIOD

A. Labour incomes

covariates	mean/std	(1)	(2)	(3)
(Intercept)		−8847.11 (11.5)	−7464.61 (17.8)	−64693.29 (0.0)
Upfront	0.779 (0.41)	193.34 (97.9)	−301.33 (96.7)	−4081.79 (52.3)
WithGrace	0.502 (0.50)	−1709.93 (81.4)	−5649.17 (37.2)	−1667.77 (74.7)
InKind	0.254 (0.44)	−846.90 (90.7)	2462.13 (69.4)	1963.44 (67.4)
rd 3	0.343 (0.47)	12826.35 (0.0)	12726.78 (0.0)	12533.21 (0.0)
Upfront × rd 3	0.266 (0.44)	−5904.74 (34.9)	−5706.05 (36.0)	−3202.98 (57.7)
WithGrace × rd 3	0.172 (0.38)	7148.39 (17.7)	6251.77 (22.1)	5713.63 (23.6)
InKind × rd 3	0.086 (0.28)	−10011.41 (16.6)	−8545.69 (21.3)	−7219.56 (24.6)
rd 4	0.326 (0.47)	23562.04 (0.0)	23314.19 (0.0)	23381.34 (0.0)
Upfront × rd 4	0.258 (0.44)	10278.34 (43.7)	10389.16 (43.1)	12187.73 (34.7)
WithGrace × rd 4	0.163 (0.37)	−9965.26 (43.2)	−11040.90 (37.8)	−10772.06 (38.9)
InKind × rd 4	0.081 (0.27)	−7057.27 (44.9)	−5955.61 (51.3)	−3623.74 (67.3)
FloodInRd1	0.488 (0.50)			7086.54 (14.6)
Head literate0	0.113 (0.32)			−6837.51 (20.9)
household labour income$_1$	2397.862 (172385.37)		0.10 (0.0)	0.06 (15.2)
HHsize0	4.405 (1.53)			12629.79 (0.0)
pcHHLabourIncome0	15499.124 (29821.83)			0.16 (52.9)
mean of dependent variable		2410	2410	2410
T = 2		105	105	105
T = 3		83	83	83
T = 4		658	658	658
$\bar{R}^2$		0.013	0.064	0.119
N	2557	2557	2557	2557

B. Farm incomes

covariates	mean/std	(1)	(2)	(3)
(Intercept)		5780.95 (47.5)	−7373.91 (58.0)	−54279.46 (25.5)
Upfront	0.922 (0.27)	−2973.40 (52.0)	13333.59 (26.1)	14697.92 (29.1)
WithGrace	0.455 (0.50)	9974.93 (57.0)	8002.21 (55.4)	17722.59 (33.9)
InKind	0.182 (0.39)	−8911.22 (61.0)	−1330.02 (91.9)	−2374.63 (85.0)
rd 3	0.468 (0.50)	1927.82 (85.7)	−1913.28 (82.5)	6486.76 (65.4)
Upfront × rd 3	0.442 (0.50)	−16156.25 (7.3)	−846.50 (92.9)	−2463.13 (76.0)
WithGrace × rd 3	0.208 (0.41)	79595.00 (5.7)	67270.05 (4.5)	37061.73 (8.5)
InKind × rd 3	0.078 (0.27)	−86720.00 (3.7)	−88730.06 (1.2)	−79543.94 (0.3)
rd 4	0.481 (0.50)	−2672.64 (60.0)	−9400.17 (4.2)	−69.31 (99.2)
WithGrace × rd 4	0.221 (0.42)	33005.75 (0.5)	20664.47 (2.2)	−8274.30 (77.7)
InKind × rd 4	0.091 (0.29)	−55949.86 (0.0)	−50483.26 (0.0)	−37142.42 (2.4)
FloodInRd1	0.532 (0.50)			7051.67 (30.1)
Head literate0	0.156 (0.37)			−4712.16 (61.5)
farm revenue$_1$	2668.874 (15293.24)		0.89 (1.6)	0.71 (3.2)
HHsize0	5.013 (1.41)			6041.57 (26.3)
mean of dependent variable		6338	6338	6338
T = 2		30	30	30
T = 3		22	22	22
T = 4		1	1	1
$\bar{R}^2$		0.003	0.071	0.067
N	77	77	77	77

III.4   Consumption

Consumption is observed in rd 2-4. There are 1380 observations.

```
[1] excl
[[1]]
PCExpenditure ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
PCExpenditure ~ dummyLarge + dummyLargeGrace + dummyCattle +
    PCExpenditure0

[[3]]
PCExpenditure ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + PCExpenditure0

[[4]]
TotalExpenditure ~ dummyLarge + dummyLargeGrace + dummyCattle

[[5]]
TotalExpenditure ~ dummyLarge + dummyLargeGrace + dummyCattle +
    TotalExpenditure0

[[6]]
TotalExpenditure ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalExpenditure0

[[7]]
PCExpenditure ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + PCExpenditure0 + TotalExpenditure0

[1] excla
[[1]]
PCExpenditure ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
PCExpenditure ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    PCExpenditure0

[[3]]
PCExpenditure ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + PCExpenditure0

[[4]]
TotalExpenditure ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[5]]
TotalExpenditure ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    TotalExpenditure0

[[6]]
TotalExpenditure ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalExpenditure0

[[7]]
PCExpenditure ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + PCExpenditure0 +
    TotalExpenditure0

[1] exclP
```

```
[[1]]
PCExpenditure ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
PCExpenditure ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + PCExpenditure0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
PCExpenditure ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    PCExpenditure0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[4]]
TotalExpenditure ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[5]]
TotalExpenditure ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + TotalExpenditure0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[6]]
TotalExpenditure ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalExpenditure0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[7]]
PCExpenditure ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    PCExpenditure0 + TotalExpenditure0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[1] exclT
[[1]]
PCExpenditure ~ Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[2]]
PCExpenditure ~ Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    PCExpenditure0

[[3]]
PCExpenditure ~ FloodInRd1 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + PCExpenditure0

[[4]]
TotalExpenditure ~ Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[5]]
TotalExpenditure ~ Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    TotalExpenditure0
```

```
[[6]]
TotalExpenditure ~ FloodInRd1 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalExpenditure0

[[7]]
PCExpenditure ~ FloodInRd1 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + PCExpenditure0 +
    TotalExpenditure0

[1] exclTa
[[1]]
PCExpenditure ~ Time.4 + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4

[[2]]
PCExpenditure ~ Time.4 + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    PCExpenditure0

[[3]]
PCExpenditure ~ FloodInRd1 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + PCExpenditure0

[[4]]
TotalExpenditure ~ Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[5]]
TotalExpenditure ~ Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + TotalExpenditure0

[[6]]
TotalExpenditure ~ FloodInRd1 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalExpenditure0

[[7]]
PCExpenditure ~ FloodInRd1 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + PCExpenditure0 +
    TotalExpenditure0
```

TABLE 29: ANCOVA ESTIMATION OF CONSUMPTION

covariates	mean/std	Per capita consumption (Tk)			Total consumption (Tk)		
		(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		2753.7 (0.0)	2044.2 (0.0)	3266.6 (0.0)	10918.6 (0.0)	5371.0 (0.0)	3496.7 (0.0)
Large	0.273 (0.45)	44.5 (51.4)	67.6 (29.0)	102.4 (10.2)	679.3 (14.1)	546.9 (8.6)	361.6 (16.0)
LargeGrace	0.244 (0.43)	26.8 (68.1)	16.1 (77.8)	33.9 (59.7)	300.7 (56.9)	42.6 (88.9)	99.4 (68.6)
Cattle	0.261 (0.44)	36.8 (54.3)	54.7 (32.4)	42.4 (45.7)	103.9 (78.9)	346.8 (20.9)	195.7 (41.0)
FloodInRd1	0.489 (0.50)			−48.9 (21.0)			34.6 (83.8)
Head literate0	0.117 (0.32)			118.9 (1.7)			571.1 (2.7)
per capita consumption$_2$	2212.703 (653.86)		0.3 (0.0)	0.1 (0.1)			
HHsize0	4.354 (1.47)			−188.1 (0.0)			1175.5 (0.0)
household consumption$_2$	9208.982 (3172.47)					0.6 (0.0)	0.3 (0.0)
mean of dependent variable		2782	2782	2782	11205	11205	11205
$T=2$		50	50	50	50	50	50
$T=3$		665	665	665	665	665	665
$\bar{R}^2$		−0.002	0.08	0.201	0.004	0.326	0.483
N	77	1380	1380	1380	1380	1380	1380

Source: Estimated with GUK administrative and survey data of round 2 - 4.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Consumption is annualised values.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 30: ANCOVA ESTIMATION OF CONSUMPTION BY ATTRIBUTES

covariates	mean/std	Per capita consumption (Tk)			Total consumption (Tk)		
		(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		2753.7 (0.0)	2044.2 (0.0)	3266.6 (0.0)	10918.6 (0.0)	5371.0 (0.0)	3496.7 (0.0)
Upfront	0.778 (0.42)	44.5 (51.4)	67.6 (29.0)	102.4 (10.2)	679.3 (14.1)	546.9 (8.6)	361.6 (16.0)
WithGrace	0.505 (0.50)	−17.7 (81.5)	−51.4 (44.7)	−68.6 (26.7)	−378.6 (48.4)	−504.2 (13.5)	−262.2 (36.5)
InKind	0.261 (0.44)	10.0 (88.4)	38.6 (51.8)	8.5 (87.9)	−196.8 (68.2)	304.2 (31.8)	96.4 (72.1)
FloodInRd1	0.489 (0.50)			−48.9 (21.0)			34.6 (83.8)
Head literate0	0.117 (0.32)			118.9 (1.7)			571.1 (2.7)
per capita consumption$_2$	2212.703 (653.86)		0.3 (0.0)	0.1 (0.1)			
HHsize0	4.354 (1.47)			−188.1 (0.0)			1175.5 (0.0)
household consumption$_2$	9208.982 (3172.47)					0.6 (0.0)	0.3 (0.0)
mean of dependent variable		2782	2782	2782	11205	11205	11205
$T = 2$		50	50	50	50	50	50
$T = 3$		665	665	665	665	665	665
$\bar{R}^2$		−0.002	0.08	0.201	0.004	0.326	0.483
N	77	1380	1380	1380	1380	1380	1380

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Consumption is annualised values.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 31: ANCOVA ESTIMATION OF CONSUMPTION, MODERATELY POOR VS. ULTRA POOR

covariates	mean/std	Per capita consumption (Tk)			Total consumption (Tk)		
		(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		2757.4 (0.0)	2046.2 (0.0)	3281.5 (0.0)	11098.4 (0.0)	5512.0 (0.0)	3615.0 (0.0)
Upfront	0.778 (0.42)	50.0 (45.8)	64.3 (30.1)	102.0 (10.5)	631.4 (19.4)	450.9 (15.7)	314.7 (22.8)
WithGrace	0.505 (0.50)	−21.4 (77.3)	−57.0 (39.3)	−70.5 (25.3)	−310.1 (56.5)	−463.9 (16.6)	−229.7 (42.5)
InKind	0.261 (0.44)	18.1 (79.0)	48.3 (40.9)	16.6 (76.8)	−242.9 (61.2)	275.8 (37.5)	61.7 (82.3)
UltraPoor	0.633 (0.48)	−14.8 (72.0)	−2.6 (94.4)	−12.8 (69.5)	−211.2 (40.8)	−98.7 (60.9)	−86.4 (63.2)
Upfront × UltraPoor	0.030 (0.21)	51.4 (70.4)	−43.9 (72.9)	25.5 (81.8)	−292.9 (67.7)	−1001.9 (3.0)	−569.7 (27.1)
WithGrace × UltraPoor	0.032 (0.24)	35.9 (74.8)	81.4 (43.9)	−4.9 (96.0)	−890.8 (18.7)	−233.2 (67.0)	−290.0 (58.6)
InKind × UltraPoor	0.013 (0.21)	−119.4 (24.0)	−136.6 (12.8)	−129.5 (12.0)	429.3 (54.5)	295.6 (61.8)	474.6 (32.0)
FloodInRd1	0.489 (0.50)			−48.3 (22.8)			12.8 (94.0)
Head literate0	0.117 (0.32)			115.0 (2.1)			543.6 (2.9)
per capita consumption$_2$	2212.703 (653.86)		0.3 (0.0)	0.1 (0.2)			
HHsize0	4.354 (1.47)			−189.0 (0.0)			1170.9 (0.0)
household consumption$_2$	9208.982 (3172.47)					0.6 (0.0)	0.3 (0.0)
mean of dependent variable		2782	2782	2782	11205	11205	11205
$T = 2$		50	50	50	50	50	50
$T = 3$		665	665	665	665	665	665
$\bar{R}^2$		−0.004	0.078	0.2	0.005	0.329	0.484
N	77	1380	1380	1380	1380	1380	1380

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Consumption is annualised values.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 32: ANCOVA ESTIMATION OF CONSUMPTION BY PERIOD

covariates	mean/std	Per capita consumption (Tk)			Total consumption (Tk)		
		(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		2704.3	1997.0	3219.3	10905.6	5373.6	3492.3
		(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Large	0.273	34.7	58.8	94.3	670.7	533.6	342.7
	(0.45)	(65.3)	(41.3)	(19.7)	(17.8)	(13.6)	(25.0)
LargeGrace	0.244	10.5	1.3	20.6	289.2	16.8	64.6
	(0.43)	(89.4)	(98.5)	(79.4)	(61.6)	(96.2)	(83.0)
Cattle	0.261	46.3	67.8	57.6	212.2	443.3	267.7
	(0.44)	(50.7)	(29.3)	(39.0)	(62.1)	(16.1)	(33.8)
rd 4	0.493	108.3	102.5	101.5	−23.0	−37.1	5.2
	(0.50)	(0.9)	(1.5)	(1.7)	(88.8)	(82.1)	(97.4)
Large × rd 4	0.001	36.2	29.1	25.8	21.8	60.5	97.4
	(0.24)	(74.3)	(78.7)	(81.0)	(96.1)	(89.3)	(82.8)
LargeGrace × rd 4	0.001	71.3	62.4	52.5	37.6	129.3	181.2
	(0.23)	(59.4)	(63.6)	(69.1)	(93.9)	(79.2)	(71.0)
Cattle × rd 4	−0.002	−67.8	−90.1	−103.0	−665.6	−587.5	−435.6
	(0.23)	(52.4)	(39.0)	(33.2)	(14.8)	(20.0)	(30.6)
FloodInRd1	0.489			−49.8			33.5
	(0.50)			(20.2)			(84.4)
Head literate0	0.117			118.5			566.1
	(0.32)			(1.7)			(2.8)
per capita consumption$_2$	2212.703		0.3	0.1			
	(653.86)		(0.0)	(0.2)			
HHsize0	4.354			−188.2			1173.9
	(1.47)			(0.0)			(0.0)
household consumption$_2$	9208.982					0.6	0.3
	(3172.47)					(0.0)	(0.0)
mean of dependent variable		2782	2782	2782	11205	11205	11205
T = 2		50	50	50	50	50	50
T = 3		665	665	665	665	665	665
$\bar{R}^2$		0.002	0.084	0.205	0.003	0.326	0.483
N	77	1380	1380	1380	1380	1380	1380

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Consumption is annualised values.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 33: ANCOVA ESTIMATION OF CONSUMPTION BY ATTRIBUTES AND PERIOD

covariates	mean/std	Per capita consumption (Tk)			Total consumption (Tk)		
		(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		2704.3 (0.0)	1997.0 (0.0)	3219.3 (0.0)	10905.6 (0.0)	5373.6 (0.0)	3492.3 (0.0)
Upfront	0.778 (0.42)	34.7 (65.3)	58.8 (41.3)	94.3 (19.7)	670.7 (17.8)	533.6 (13.6)	342.7 (25.0)
WithGrace	0.505 (0.50)	−24.2 (78.2)	−57.5 (47.0)	−73.7 (33.9)	−381.6 (51.8)	−516.8 (17.8)	−278.1 (41.0)
InKind	0.261 (0.44)	35.8 (65.8)	66.5 (36.1)	37.0 (60.4)	−77.0 (88.5)	426.5 (22.7)	203.1 (52.6)
rd 4	0.493 (0.50)	108.3 (0.9)	102.5 (1.5)	101.5 (1.7)	−23.0 (88.8)	−37.1 (82.1)	5.2 (97.4)
Upfront × rd 4	0.001 (0.22)	36.2 (74.3)	29.1 (78.7)	25.8 (81.0)	21.8 (96.1)	60.5 (89.3)	97.4 (82.8)
WithGrace × rd 4	−0.001 (0.26)	35.1 (78.5)	33.3 (79.6)	26.7 (83.6)	15.8 (97.3)	68.7 (88.3)	83.8 (85.7)
InKind × rd 4	−0.002 (0.23)	−139.0 (26.7)	−152.5 (23.0)	−155.5 (22.5)	−703.1 (14.3)	−716.8 (13.2)	−616.8 (16.6)
FloodInRd1	0.489 (0.50)			−49.8 (20.2)			33.5 (84.4)
Head literate0	0.117 (0.32)			118.5 (1.7)			566.1 (2.8)
per capita consumption$_2$	2212.703 (653.86)		0.3 (0.0)	0.1 (0.2)			
HHsize0	4.354 (1.47)			−188.2 (0.0)			1173.9 (0.0)
household consumption$_2$	9208.982 (3172.47)					0.6 (0.0)	0.3 (0.0)
mean of dependent variable		2782	2782	2782	11205	11205	11205
T = 2		50	50	50	50	50	50
T = 3		665	665	665	665	665	665
$\bar{R}^2$		0.002	0.084	0.205	0.003	0.326	0.483
N	77	1380	1380	1380	1380	1380	1380

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Consumption is annualised values.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

III.5 Assets

III.5.1 Homestead land

Nonzero reported residential land holding among 800 (776) HHs. Around 40-50% of respondents report nonzero residential land holding.

```
            Arm  survey   NonZero
          <fctr>  <num>     <num>
 1: traditional      1  0.470588
 2: traditional      2  0.517647
 3: traditional      3  0.552941
 4: traditional      4  0.552941
 5:       large      1  0.467836
 6:       large      2  0.491228
 7:       large      3  0.514620
 8:       large      4  0.508772
 9: large grace      1  0.479042
10: large grace      2  0.508982
11: large grace      3  0.526946
12: large grace      4  0.520958
13:      cattle      1  0.379085
14:      cattle      2  0.450980
```

```
15:        cattle     3 0.470588
16:        cattle     4 0.470588
```

HHs reporting zero residential land holding are, except for the traditional arm, substantially poorer than HHs who report nonzero residential land holding.

```
         Arm ZeroLandHolding MeanNetValue
        <fctr>         <lgcl>        <num>
1: traditional          FALSE     11259.46
2: traditional           TRUE     10612.93
3:       large          FALSE     22738.46
4:       large           TRUE     17915.93
5: large grace          FALSE     15707.96
6: large grace           TRUE      9539.76
7:      cattle          FALSE     15232.56
8:      cattle           TRUE      9659.07
```

Abu-san's email on Jan 30, 2020   I checked the questionnaire and found that from round 2, land-holding information has been included in the asset information, which made the asset data inflated from round 2. Since landholding is something that is time-invariant for the ultra-poor households, either we can add the landholding information in round 1 or create an asset holding information deleting the landholding information from round 2 onwards, to make the valid comparison. ⇒ This is done and saved as AmountFilled.

FIGURE 6: HOMESTEAD LAND HOLDING OF LOAN RECIPIENTS
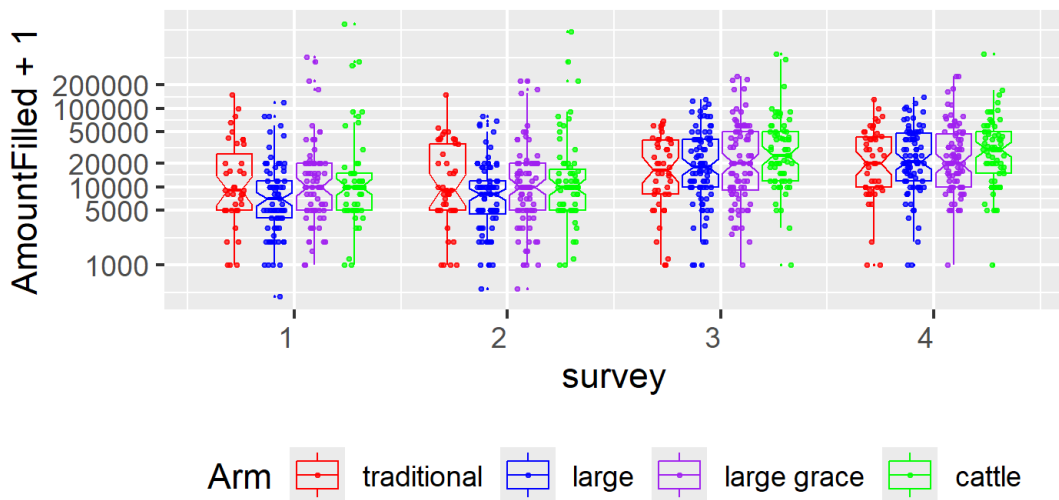
Source: Survey data.

Note: Loan recipients only.

FIGURE 7: HOMESTEAD LAND HOLDING OF LOAN RECIPIENTS, INCLUDING ZERO HOLDING
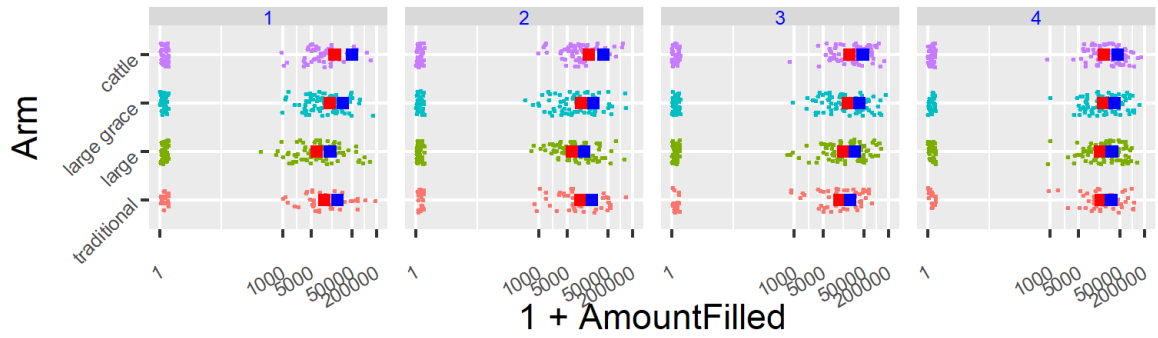
Source: Survey data.

Note: Log of 1+land holding is displayed on horizontal axes. Red squares are means including zero holding for respective Arm-round. Blue squares are means excluding zero holding for respective Arm-round. Loan recipients only.

FIGURE 8: HOMESTEAD LAND HOLDING OF LOAN RECIPIENTS, EXCLUDING ZERO HOLDING
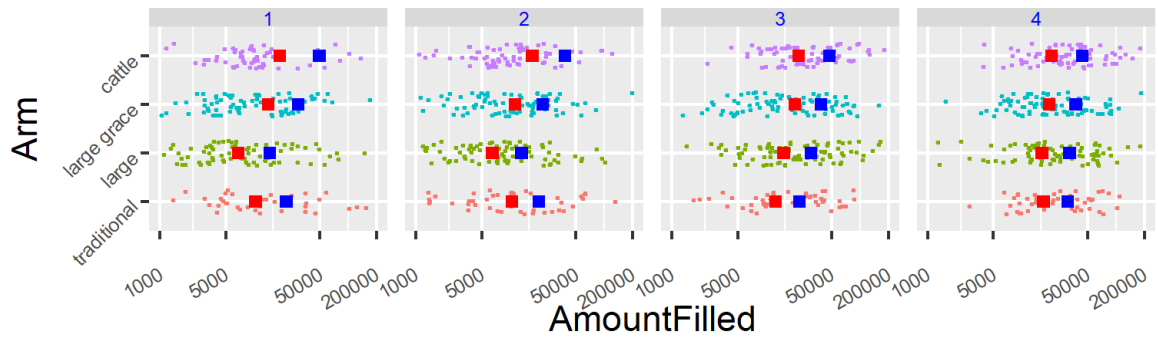
Source: Survey data.

Note: Log of land holding is displayed on horizontal axes. Zero land holders are excluded. Red squares are means including zero holding for respective Arm-round. Blue squares are means excluding zero holding for respective Arm-round. Loan recipients only.

FIGURE 9: HOMESTEAD LAND HOLDING OF LOAN RECIPIENTS, EXCLDUING ZERO
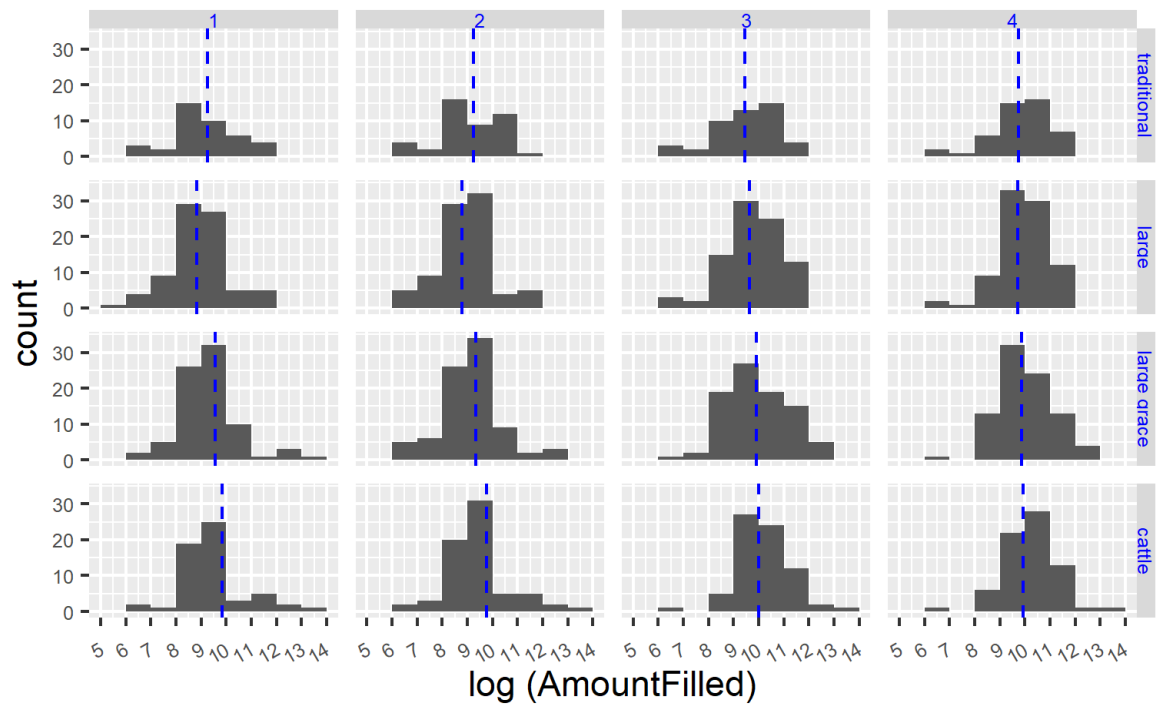
Source: Survey data.

Note: Loan recipients only. Logarithm of land holding is displayed on horizontal axes. Zero land holding is excluded from the graph. Mean including zero holding is shown as a dotted line in each panel.
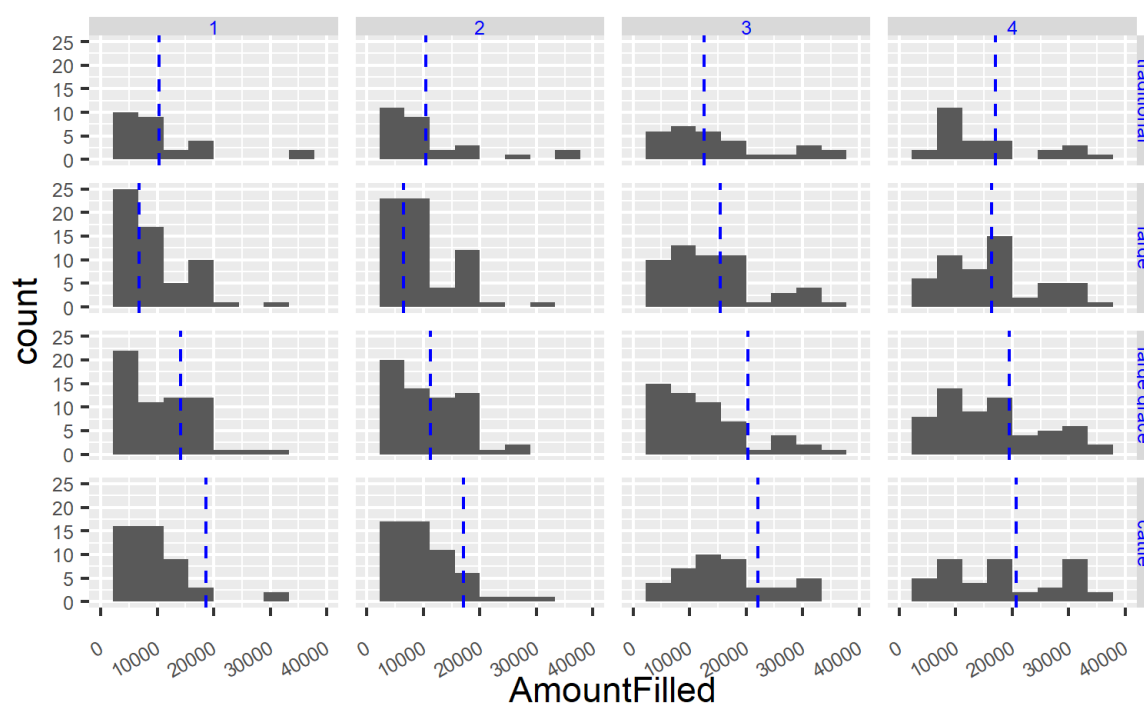
Note: Loan recipients only. Land holding is displayed on horizontal axes. Zero land holding is excluded from the graph. Mean including zero holding is shown as a dotted line in each panel.

Land holding distributions look different between arms at the baseline (Figure 9). This can be a consequence of copying the round 2 values which was justified under the assumption that all the round 1 land acquisition is reported in round 2 when our interviewer asks about it. By round 4, distributions become more skewed to left in all arms, indicating that some members have increased their land holding, only that such a tendency is weakest among the traditional arm.

```
Key: <tee>
     tee traditional  large  large grace  cattle     Sum
   <int>        <int> <int>        <int>   <int>   <int>
1:     1          174    199          198     199     770
2:     2          166    193          176     194     729
3:     3          162    190          173     187     712
4:     4          133    179          155     151     618
```

Land entries by arm and round:

```
            Arm    NA.1    NA.2    NA.3    NA.4  NonNA.1  NonNA.2  NonNA.3  NonNA.4
         <fctr> <char> <char> <char> <char>   <char>   <char>   <char>   <char>
1:        large     85     84     84     85      139      142      140      141
2:       cattle    108    107    107     96       84       96       98       95
3:  large grace     98     78     82     81      103      104      103      101
4:  traditional     85     82     81     71       83       91       89       81
5:        Total    376    351    354    333      409      433      430      418
```

```
[1] 6
```

```
[1] excl
[[1]]
AmountFilled ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
AmountFilled ~ dummyLarge + dummyLargeGrace + dummyCattle + AmountFilled0
```

```
[[3]]
AmountFilled ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + AmountFilled0

[[4]]
AmountFilled ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + AmountFilled0

[[5]]
AmountFilled ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + AmountFilled0

[[6]]
AmountFilled ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + AmountFilled0

[1] exclP
[[1]]
AmountFilled ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
AmountFilled ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + AmountFilled0

[[3]]
AmountFilled ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + HHsize0 +
    HeadLiteracy0 + AmountFilled0

[[4]]
AmountFilled ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyHadCows + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + HHsize0 +
    HeadLiteracy0 + AmountFilled0

[[5]]
AmountFilled ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + HHsize0 +
    HeadLiteracy0 + AmountFilled0

[[6]]
AmountFilled ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyHadCows + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + HHsize0 +
    HeadLiteracy0 + AmountFilled0

[1] excla
[[1]]
AmountFilled ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
AmountFilled ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    AmountFilled0

[[3]]
AmountFilled ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
```

```
    dummyInKind + HHsize0 + HeadLiteracy0 + AmountFilled0

[[4]]
AmountFilled ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + AmountFilled0

[[5]]
AmountFilled ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + AmountFilled0

[[6]]
AmountFilled ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + AmountFilled0

[1] exclT
[[1]]
AmountFilled ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
AmountFilled ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + AmountFilled0

[[3]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + AmountFilled0

[[4]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + AmountFilled0

[[5]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + AmountFilled0

[[6]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + AmountFilled0

[1] exclTa
[[1]]
AmountFilled ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
AmountFilled ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
```

```
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + AmountFilled0

[[3]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + AmountFilled0

[[4]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + AmountFilled0

[[5]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + AmountFilled0

[[6]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + AmountFilled0

[1] exclTP
[[1]]
AmountFilled ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[2]]
AmountFilled ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    AmountFilled0

[[3]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + AmountFilled0

[[4]]
```
73

```
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + AmountFilled0

[[5]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + AmountFilled0

[[6]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + AmountFilled0

[1] exclTPa
[[1]]
AmountFilled ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[2]]
AmountFilled ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4 +
    AmountFilled0

[[3]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
```

```
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + HHsize0 + HeadLiteracy0 + AmountFilled0

[[4]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + HHsize0 + HeadLiteracy0 + AmountFilled0

[[5]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + HHsize0 + HeadLiteracy0 + AmountFilled0

[[6]]
AmountFilled ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + HHsize0 + HeadLiteracy0 + AmountFilled0
```

TABLE 34: ANCOVA ESTIMATION OF LAND HOLDING

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		22723.0 (0.0)	12665.5 (0.0)	10601.3 (4.0)	10505.4 (4.3)	10601.3 (4.0)	10505.4 (4.3)
Large	0.334 (0.47)	14224.2 (7.4)	12176.8 (1.2)	12059.7 (1.0)	11745.9 (1.6)	12059.7 (1.0)	11745.9 (1.6)
LargeGrace	0.244 (0.43)	19537.6 (1.5)	9023.0 (2.1)	9379.7 (2.9)	9209.4 (3.1)	9379.7 (2.9)	9209.4 (3.1)
Cattle	0.220 (0.41)	32534.3 (14.7)	6080.2 (7.7)	6095.8 (8.3)	6161.8 (8.1)	6095.8 (8.3)	6161.8 (8.1)
HadCattle	0.231 (0.42)				2724.7 (43.7)		2724.7 (43.7)
FloodInRd1	0.433 (0.50)			640.4 (85.5)	575.8 (87.2)	640.4 (85.5)	575.8 (87.2)
Head literate0	0.119 (0.32)			−981.9 (75.9)	−1306.3 (67.3)	−981.9 (75.9)	−1306.3 (67.3)
land value$_1$	35511.779 (115082.24)		0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)
HHsize0	4.477 (1.38)			412.3 (70.5)	334.2 (74.7)	412.3 (70.5)	334.2 (74.7)
mean of dependent variable		39394	39394	39394	39394	39394	39394
$\bar{R}^2$		0.02	0.737	0.737	0.737	0.737	0.737
N	1248	1248	1248	1248	1248	1248	1248

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Interaction terms of dummy variables are demeaned before interacting. The first column gives mean and standard deviation (in parenthesises) of each covariates before demeaning.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 35: ANCOVA ESTIMATION OF LAND HOLDING BY ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		22723.0 (0.0)	12665.5 (0.0)	10601.3 (4.0)	10505.4 (4.3)	10601.3 (4.0)	10505.4 (4.3)
Upfront	0.798 (0.40)	14224.2 (7.4)	12176.8 (1.2)	12059.7 (1.0)	11745.9 (1.6)	12059.7 (1.0)	11745.9 (1.6)
WithGrace	0.464 (0.50)	5313.4 (61.8)	−3153.8 (59.0)	−2680.0 (66.3)	−2536.4 (68.4)	−2680.0 (66.3)	−2536.4 (68.4)
InKind	0.220 (0.41)	12996.6 (58.0)	−2942.8 (53.7)	−3284.0 (52.8)	−3047.6 (55.7)	−3284.0 (52.8)	−3047.6 (55.7)
HadCattle	0.231 (0.42)				2724.7 (43.7)		2724.7 (43.7)
FloodInRd1	0.433 (0.50)			640.4 (85.5)	575.8 (87.2)	640.4 (85.5)	575.8 (87.2)
Head literate0	0.119 (0.32)			−981.9 (75.9)	−1306.3 (67.3)	−981.9 (75.9)	−1306.3 (67.3)
land value$_1$	35511.779 (115082.24)		0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)
HHsize0	4.477 (1.38)			412.3 (70.5)	334.2 (74.7)	412.3 (70.5)	334.2 (74.7)
mean of dependent variable		39394	39394	39394	39394	39394	39394
$\bar{R}^2$		0.02	0.737	0.737	0.737	0.737	0.737
N	1248	1248	1248	1248	1248	1248	1248

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Interaction terms of dummy variables are demeaned before interacting. The first column gives mean and standard deviation (in parenthesises) of each covariates before demeaning.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		14369.0 (0.0)	3737.6 (20.6)	1721.7 (75.1)	1721.7 (75.1)	1721.7 (75.1)	1721.7 (75.1)
Large	0.334 (0.47)	10968.4 (11.3)	8770.6 (1.4)	8634.3 (1.1)	8634.3 (1.1)	8634.3 (1.1)	8634.3 (1.1)
LargeGrace	0.244 (0.43)	17714.5 (2.6)	7106.7 (2.3)	7481.3 (3.2)	7481.3 (3.2)	7481.3 (3.2)	7481.3 (3.2)
Cattle	0.220 (0.41)	35735.1 (18.5)	8274.5 (4.4)	8287.5 (4.7)	8287.5 (4.7)	8287.5 (4.7)	8287.5 (4.7)
rd 3	0.344 (0.48)	11996.0 (3.9)	13466.6 (0.5)	13469.9 (0.5)	13469.9 (0.5)	13469.9 (0.5)	13469.9 (0.5)
Large × rd 3	0.111 (0.31)	17399.6 (0.6)	17900.1 (0.3)	17854.7 (0.3)	17854.7 (0.3)	17854.7 (0.3)	17854.7 (0.3)
LargeGrace × rd 3	0.083 (0.28)	15554.1 (1.9)	15916.7 (1.2)	15891.4 (1.2)	15891.4 (1.2)	15891.4 (1.2)	15891.4 (1.2)
Cattle × rd 3	0.079 (0.27)	−12338.2 (56.9)	−7450.9 (67.1)	−7498.5 (67.0)	−7498.5 (67.0)	−7498.5 (67.0)	−7498.5 (67.0)
rd 4	0.335 (0.47)	14818.0 (2.4)	15884.7 (0.6)	15893.4 (0.6)	15893.4 (0.6)	15893.4 (0.6)	15893.4 (0.6)
Large × rd 4	0.113 (0.32)	18142.6 (6.8)	19403.8 (5.0)	19408.4 (5.2)	19408.4 (5.2)	19408.4 (5.2)	19408.4 (5.2)
LargeGrace × rd 4	0.081 (0.27)	5183.2 (40.0)	5937.8 (33.5)	5962.3 (33.7)	5962.3 (33.7)	5962.3 (33.7)	5962.3 (33.7)
Cattle × rd 4	0.076 (0.27)	−21791.7 (34.1)	−16958.2 (38.2)	−16947.3 (38.3)	−16947.3 (38.3)	−16947.3 (38.3)	−16947.3 (38.3)
FloodInRd1	0.433 (0.50)			787.9 (82.5)	787.9 (82.5)	787.9 (82.5)	787.9 (82.5)
Head literate0	0.119 (0.32)			−976.4 (76.1)	−976.4 (76.1)	−976.4 (76.1)	−976.4 (76.1)
land value$_1$	35511.779 (115082.24)		0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)
HHsize0	4.477 (1.38)			387.3 (72.2)	387.3 (72.2)	387.3 (72.2)	387.3 (72.2)
mean of dependent variable $\bar{R}^2$		39394 0.031	39394 0.753	39394 0.753	39394 0.753	39394 0.753	39394 0.753
N	1248	1248	1248	1248	1248	1248	1248

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Interaction terms of dummy variables are demeaned before interacting. The first column gives mean and standard deviation (in parenthesises) of each covariates before demeaning.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 37: ANCOVA ESTIMATION OF LAND HOLDING BY PERIOD, ARM, AND POVERTY STATUS

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		27062.0 (8.4)	7935.6 (14.0)	5594.5 (44.0)	5594.5 (44.0)	5594.5 (44.0)	5594.5 (44.0)
Large	0.334 (0.47)	8550.1 (9.7)	7976.8 (0.2)	8046.8 (0.2)	8046.8 (0.2)	8046.8 (0.2)	8046.8 (0.2)
LargeGrace	0.244 (0.43)	15147.1 (5.3)	7016.5 (1.8)	7102.7 (3.3)	7102.7 (3.3)	7102.7 (3.3)	7102.7 (3.3)
Cattle	0.220 (0.41)	43952.3 (21.6)	10129.6 (5.7)	10168.9 (5.6)	10168.9 (5.6)	10168.9 (5.6)	10168.9 (5.6)
UltraPoor	0.594 (0.49)	−18201.7 (35.5)	−5493.0 (13.0)	−5521.6 (13.0)	−5521.6 (13.0)	−5521.6 (13.0)	−5521.6 (13.0)
Large × UltraPoor	0.171 (0.38)	−25078.4 (2.6)	−9512.8 (9.0)	−10173.8 (9.2)	−10173.8 (9.2)	−10173.8 (9.2)	−10173.8 (9.2)
LargeGrace × UltraPoor	0.166 (0.37)	24662.6 (2.3)	8357.6 (12.7)	8420.6 (13.6)	8420.6 (13.6)	8420.6 (13.6)	8420.6 (13.6)
Cattle × UltraPoor	0.158 (0.36)	−84476.4 (26.6)	−10715.2 (41.9)	−10805.0 (41.4)	−10805.0 (41.4)	−10805.0 (41.4)	−10805.0 (41.4)
rd 3	0.344 (0.48)	9619.4 (19.1)	11241.8 (7.0)	11258.4 (7.0)	11258.4 (7.0)	11258.4 (7.0)	11258.4 (7.0)
Large × rd 3	0.111 (0.31)	16613.1 (0.1)	16820.2 (0.1)	16781.0 (0.1)	16781.0 (0.1)	16781.0 (0.1)	16781.0 (0.1)
LargeGrace × rd 3	0.083 (0.28)	16888.7 (0.7)	16820.7 (0.7)	16820.2 (0.7)	16820.2 (0.7)	16820.2 (0.7)	16820.2 (0.7)
Cattle × rd 3	0.079 (0.27)	−16605.9 (55.7)	−11414.0 (62.9)	−11319.1 (63.3)	−11319.1 (63.3)	−11319.1 (63.3)	−11319.1 (63.3)
UltraPoor × rd 3	0.203 (0.40)	6027.0 (71.0)	4361.8 (75.3)	4402.6 (75.2)	4402.6 (75.2)	4402.6 (75.2)	4402.6 (75.2)
Large × UltraPoor × rd 3	0.057 (0.23)	−10406.0 (22.8)	−14527.1 (8.7)	−14620.7 (8.5)	−14620.7 (8.5)	−14620.7 (8.5)	−14620.7 (8.5)
LargeGrace × UltraPoor × rd 3	0.056 (0.23)	13941.3 (31.8)	11246.7 (40.3)	11184.2 (40.8)	11184.2 (40.8)	11184.2 (40.8)	11184.2 (40.8)
Cattle × UltraPoor × rd 3	0.057 (0.23)	68459.6 (27.2)	54104.1 (31.0)	53992.8 (31.2)	53992.8 (31.2)	53992.8 (31.2)	53992.8 (31.2)
rd 4	0.335 (0.47)	12572.2 (10.9)	13862.0 (4.0)	13889.8 (3.9)	13889.8 (3.9)	13889.8 (3.9)	13889.8 (3.9)
Large × rd 4	0.113 (0.32)	16954.0 (2.6)	18021.3 (1.7)	17963.1 (1.8)	17963.1 (1.8)	17963.1 (1.8)	17963.1 (1.8)
LargeGrace × rd 4	0.081 (0.27)	6394.5 (25.5)	6785.5 (23.5)	6766.0 (24.0)	6766.0 (24.0)	6766.0 (24.0)	6766.0 (24.0)
Cattle × rd 4	0.076 (0.27)	−27731.5 (34.8)	−21854.7 (38.1)	−21786.8 (38.3)	−21786.8 (38.3)	−21786.8 (38.3)	−21786.8 (38.3)
UltraPoor × rd 4	0.200 (0.40)	7302.6 (65.1)	4674.6 (73.8)	4688.1 (73.8)	4688.1 (73.8)	4688.1 (73.8)	4688.1 (73.8)
Large × UltraPoor × rd 4	0.058 (0.23)	−15200.4 (39.4)	−15959.0 (36.5)	−15870.7 (37.1)	−15870.7 (37.1)	−15870.7 (37.1)	−15870.7 (37.1)
LargeGrace × UltraPoor × rd 4	0.054 (0.23)	2420.4 (87.9)	2429.0 (87.5)	2548.5 (86.9)	2548.5 (86.9)	2548.5 (86.9)	2548.5 (86.9)
Cattle × UltraPoor × rd 4	0.054 (0.23)	67572.4 (25.2)	56291.1 (25.9)	56348.6 (26.0)	56348.6 (26.0)	56348.6 (26.0)	56348.6 (26.0)
FloodInRd1	0.433 (0.50)			−1098.9 (74.1)	−1098.9 (74.1)	−1098.9 (74.1)	−1098.9 (74.1)
Head literate0	0.119 (0.32)			−1413.8 (64.6)	−1413.8 (64.6)	−1413.8 (64.6)	−1413.8 (64.6)
land value₁	35511.779 (115082.24)		0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)
HHsize0	4.477 (1.38)			643.2 (51.3)	643.2 (51.3)	643.2 (51.3)	643.2 (51.3)
mean of dependent variable		39394	39394	39394	39394	39394	39394
$\bar{R}^2$		0.088	0.762	0.761	0.761	0.761	0.761
N	1248	1248	1248	1248	1248	1248	1248

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Interaction terms of dummy variables are demeaned before interacting. The first column gives mean and standard deviation (in parenthesises) of each covariates before demeaning.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 38: ANCOVA ESTIMATION OF LAND HOLDING BY PERIOD AND ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		14369.0 (0.0)	3737.6 (20.6)	1721.7 (75.1)	1721.7 (75.1)	1721.7 (75.1)	1721.7 (75.1)
Upfront	0.798 (0.40)	10968.4 (11.3)	8770.6 (1.4)	8634.3 (1.1)	8634.3 (1.1)	8634.3 (1.1)	8634.3 (1.1)
WithGrace	0.464 (0.50)	6746.2 (49.2)	−1663.9 (71.3)	−1153.0 (81.2)	−1153.0 (81.2)	−1153.0 (81.2)	−1153.0 (81.2)
InKind	0.220 (0.41)	18020.5 (51.7)	1167.8 (80.6)	806.2 (87.2)	806.2 (87.2)	806.2 (87.2)	806.2 (87.2)
rd 3	0.344 (0.48)	11996.0 (3.9)	13466.6 (0.5)	13469.9 (0.5)	13469.9 (0.5)	13469.9 (0.5)	13469.9 (0.5)
Upfront × rd 3	0.272 (0.45)	17399.6 (0.6)	17900.1 (0.3)	17854.7 (0.3)	17854.7 (0.3)	17854.7 (0.3)	17854.7 (0.3)
WithGrace × rd 3	0.161 (0.37)	−1845.5 (79.7)	−1983.4 (78.1)	−1963.2 (78.4)	−1963.2 (78.4)	−1963.2 (78.4)	−1963.2 (78.4)
InKind × rd 3	0.079 (0.27)	−27892.3 (20.3)	−23367.6 (19.2)	−23390.0 (19.4)	−23390.0 (19.4)	−23390.0 (19.4)	−23390.0 (19.4)
rd 4	0.335 (0.47)	14818.0 (2.4)	15884.7 (0.6)	15893.4 (0.6)	15893.4 (0.6)	15893.4 (0.6)	15893.4 (0.6)
Upfront × rd 4	0.270 (0.44)	18142.6 (6.8)	19403.8 (5.0)	19408.4 (5.2)	19408.4 (5.2)	19408.4 (5.2)	19408.4 (5.2)
WithGrace × rd 4	0.157 (0.36)	−12959.4 (23.0)	−13466.0 (21.3)	−13446.1 (21.5)	−13446.1 (21.5)	−13446.1 (21.5)	−13446.1 (21.5)
InKind × rd 4	0.076 (0.27)	−26974.9 (24.7)	−22895.9 (24.9)	−22909.6 (25.0)	−22909.6 (25.0)	−22909.6 (25.0)	−22909.6 (25.0)
FloodInRd1	0.433 (0.50)			787.9 (82.5)	787.9 (82.5)	787.9 (82.5)	787.9 (82.5)
Head literate0	0.119 (0.32)			−976.4 (76.1)	−976.4 (76.1)	−976.4 (76.1)	−976.4 (76.1)
land value$_1$	35511.779 (115082.24)		0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)
HHsize0	4.477 (1.38)			387.3 (72.2)	387.3 (72.2)	387.3 (72.2)	387.3 (72.2)
mean of dependent variable $\bar{R}^2$		39394 0.031	39394 0.753	39394 0.753	39394 0.753	39394 0.753	39394 0.753
N	1248	1248	1248	1248	1248	1248	1248

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Interaction terms of dummy variables are demeaned before interacting. The first column gives mean and standard deviation (in parenthesises) of each covariates before demeaning.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 39: ANCOVA ESTIMATION OF LAND HOLDING BY PERIOD, ATTRIBUTES, AND POVERTY STATUS

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		27062.0 (8.4)	7935.6 (14.0)	5594.5 (44.0)	5594.5 (44.0)	5594.5 (44.0)	5594.5 (44.0)
Upfront	0.798 (0.40)	8550.1 (9.7)	7976.8 (0.2)	8046.8 (0.2)	8046.8 (0.2)	8046.8 (0.2)	8046.8 (0.2)
WithGrace	0.464 (0.50)	6597.0 (43.0)	−960.4 (79.3)	−944.1 (82.1)	−944.1 (82.1)	−944.1 (82.1)	−944.1 (82.1)
InKind	0.220 (0.41)	28805.2 (42.5)	3113.1 (58.7)	3066.2 (59.9)	3066.2 (59.9)	3066.2 (59.9)	3066.2 (59.9)
UltraPoor	0.594 (0.49)	−18201.7 (35.5)	−5493.0 (13.0)	−5521.6 (13.0)	−5521.6 (13.0)	−5521.6 (13.0)	−5521.6 (13.0)
Upfront × UltraPoor	0.495 (0.50)	−25078.4 (2.6)	−9512.8 (9.0)	−10173.8 (9.2)	−10173.8 (9.2)	−10173.8 (9.2)	−10173.8 (9.2)
WithGrace × UltraPoor	0.324 (0.47)	49741.0 (0.0)	17870.4 (0.9)	18594.5 (0.3)	18594.5 (0.3)	18594.5 (0.3)	18594.5 (0.3)
InKind × UltraPoor	0.158 (0.36)	−109139.0 (15.3)	−19072.9 (18.5)	−19225.7 (18.5)	−19225.7 (18.5)	−19225.7 (18.5)	−19225.7 (18.5)
rd 3	0.344 (0.48)	9619.4 (19.1)	11241.8 (7.0)	11258.4 (7.0)	11258.4 (7.0)	11258.4 (7.0)	11258.4 (7.0)
UltraPoor × rd 3	0.203 (0.40)	6027.0 (71.0)	4361.8 (75.3)	4402.6 (75.2)	4402.6 (75.2)	4402.6 (75.2)	4402.6 (75.2)
Upfront × rd 3	0.272 (0.45)	16613.1 (0.1)	16820.2 (0.1)	16781.0 (0.1)	16781.0 (0.1)	16781.0 (0.1)	16781.0 (0.1)
WithGrace × rd 3	0.161 (0.37)	275.6 (96.4)	0.5 (100.0)	39.1 (99.5)	39.1 (99.5)	39.1 (99.5)	39.1 (99.5)
InKind × rd 3	0.079 (0.27)	−33494.7 (23.9)	−28234.7 (23.6)	−28139.3 (23.9)	−28139.3 (23.9)	−28139.3 (23.9)	−28139.3 (23.9)
Upfront × UltraPoor × rd 3	0.170 (0.38)	−10406.0 (22.8)	−14527.1 (8.7)	−14620.7 (8.5)	−14620.7 (8.5)	−14620.7 (8.5)	−14620.7 (8.5)
WithGrace × UltraPoor × rd 3	0.113 (0.32)	24347.3 (7.2)	25773.9 (4.7)	25804.9 (4.7)	25804.9 (4.7)	25804.9 (4.7)	25804.9 (4.7)
InKind × UltraPoor × rd 3	0.057 (0.23)	54518.3 (38.8)	42857.4 (42.8)	42808.6 (43.0)	42808.6 (43.0)	42808.6 (43.0)	42808.6 (43.0)
rd 4	0.335 (0.47)	12572.2 (10.9)	13862.0 (4.0)	13889.8 (3.9)	13889.8 (3.9)	13889.8 (3.9)	13889.8 (3.9)
UltraPoor × rd 4	0.200 (0.40)	7302.6 (65.1)	4674.6 (73.8)	4688.1 (73.8)	4688.1 (73.8)	4688.1 (73.8)	4688.1 (73.8)
Upfront × rd 4	0.270 (0.44)	16954.0 (2.6)	18021.3 (1.7)	17963.1 (1.8)	17963.1 (1.8)	17963.1 (1.8)	17963.1 (1.8)
WithGrace × rd 4	0.157 (0.36)	−10559.5 (19.9)	−11235.9 (17.1)	−11197.0 (17.5)	−11197.0 (17.5)	−11197.0 (17.5)	−11197.0 (17.5)
InKind × rd 4	0.076 (0.27)	−34126.0 (25.0)	−28640.2 (25.5)	−28552.9 (25.8)	−28552.9 (25.8)	−28552.9 (25.8)	−28552.9 (25.8)
Upfront × UltraPoor × rd 4	0.167 (0.37)	−15200.4 (39.4)	−15959.0 (36.5)	−15870.7 (37.1)	−15870.7 (37.1)	−15870.7 (37.1)	−15870.7 (37.1)
WithGrace × UltraPoor × rd 4	0.109 (0.31)	17620.8 (42.5)	18388.0 (39.5)	18419.2 (39.5)	18419.2 (39.5)	18419.2 (39.5)	18419.2 (39.5)
InKind × UltraPoor × rd 4	0.054 (0.23)	65152.0 (28.0)	53862.2 (29.5)	53800.1 (29.6)	53800.1 (29.6)	53800.1 (29.6)	53800.1 (29.6)
FloodInRd1	0.433 (0.50)			−1098.9 (74.1)	−1098.9 (74.1)	−1098.9 (74.1)	−1098.9 (74.1)
Head literate0	0.119 (0.32)			−1413.8 (64.6)	−1413.8 (64.6)	−1413.8 (64.6)	−1413.8 (64.6)
land value$_1$	35511.779 (115082.24)		0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)
HHsize0	4.477 (1.38)			643.2 (51.3)	643.2 (51.3)	643.2 (51.3)	643.2 (51.3)
mean of dependent variable		39394	39394	39394	39394	39394	39394
R^2		0.088	0.762	0.761	0.761	0.761	0.761
N	1248	1248	1248	1248	1248	1248	1248

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Interaction terms of dummy variables are demeaned before interacting. The first column gives mean and standard deviation (in parenthesises) of each covariates before demeaning.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 36 shows that, compared to traditional arm, land holding is larger for large, large grace, and cattle arms in round 2. The difference with traditional arm is maintained only for large arm

throughout the rounds, and become negligible for large grace and cattle arms.

III.5.2 Livestock

```
             AttritIn
Arm             2    3    4    9  Sum
  traditional   7    4   20  144  175
  large         5    2    1  191  199
  large grace  12    3    3  170  188
  cattle        5    5   13  176  199
  Sum          29   14   37  681  761
     NumCows
tee      0    1    2    3    4    5    6    7    8    9  <NA>   Sum
  2     15  308  153   40   11    1    2    0    1    1   196   728
  3      5  337  175   40   15    1    2    2    1    0   110   688
  4      4  218  201   54   11    4    2    0    1    1    86   582
  Sum   24  863  529  134   37    6    6    2    3    2   392  1998
```

```
[1] 5
```

```
[1] excl
[[1]]
TotalImputedValue ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
TotalImputedValue ~ dummyLarge + dummyLargeGrace + dummyCattle +
    TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyHadCows + dummyLarge +
    dummyLargeGrace + dummyCattle + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyHadCows.Large + dummyHadCows.LargeGrace +
    dummyHadCows.Cattle

[[5]]
TotalImputedValue ~ FloodInRd1 + dummyHadCows + dummyLarge +
    dummyLargeGrace + dummyCattle + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyHadCows.Large + dummyHadCows.LargeGrace +
    dummyHadCows.Cattle

[1] exclP
[[1]]
TotalImputedValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
TotalImputedValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + TotalImputedValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
TotalImputedValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor
```

```
[[4]]
TotalImputedValue ~ FloodInRd1 + dummyHadCows + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + HHsize0 +
    HeadLiteracy0 + TotalImputedValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyHadCows.LargeSize +
    dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
TotalImputedValue ~ FloodInRd1 + dummyHadCows + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + HHsize0 +
    HeadLiteracy0 + TotalImputedValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyHadCows.LargeSize +
    dummyHadCows.WithGrace + dummyHadCows.InKind

[1] excla
[[1]]
TotalImputedValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
TotalImputedValue ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyHadCows + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[[5]]
TotalImputedValue ~ FloodInRd1 + dummyHadCows + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[1] exclT
[[1]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyHadCows +
    dummyLarge + dummyLargeGrace + dummyCattle + dummyLarge.Time3 +
```

```
        dummyLargeGrace.Time3 + dummyCattle.Time3 + dummyLarge.Time4 +
        dummyLargeGrace.Time4 + dummyCattle.Time4 + HHsize0 + HeadLiteracy0 +
        TotalImputedValue0 + dummyHadCows.Large + dummyHadCows.Time3 +
        dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
        dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
        dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
        dummyHadCows.Cattle.Time4

[[5]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyHadCows +
        dummyLarge + dummyLargeGrace + dummyCattle + dummyLarge.Time3 +
        dummyLargeGrace.Time3 + dummyCattle.Time3 + dummyLarge.Time4 +
        dummyLargeGrace.Time4 + dummyCattle.Time4 + HHsize0 + HeadLiteracy0 +
        TotalImputedValue0 + dummyHadCows.Large + dummyHadCows.Time3 +
        dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
        dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
        dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
        dummyHadCows.Cattle.Time4

[1] exclTa
[[1]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
        dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
        dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
        dummyInKind.Time4

[[2]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
        dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
        dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
        dummyInKind.Time4 + TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
        dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
        dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
        dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyHadCows +
        dummyLargeSize + dummyWithGrace + dummyInKind + dummyLargeSize.Time3 +
        dummyWithGrace.Time3 + dummyInKind.Time3 + dummyLargeSize.Time4 +
        dummyWithGrace.Time4 + dummyInKind.Time4 + HHsize0 + HeadLiteracy0 +
        TotalImputedValue0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
        dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
        dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
        dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyHadCows +
        dummyLargeSize + dummyWithGrace + dummyInKind + dummyLargeSize.Time3 +
        dummyWithGrace.Time3 + dummyInKind.Time3 + dummyLargeSize.Time4 +
        dummyWithGrace.Time4 + dummyInKind.Time4 + HHsize0 + HeadLiteracy0 +
        TotalImputedValue0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
        dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
        dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
        dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[1] excl
[[1]]
TotalImputed2Value ~ dummyLarge + dummyLargeGrace + dummyCattle
```

```
[[2]]
TotalImputed2Value ~ dummyLarge + dummyLargeGrace + dummyCattle +
    TotalImputed2Value0

[[3]]
TotalImputed2Value ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalImputed2Value0

[[4]]
TotalImputed2Value ~ FloodInRd1 + dummyHadCows + dummyLarge +
    dummyLargeGrace + dummyCattle + HHsize0 + HeadLiteracy0 +
    TotalImputed2Value0 + dummyHadCows.Large + dummyHadCows.LargeGrace +
    dummyHadCows.Cattle

[[5]]
TotalImputed2Value ~ FloodInRd1 + dummyHadCows + dummyLarge +
    dummyLargeGrace + dummyCattle + HHsize0 + HeadLiteracy0 +
    TotalImputed2Value0 + dummyHadCows.Large + dummyHadCows.LargeGrace +
    dummyHadCows.Cattle

[1] exclP
[[1]]
TotalImputed2Value ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
TotalImputed2Value ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + TotalImputed2Value0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
TotalImputed2Value ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputed2Value0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[4]]
TotalImputed2Value ~ FloodInRd1 + dummyHadCows + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + HHsize0 +
    HeadLiteracy0 + TotalImputed2Value0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyHadCows.LargeSize +
    dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
TotalImputed2Value ~ FloodInRd1 + dummyHadCows + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + HHsize0 +
    HeadLiteracy0 + TotalImputed2Value0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyHadCows.LargeSize +
    dummyHadCows.WithGrace + dummyHadCows.InKind

[1] excla
[[1]]
TotalImputed2Value ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
TotalImputed2Value ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    TotalImputed2Value0

[[3]]
```

```
TotalImputed2Value ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalImputed2Value0

[[4]]
TotalImputed2Value ~ FloodInRd1 + dummyHadCows + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputed2Value0 + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[[5]]
TotalImputed2Value ~ FloodInRd1 + dummyHadCows + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputed2Value0 + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[1] exclT
[[1]]
TotalImputed2Value ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
TotalImputed2Value ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + TotalImputed2Value0

[[3]]
TotalImputed2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalImputed2Value0

[[4]]
TotalImputed2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyHadCows +
    dummyLarge + dummyLargeGrace + dummyCattle + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyCattle.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + HHsize0 + HeadLiteracy0 +
    TotalImputed2Value0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[[5]]
TotalImputed2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyHadCows +
    dummyLarge + dummyLargeGrace + dummyCattle + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyCattle.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + HHsize0 + HeadLiteracy0 +
    TotalImputed2Value0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[1] exclTa
[[1]]
TotalImputed2Value ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
```

```
    dummyInKind.Time4

[[2]]
TotalImputed2Value ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + TotalImputed2Value0

[[3]]
TotalImputed2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputed2Value0

[[4]]
TotalImputed2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyHadCows +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyLargeSize.Time4 +
    dummyWithGrace.Time4 + dummyInKind.Time4 + HHsize0 + HeadLiteracy0 +
    TotalImputed2Value0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
TotalImputed2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyHadCows +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyLargeSize.Time4 +
    dummyWithGrace.Time4 + dummyInKind.Time4 + HHsize0 + HeadLiteracy0 +
    TotalImputed2Value0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4
```

III.5.3 Cattle holding

```
             AttritIn
Arm             2    3    4    9  Sum
  traditional   7    4   20  144  175
  large         5    2    1  191  199
  large grace  12    3    3  170  188
  cattle        5    5   13  176  199
  Sum          29   14   37  681  761
     NumCows
tee      0    1    2    3    4    5    6    7    8    9  <NA>   Sum
  2     15  308  153   40   11    1    2    0    1    1   196   728
  3      5  337  175   40   15    1    2    2    1    0   110   688
  4      4  218  201   54   11    4    2    0    1    1    86   582
  Sum   24  863  529  134   37    6    6    2    3    2   392  1998
```

```
Warning in `[.data.table`(lvoN, , `:=`(grepout("TotalImputed2?Value.?", : Column 'TotalImp
```

```
[1] 5
```

```
[1] excl
[[1]]
NumCows ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
```

86

```
NumCows ~ dummyLarge + dummyLargeGrace + dummyCattle + NumCows0

[[3]]
NumCows ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NumCows0

[[4]]
NumCows ~ FloodInRd1 + dummyHadCows + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + NumCows0 + dummyHadCows.Large +
    dummyHadCows.LargeGrace + dummyHadCows.Cattle

[[5]]
NumCows ~ FloodInRd1 + dummyHadCows + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + NumCows0 + dummyHadCows.Large +
    dummyHadCows.LargeGrace + dummyHadCows.Cattle

[1] exclP
[[1]]
NumCows ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
NumCows ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[3]]
NumCows ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[4]]
NumCows ~ FloodInRd1 + dummyHadCows + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[[5]]
NumCows ~ FloodInRd1 + dummyHadCows + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[1] excla
[[1]]
NumCows ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NumCows ~ dummyLargeSize + dummyWithGrace + dummyInKind + NumCows0

[[3]]
NumCows ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NumCows0

[[4]]
NumCows ~ FloodInRd1 + dummyHadCows + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0 + dummyHadCows.LargeSize +
    dummyHadCows.WithGrace + dummyHadCows.InKind
```

```
[[5]]
NumCows ~ FloodInRd1 + dummyHadCows + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0 + dummyHadCows.LargeSize +
    dummyHadCows.WithGrace + dummyHadCows.InKind

[1] exclT
[[1]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[2]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    NumCows0

[[3]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0

[[4]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyHadCows + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    dummyHadCows.Large + dummyHadCows.Time3 + dummyHadCows.Large.Time3 +
    dummyHadCows.Time4 + dummyHadCows.Large.Time4 + dummyHadCows.LargeGrace +
    dummyHadCows.LargeGrace.Time3 + dummyHadCows.LargeGrace.Time4 +
    dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 + dummyHadCows.Cattle.Time4

[[5]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyHadCows + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    dummyHadCows.Large + dummyHadCows.Time3 + dummyHadCows.Large.Time3 +
    dummyHadCows.Time4 + dummyHadCows.Large.Time4 + dummyHadCows.LargeGrace +
    dummyHadCows.LargeGrace.Time3 + dummyHadCows.LargeGrace.Time4 +
    dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 + dummyHadCows.Cattle.Time4

[1] exclTa
[[1]]
NumCows ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NumCows ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NumCows0

[[3]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
```
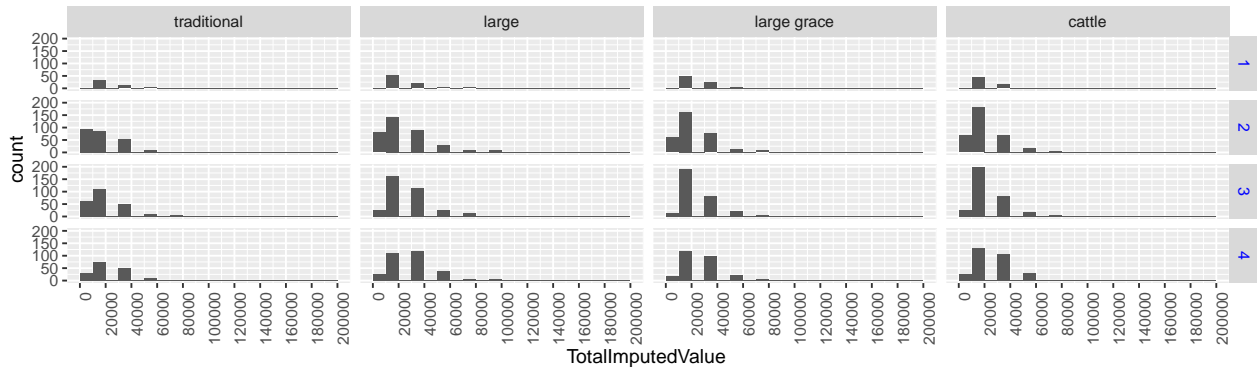
Figure 11: Total imputed value of livestock holding
Livestock holding values are computed by using respective median prices of each year.

```
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0

[[4]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyHadCows + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    dummyHadCows.Time3 + dummyHadCows.Time4 + dummyHadCows.LargeSize +
    dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyHadCows + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    dummyHadCows.Time3 + dummyHadCows.Time4 + dummyHadCows.LargeSize +
    dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4
```

| | HoldingClass | | | | |
tee	below 1000	1000-29999	30000-49999	above 50000	Sum
1	623	99	30	9	761
2	210	309	153	56	728
3	115	337	175	61	688
4	90	218	201	73	582

| | povertystatus | | |
BStatus	Ultra Poor	Moderately Poor	<NA>
borrower	409	163	0
pure saver	0	0	0
individual rejection	56	33	0
group rejection	0	0	60
rejection by flood	0	0	40
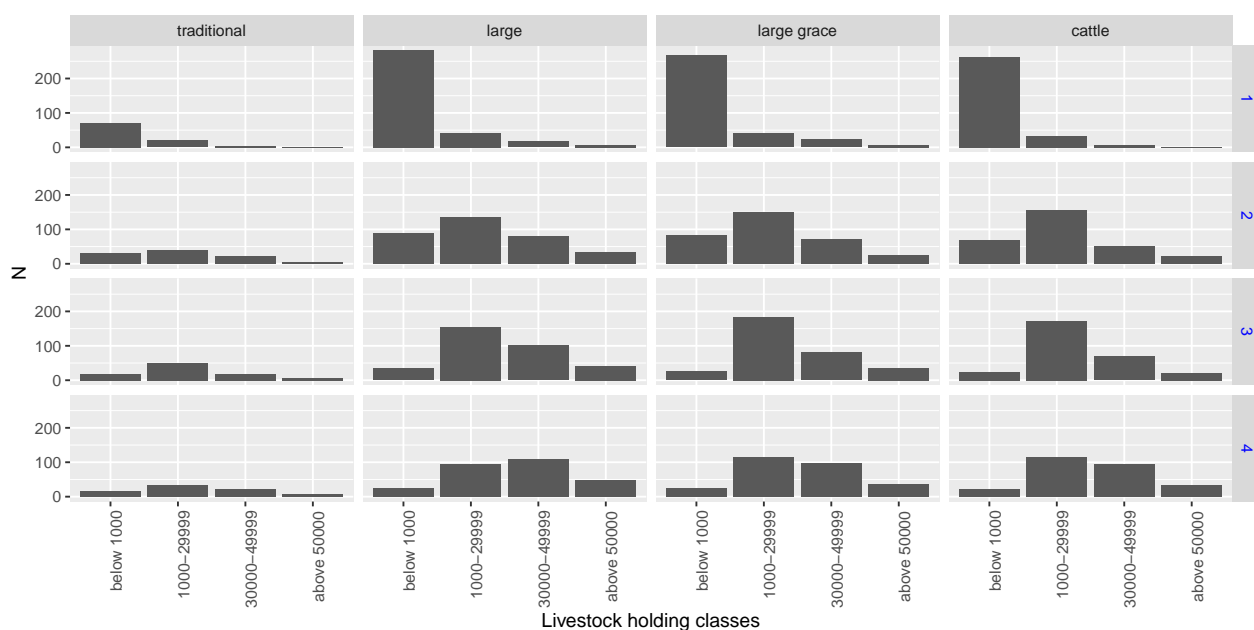
Figure 12: Histogram of livestock holding classes
Livestock holding values are computed by using respective median prices of each year.
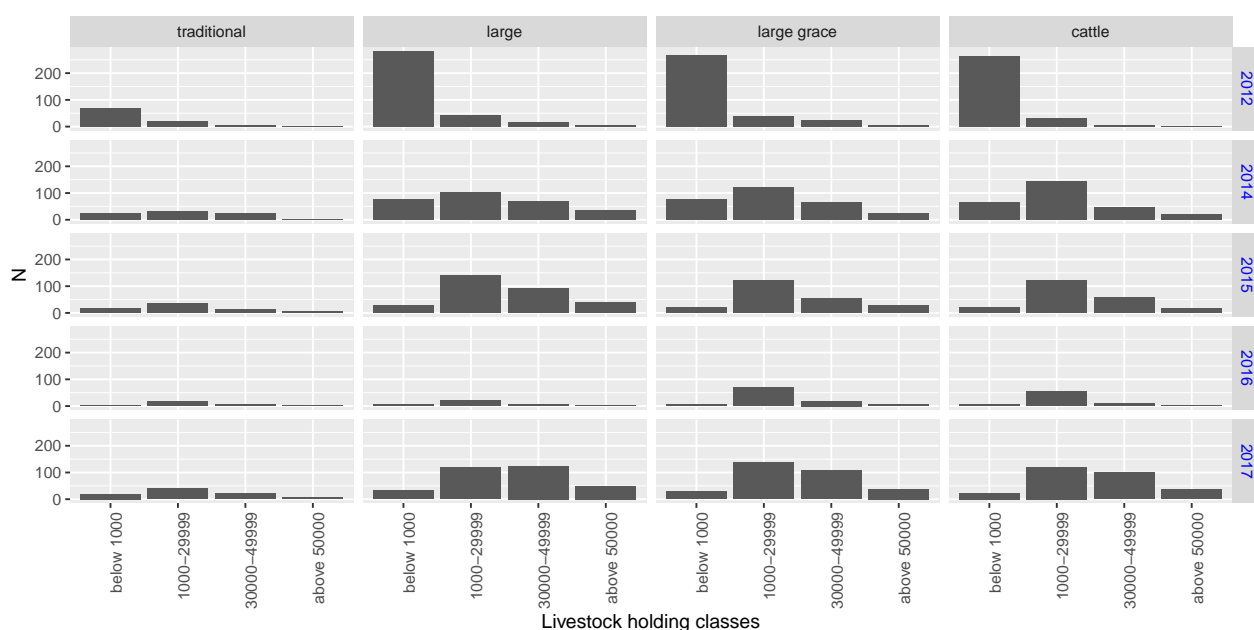
Figure 13: Histogram of livestock holding classes by year
Livestock holding values are computed by using respective median prices of each year.

FIGURE 14: LVESTOCK HOLDING AT BASELINE

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Source: Survey data
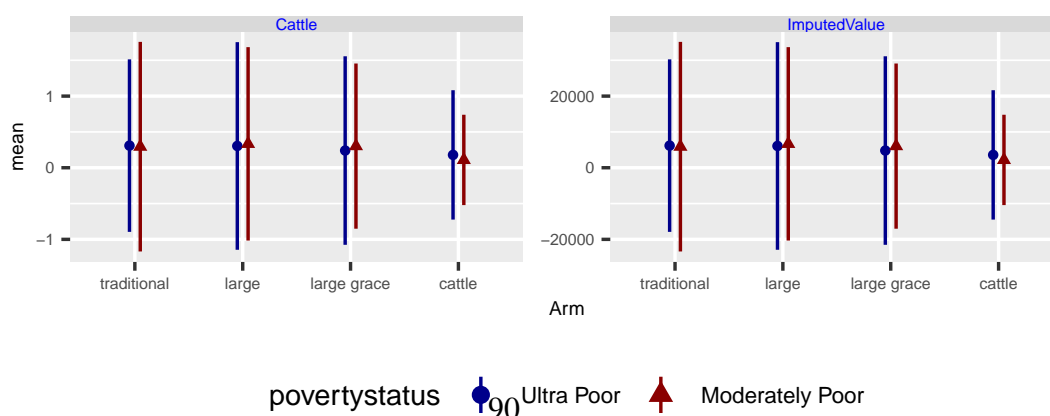
- cattle reports above 20000 holding in rds 2-4 while traditional does not.

```
           Arm survey MeanImputedVal MeanNumCows      N
         <fctr>  <num>          <num>        <num> <int>
 1: traditional      1        4557.82     0.227891    294
 2: traditional      2       18965.26     1.601449    234
 3: traditional      3       21270.53     1.502703    262
 4: traditional      4       23364.52     1.591195    217
 5:       large      1        5513.78     0.275689    399
 6:       large      2       29214.50     1.979253    327
 7:       large      3       31623.09     1.798799    379
 8:       large      4       33248.21     1.882175    375
 9: large grace      1        6666.67     0.333333    399
10: large grace      2       24273.25     1.648649    302
11: large grace      3       28044.08     1.532051    341
12: large grace      4       31599.85     1.744108    328
13:      cattle      1        4360.90     0.218045    399
14:      cattle      2       22239.38     1.457031    336
15:      cattle      3       26102.42     1.474522    355
16:      cattle      4       29716.61     1.655405    330
```

FIGURE 15: NUMBER OF COWS/OXEN BY YEAR
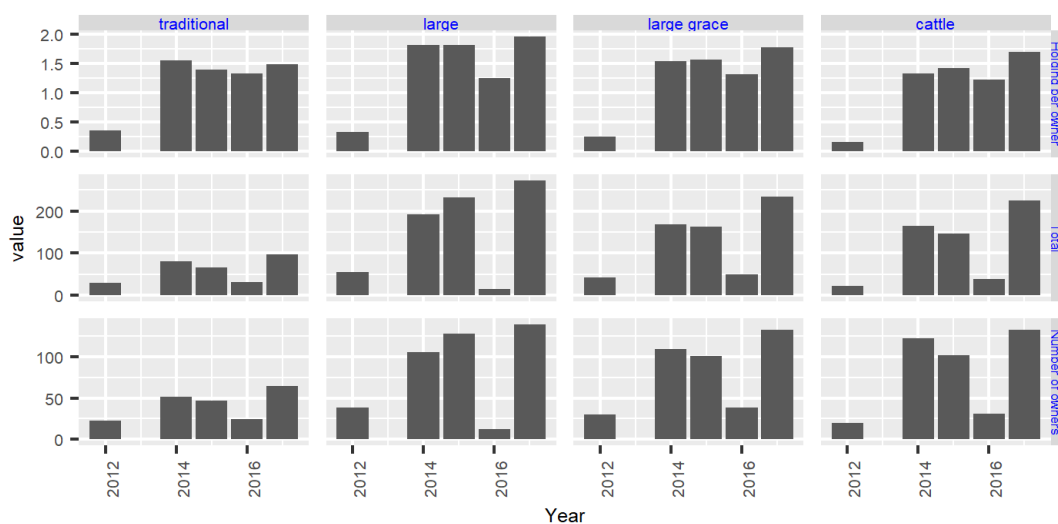
Source: Survey data.

Note:

FIGURE 16: NUMBER OF COWS/OXEN BY SURVEY ROUND
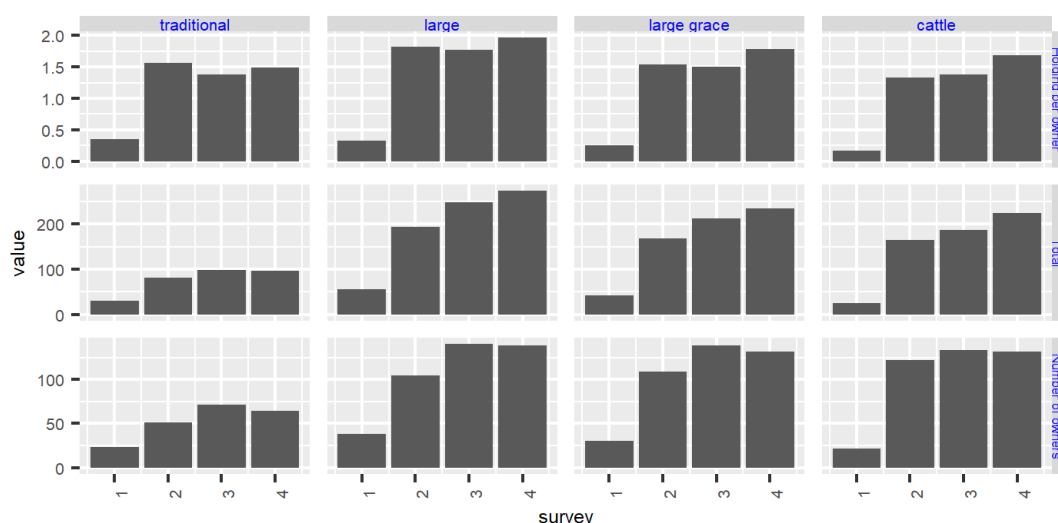
Source: Survey data.

Note:

TABLE 40: ANCOVA ESTIMATION OF LIVESTOCK HOLDING VALUES

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		20988.8	19118.6	13496.7	13383.1
		(0.0)	(0.0)	(0.0)	(0.0)
Large	0.273	9623.6	8925.8	8574.2	8296.2
	(0.45)	(0.3)	(0.1)	(0.2)	(0.1)
LargeGrace	0.248	4808.8	4523.2	4614.1	4711.8
	(0.43)	(5.2)	(5.2)	(4.1)	(3.9)
Cattle	0.264	4448.8	4681.4	4657.5	4582.7
	(0.44)	(1.0)	(0.5)	(0.5)	(0.5)
HadCattle	0.195				6935.8
	(0.40)				(14.7)
FloodInRd1	0.491			1032.3	1144.7
	(0.50)			(53.6)	(49.2)
Head literate0	0.114			−560.4	−462.0
	(0.32)			(78.4)	(82.0)
livestock value1	5315.315		0.4	0.4	0.2
	(12450.23)		(0.0)	(0.1)	(33.6)
HHsize0	4.219			1267.1	1206.0
	(1.43)			(1.5)	(2.1)
HadCattle × Large	0.063				12418.1
	(0.24)				(12.5)
HadCattle × LargeGrace	0.049				746.9
	(0.22)				(87.8)
HadCattle × Cattle	0.045				1345.6
	(0.21)				(75.7)
mean of dependent variable		25986	25986	25986	25986
T = 2		40	40	40	40
T = 3		106	106	106	106
T = 4		582	582	582	582
$\bar{R}^2$		0.024	0.076	0.083	0.095
N	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level. P values in parenthesises. Standard errors are clustered at group (village) level.

TABLE 41: ANCOVA ESTIMATION OF LIVESTOCK HOLDING VALUES BY ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		20988.8	19118.6	13496.7	13383.1
		(0.0)	(0.0)	(0.0)	(0.0)
Upfront	0.785	9623.6	8925.8	8574.2	8296.2
	(0.41)	(0.3)	(0.1)	(0.2)	(0.1)
WithGrace	0.512	−4814.7	−4402.6	−3960.1	−3584.4
	(0.50)	(17.3)	(16.0)	(21.8)	(23.5)
InKind	0.264	−360.1	158.3	43.5	−129.1
	(0.44)	(86.9)	(94.3)	(98.4)	(95.2)
HadCattle	0.195				6935.8
	(0.40)				(14.7)
FloodInRd1	0.491			1032.3	1144.7
	(0.50)			(53.6)	(49.2)
Head literate0	0.114			−560.4	−462.0
	(0.32)			(78.4)	(82.0)
livestock value$_1$	5315.315		0.4	0.4	0.2
	(12450.23)		(0.0)	(0.1)	(33.6)
HHsize0	4.219			1267.1	1206.0
	(1.43)			(1.5)	(2.1)
HadCattle × Upfront	0.157				12418.1
	(0.36)				(12.5)
HadCattle × WithGrace	0.094				−11671.2
	(0.29)				(15.6)
HadCattle × InKind	0.045				598.7
	(0.21)				(89.3)
mean of dependent variable		25986	25986	25986	25986
$T = 2$		40	40	40	40
$T = 3$		106	106	106	106
$T = 4$		582	582	582	582
$\bar{R}^2$		0.024	0.076	0.083	0.095
N	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 42: ANCOVA ESTIMATION OF LIVESTOCK HOLDING VALUES, ULTRA VS. MODERATELY POOR

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		21953.7	19944.3	14138.4	13953.5
		(0.0)	(0.0)	(0.0)	(0.0)
Upfront	0.785	9908.7	9383.5	9053.2	8760.7
	(0.41)	(0.2)	(0.1)	(0.1)	(0.1)
WithGrace	0.512	−5000.0	−4606.3	−4207.4	−3847.6
	(0.50)	(15.2)	(13.4)	(18.5)	(19.5)
InKind	0.264	−201.0	322.6	245.2	81.2
	(0.44)	(92.6)	(88.3)	(90.9)	(97.0)
UltraPoor	0.630	−1902.4	−2004.4	−1956.6	−1780.7
	(0.48)	(18.4)	(15.7)	(17.6)	(19.8)
Upfront × UltraPoor	0.524	−4782.5	−3397.7	−3531.0	−3069.6
	(0.50)	(27.9)	(39.4)	(37.9)	(44.7)
WithGrace × UltraPoor	0.352	8053.9	8415.9	8910.6	8422.9
	(0.48)	(6.4)	(5.0)	(4.1)	(4.5)
InKind × UltraPoor	0.181	−2300.4	−2272.3	−2366.3	−2562.7
	(0.39)	(50.0)	(54.5)	(52.8)	(47.4)
HadCattle	0.195				6987.1
	(0.40)				(14.9)
FloodInRd1	0.491			911.3	1033.5
	(0.50)			(58.2)	(53.5)
Head literate0	0.114			−828.7	−713.5
	(0.32)			(68.2)	(72.2)
livestock value$_1$	5315.315		0.4	0.4	0.2
	(12450.23)		(0.0)	(0.1)	(33.8)
HHsize0	4.219			1321.7	1255.4
	(1.43)			(0.9)	(1.5)
HadCattle × Upfront	0.157				11265.2
	(0.36)				(17.6)
HadCattle × WithGrace	0.094				−11119.9
	(0.29)				(18.5)
HadCattle × InKind	0.045				368.9
	(0.21)				(93.3)
mean of dependent variable		25986	25986	25986	25986
$T = 2$		40	40	40	40
$T = 3$		106	106	106	106
$T = 4$		582	582	582	582
$\bar{R}^2$		0.029	0.082	0.089	0.1
N	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

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TABLE 43: ANCOVA ESTIMATION OF LIVESTOCK HOLDING VALUES BY ATTRIBUTES AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		18149.0	16157.5	10386.5	10100.7
		(0.0)	(0.0)	(0.0)	(0.0)
Upfront	0.785	9780.4	9036.1	8661.0	8348.5
	(0.41)	(0.3)	(0.1)	(0.2)	(0.2)
WithGrace	0.512	−5431.9	−4962.4	−4505.7	−4126.4
	(0.50)	(12.3)	(11.2)	(15.8)	(17.0)
InKind	0.264	−5.1	492.8	368.0	238.0
	(0.44)	(99.8)	(82.2)	(86.2)	(90.9)
rd 3	0.348	2891.6	3011.2	3062.4	3128.7
	(0.48)	(0.2)	(0.1)	(0.1)	(0.1)
Upfront × rd 3	0.269	−1951.6	−1782.3	−1726.7	−1435.2
	(0.44)	(50.6)	(54.3)	(55.6)	(62.3)
WithGrace × rd 3	0.176	3035.2	2831.1	2799.9	2661.2
	(0.38)	(30.6)	(33.3)	(34.4)	(35.6)
InKind × rd 3	0.091	−1695.5	−1777.5	−1766.4	−1847.5
	(0.29)	(45.0)	(41.9)	(43.0)	(39.2)
rd 4	0.326	5956.7	6180.7	6249.3	6298.9
	(0.47)	(0.0)	(0.0)	(0.0)	(0.0)
Upfront × rd 4	0.260	−665.3	−447.3	−322.6	−9.8
	(0.44)	(84.7)	(89.6)	(92.5)	(99.8)
WithGrace × rd 4	0.166	4713.5	4384.1	4373.7	4256.5
	(0.37)	(17.3)	(20.3)	(20.8)	(21.2)
InKind × rd 4	0.085	−2024.8	−1643.4	−1559.6	−1804.4
	(0.28)	(46.2)	(55.3)	(57.4)	(51.3)
HadCattle	0.195				7657.7
	(0.40)				(10.6)
HadCattle × rd 3	0.067				−4133.9
	(0.25)				(4.5)
HadCattle × rd 4	0.061				−3786.4
	(0.24)				(16.7)
FloodInRd1	0.491			1052.6	1157.6
	(0.50)			(52.7)	(48.7)
Head literate0	0.114			−572.7	−480.5
	(0.32)			(78.0)	(81.4)
livestock value₁	5315.315		0.4	0.4	0.2
	(12450.23)		(0.0)	(0.1)	(33.1)
HHsize0	4.219			1294.6	1236.7
	(1.43)			(1.3)	(1.9)
HadCattle × Upfront	0.157				11420.4
	(0.36)				(13.5)
HadCattle × Upfront × rd 3	0.054				5340.1
	(0.23)				(32.4)
HadCattle × Upfront × rd 4	0.050				6789.7
	(0.22)				(38.2)
HadCattle × WithGrace	0.094				−9187.7
	(0.29)				(22.8)
HadCattle × WithGrace × rd 3	0.033				−13729.8
	(0.18)				(3.0)
HadCattle × WithGrace × rd 4	0.029				−15645.7
	(0.17)				(5.9)
HadCattle × InKind	0.045				−1531.9
	(0.21)				(71.8)
HadCattle × InKind × rd 3	0.016				13406.1
	(0.13)				(2.1)
HadCattle × InKind × rd 4	0.013				12935.4
	(0.11)				(8.2)
mean of dependent variable		25986	25986	25986	25986
T = 2		40	40	40	40
T = 3		106	106	106	106
T = 4		582	582	582	582
$\bar{R}^2$		0.034	0.088	0.095	0.108
N	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 44: ANCOVA ESTIMATION OF LIVESTOCK HOLDING VALUES USING ANNUAL PRICES

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		29833.8	27298.2	20380.3	20397.5
		(0.0)	(0.0)	(0.0)	(0.0)
Large	0.273	14325.3	13379.2	12940.4	12534.5
	(0.45)	(0.3)	(0.1)	(0.2)	(0.1)
LargeGrace	0.248	7719.4	7332.1	7449.7	7586.5
	(0.43)	(3.5)	(3.4)	(2.7)	(2.6)
Cattle	0.264	6838.6	7154.1	7129.0	7029.4
	(0.44)	(0.8)	(0.4)	(0.4)	(0.4)
HadCattle	0.195				7594.1
	(0.40)				(29.3)
FloodInRd1	0.491			1323.7	1444.6
	(0.50)			(58.3)	(54.8)
Head literate0	0.114			−820.1	−597.0
	(0.32)			(78.6)	(84.1)
livestock value$_1$	5315.315		0.5	0.5	0.3
	(12450.23)		(0.1)	(0.3)	(31.7)
HHsize0	4.219			1556.0	1455.2
	(1.43)			(3.6)	(5.5)
HadCattle × Large	0.063				17919.6
	(0.24)				(13.2)
HadCattle × LargeGrace	0.049				−81.7
	(0.22)				(99.1)
HadCattle × Cattle	0.045				1433.8
	(0.21)				(82.2)
mean of dependent variable		37468	37468	37468	37468
$T = 2$		40	40	40	40
$T = 3$		106	106	106	106
$T = 4$		582	582	582	582
$\bar{R}^2$		0.02	0.057	0.06	0.069
N	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.P values in parenthesises. Standard errors are clustered at group (village) level.

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TABLE 45: ANCOVA ESTIMATION OF LIVESTOCK HOLDING VALUES USING ANNUAL PRICES BY ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		29833.8	27298.2	20380.3	20397.5
		(0.0)	(0.0)	(0.0)	(0.0)
Upfront	0.785	14325.3	13379.2	12940.4	12534.5
	(0.41)	(0.3)	(0.1)	(0.2)	(0.1)
WithGrace	0.512	−6605.9	−6047.2	−5490.7	−4948.0
	(0.50)	(19.9)	(18.6)	(24.7)	(26.5)
InKind	0.264	−880.8	−178.0	−320.7	−557.2
	(0.44)	(78.3)	(95.6)	(92.0)	(86.1)
HadCattle	0.195				7594.1
	(0.40)				(29.3)
FloodInRd1	0.491			1323.7	1444.6
	(0.50)			(58.3)	(54.8)
Head literate0	0.114			−820.1	−597.0
	(0.32)			(78.6)	(84.1)
livestock value$_1$	5315.315		0.5	0.5	0.3
	(12450.23)		(0.1)	(0.3)	(31.7)
HHsize0	4.219			1556.0	1455.2
	(1.43)			(3.6)	(5.5)
HadCattle × Upfront	0.157				17919.6
	(0.36)				(13.2)
HadCattle × WithGrace	0.094				−18001.2
	(0.29)				(14.3)
HadCattle × InKind	0.045				1515.4
	(0.21)				(82.4)
mean of dependent variable		37468	37468	37468	37468
$T = 2$		40	40	40	40
$T = 3$		106	106	106	106
$T = 4$		582	582	582	582
$\bar{R}^2$		0.02	0.057	0.06	0.069
N	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 46: ANCOVA ESTIMATION OF LIVESTOCK HOLDING VALUES USING ANNUAL PRICES, ULTRA VS. MODERATELY POOR

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		30751.3	28025.8	20827.7	20777.2
		(0.0)	(0.0)	(0.0)	(0.0)
Upfront	0.785	14679.3	13966.9	13551.8	13111.6
	(0.41)	(0.2)	(0.0)	(0.1)	(0.0)
WithGrace	0.512	−6888.0	−6354.1	−5847.1	−5315.1
	(0.50)	(17.8)	(16.0)	(21.4)	(22.8)
InKind	0.264	−695.9	14.3	−86.9	−322.5
	(0.44)	(82.8)	(99.6)	(97.8)	(92.0)
UltraPoor	0.630	−1908.6	−2047.0	−1989.8	−1771.1
	(0.48)	(35.2)	(31.9)	(34.0)	(37.3)
Upfront × UltraPoor	0.524	−5938.9	−4060.6	−4214.2	−3733.1
	(0.50)	(33.5)	(46.4)	(44.3)	(50.2)
WithGrace × UltraPoor	0.352	10743.9	11234.9	11841.9	11039.6
	(0.48)	(8.4)	(6.8)	(5.7)	(6.4)
InKind × UltraPoor	0.181	−2630.7	−2592.6	−2712.7	−2809.0
	(0.39)	(61.1)	(65.4)	(64.0)	(60.9)
HadCattle	0.195				7693.1
	(0.40)				(29.4)
FloodInRd1	0.491			1184.7	1314.5
	(0.50)			(62.1)	(58.5)
Head literate0	0.114			−1075.9	−837.9
	(0.32)			(71.8)	(77.5)
livestock value₁	5315.315		0.5	0.5	0.3
	(12450.23)		(0.1)	(0.3)	(32.1)
HHsize0	4.219			1633.5	1525.7
	(1.43)			(2.5)	(4.2)
HadCattle × Upfront	0.157				16484.4
	(0.36)				(17.8)
HadCattle × WithGrace	0.094				−17262.5
	(0.29)				(16.7)
HadCattle × InKind	0.045				1203.5
	(0.21)				(85.7)
mean of dependent variable		37468	37468	37468	37468
T = 2		40	40	40	40
T = 3		106	106	106	106
T = 4		582	582	582	582
$\bar{R}^2$		0.022	0.059	0.063	0.071
N	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

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covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		16429.0 (0.0)	13647.9 (0.0)	6119.4 (9.7)	6220.2 (10.2)
Upfront	0.785 (0.41)	12578.0 (0.3)	11538.6 (0.1)	11055.8 (0.2)	10794.8 (0.2)
WithGrace	0.512 (0.50)	−6302.8 (17.0)	−5647.2 (16.1)	−5063.0 (22.3)	−4688.1 (23.5)
InKind	0.264 (0.44)	−314.6 (91.1)	380.7 (89.4)	236.1 (93.2)	53.7 (98.4)
rd 3	0.348 (0.48)	9406.7 (0.0)	9573.8 (0.0)	9642.3 (0.0)	9623.2 (0.0)
Upfront × rd 3	0.269 (0.44)	174.5 (95.7)	410.9 (90.0)	486.9 (88.2)	512.6 (87.2)
WithGrace × rd 3	0.176 (0.38)	1965.7 (55.3)	1680.7 (60.9)	1635.2 (62.4)	1755.6 (58.4)
InKind × rd 3	0.091 (0.29)	−1895.4 (45.4)	−2009.9 (41.8)	−1995.3 (43.0)	−2005.2 (41.9)
rd 4	0.326 (0.47)	34346.9 (0.0)	34659.8 (0.0)	34750.6 (0.0)	34655.0 (0.0)
Upfront × rd 4	0.260 (0.44)	8870.9 (15.5)	9175.4 (14.3)	9339.5 (13.6)	8855.8 (12.1)
WithGrace × rd 4	0.166 (0.37)	2180.9 (73.6)	1720.9 (79.2)	1702.4 (79.6)	2276.6 (70.7)
InKind × rd 4	0.085 (0.28)	−3117.7 (51.4)	−2585.1 (59.1)	−2480.4 (60.6)	−2483.2 (61.0)
HadCattle	0.195 (0.40)				7384.0 (30.3)
HadCattle × rd 3	0.067 (0.25)				−1526.9 (54.8)
HadCattle × rd 4	0.061 (0.24)				6716.8 (22.7)
FloodInRd1	0.491 (0.50)			1317.1 (58.3)	1446.8 (54.6)
Head literate0	0.114 (0.32)			−957.8 (75.2)	−696.0 (81.6)
livestock value₁	5315.315 (12450.23)		0.5 (0.1)	0.5 (0.2)	0.3 (29.4)
HHsize0	4.219 (1.43)			1699.5 (2.2)	1600.3 (3.4)
HadCattle × Upfront	0.157 (0.36)				15734.5 (12.8)
HadCattle × Upfront × rd 3	0.054 (0.23)				8816.8 (20.7)
HadCattle × Upfront × rd 4	0.050 (0.22)				21766.8 (20.4)
HadCattle × WithGrace	0.094 (0.29)				−14244.8 (17.3)
HadCattle × WithGrace × rd 3	0.033 (0.18)				−17856.0 (2.7)
HadCattle × WithGrace × rd 4	0.029 (0.17)				−33784.7 (6.1)
HadCattle × InKind	0.045 (0.21)				12.1 (99.8)
HadCattle × InKind × rd 3	0.016 (0.13)				14707.2 (2.8)
HadCattle × InKind × rd 4	0.013 (0.11)				17092.8 (17.0)
mean of dependent variable		37468	37468	37468	37468
T = 2		40	40	40	40
T = 3		106	106	106	106
T = 4		582	582	582	582
$\bar{R}^2$		0.195	0.235	0.239	0.252
N	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 48: ANCOVA ESTIMATION OF LIVESTOCK HOLDING

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		1.49 (0.0)	1.39 (0.0)	1.16 (0.0)	1.17 (0.0)
Large	0.273 (0.45)	0.39 (0.9)	0.37 (0.6)	0.35 (1.1)	0.31 (0.7)
LargeGrace	0.248 (0.43)	0.07 (53.9)	0.08 (47.6)	0.09 (43.7)	0.07 (49.9)
Cattle	0.264 (0.44)	0.00 (98.8)	0.02 (77.9)	0.02 (80.6)	0.00 (95.7)
HadCattle	0.195 (0.40)				0.16 (41.1)
FloodInRd1	0.491 (0.50)			0.04 (59.7)	0.05 (53.4)
Head literate0	0.114 (0.32)			0.01 (89.4)	0.01 (88.7)
NumCattle0	0.266 (0.62)		0.30 (0.3)	0.29 (0.6)	0.19 (22.3)
HHsize0	4.219 (1.43)			0.05 (4.3)	0.05 (5.0)
HadCattle × Large	0.063 (0.24)				0.73 (5.7)
HadCattle × LargeGrace	0.049 (0.22)				0.40 (3.8)
HadCattle × Cattle	0.045 (0.21)				0.27 (17.4)
mean of dependent variable		1.61	1.61	1.61	1.61
$T = 2$		85	85	85	85
$T = 3$		168	168	168	168
$T = 4$		395	395	395	395
$\bar{R}^2$		0.03	0.074	0.078	0.091
N	1998	1606	1606	1606	1606

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		1.49 (0.0)	1.39 (0.0)	1.16 (0.0)	1.17 (0.0)
Upfront	0.785 (0.41)	0.39 (0.9)	0.37 (0.6)	0.35 (1.1)	0.31 (0.7)
WithGrace	0.512 (0.50)	−0.32 (6.2)	−0.29 (5.1)	−0.27 (8.7)	−0.24 (8.8)
InKind	0.264 (0.44)	−0.07 (50.7)	−0.06 (57.5)	−0.07 (51.0)	−0.07 (48.7)
HadCattle	0.195 (0.40)				0.16 (41.1)
FloodInRd1	0.491 (0.50)			0.04 (59.7)	0.05 (53.4)
Head literate0	0.114 (0.32)			0.01 (89.4)	0.01 (88.7)
NumCattle0	0.266 (0.62)		0.30 (0.3)	0.29 (0.6)	0.19 (22.3)
HHsize0	4.219 (1.43)			0.05 (4.3)	0.05 (5.0)
HadCattle × Upfront	0.157 (0.36)				0.73 (5.7)
HadCattle × WithGrace	0.094 (0.29)				−0.32 (39.5)
HadCattle × InKind	0.045 (0.21)				−0.14 (45.0)
mean of dependent variable		1.61	1.61	1.61	1.61
$T = 2$		85	85	85	85
$T = 3$		168	168	168	168
$T = 4$		395	395	395	395
$\bar{R}^2$		0.03	0.074	0.078	0.091
N	1998	1606	1606	1606	1606

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 50: ANCOVA ESTIMATION OF LIVESTOCK HOLDING, ULTRA VS. MODERATELY POOR

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		1.51 (0.0)	1.41 (0.0)	1.16 (0.0)	1.17 (0.0)
Upfront	0.785 (0.41)	0.42 (0.4)	0.40 (0.1)	0.39 (0.3)	0.35 (0.1)
WithGrace	0.512 (0.50)	−0.33 (5.0)	−0.30 (3.7)	−0.28 (7.0)	−0.25 (6.5)
InKind	0.264 (0.44)	−0.07 (54.5)	−0.05 (62.0)	−0.06 (55.1)	−0.06 (53.0)
UltraPoor	0.630 (0.48)	−0.08 (19.1)	−0.09 (15.4)	−0.09 (16.9)	−0.07 (24.3)
Upfront × UltraPoor	0.524 (0.50)	−0.08 (62.5)	−0.01 (93.0)	−0.00 (99.4)	−0.04 (81.3)
WithGrace × UltraPoor	0.352 (0.48)	0.49 (1.1)	0.51 (0.7)	0.52 (0.8)	0.51 (0.9)
InKind × UltraPoor	0.181 (0.39)	−0.11 (53.8)	−0.10 (57.5)	−0.10 (58.8)	−0.11 (54.8)
HadCattle	0.195 (0.40)				0.17 (39.5)
FloodInRd1	0.491 (0.50)			0.05 (58.0)	0.05 (53.9)
Head literate0	0.114 (0.32)			0.01 (90.2)	0.01 (89.5)
NumCattle0	0.266 (0.62)		0.31 (0.2)	0.30 (0.6)	0.19 (23.2)
HHsize0	4.219 (1.43)			0.05 (2.2)	0.05 (3.0)
HadCattle × Upfront	0.157 (0.36)				0.63 (10.9)
HadCattle × WithGrace	0.094 (0.29)				−0.30 (44.3)
HadCattle × InKind	0.045 (0.21)				−0.15 (40.0)
mean of dependent variable		1.61	1.61	1.61	1.61
T = 2		85	85	85	85
T = 3		168	168	168	168
T = 4		395	395	395	395
$\bar{R}^2$		0.041	0.087	0.093	0.102
N	1998	1606	1606	1606	1606

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 51: ANCOVA ESTIMATION OF LIVESTOCK HOLDING BY TIME

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		1.47 (0.0)	1.36 (0.0)	1.12 (0.0)	1.14 (0.0)
Large	0.273 (0.45)	0.39 (0.6)	0.37 (0.4)	0.35 (0.8)	0.30 (0.7)
LargeGrace	0.248 (0.43)	0.01 (93.4)	0.02 (87.4)	0.02 (83.9)	−0.00 (99.4)
Cattle	0.264 (0.44)	−0.05 (44.1)	−0.03 (72.0)	−0.03 (67.5)	−0.05 (44.5)
rd 3	0.348 (0.48)	−0.02 (71.4)	0.00 (97.3)	0.00 (93.8)	0.00 (94.5)
Large × rd 3	0.094 (0.29)	−0.05 (74.9)	−0.05 (75.5)	−0.05 (77.9)	−0.02 (91.3)
LargeGrace × rd 3	0.085 (0.28)	0.19 (28.5)	0.20 (25.5)	0.21 (24.9)	0.25 (15.2)
Cattle × rd 3	0.091 (0.29)	0.17 (18.0)	0.16 (23.6)	0.16 (24.6)	0.18 (15.7)
rd 4	0.326 (0.47)	0.16 (1.0)	0.18 (0.5)	0.19 (0.4)	0.19 (0.3)
Large × rd 4	0.094 (0.29)	0.04 (80.3)	0.04 (81.9)	0.05 (78.2)	0.08 (62.6)
LargeGrace × rd 4	0.081 (0.27)	0.41 (3.0)	0.39 (3.2)	0.40 (3.0)	0.45 (1.2)
Cattle × rd 4	0.085 (0.28)	0.34 (0.8)	0.34 (1.1)	0.35 (1.1)	0.37 (0.4)
HadCattle	0.195 (0.40)				0.16 (40.9)
HadCattle × rd 3	0.067 (0.25)				0.05 (69.7)
HadCattle × rd 4	0.061 (0.24)				−0.05 (74.4)
FloodInRd1	0.491 (0.50)			0.05 (57.2)	0.05 (50.6)
Head literate0	0.114 (0.32)			0.02 (85.6)	0.02 (85.2)
NumCattle0	0.266 (0.62)		0.31 (0.3)	0.29 (0.6)	0.19 (21.1)
HHsize0	4.219 (1.43)			0.05 (3.7)	0.05 (4.2)
HadCattle × Large	0.063 (0.24)				0.70 (4.4)
HadCattle × Large × rd 3	0.021 (0.14)				0.15 (63.4)
HadCattle × Large × rd 4	0.021 (0.14)				0.10 (81.6)
HadCattle × LargeGrace	0.049 (0.22)				0.49 (1.3)
HadCattle × LargeGrace × rd 3	0.017 (0.13)				−0.17 (62.4)
HadCattle × LargeGrace × rd 4	0.016 (0.13)				−0.61 (10.4)
HadCattle × Cattle	0.045 (0.21)				0.27 (18.3)
HadCattle × Cattle × rd 3	0.016 (0.13)				0.15 (58.6)
HadCattle × Cattle × rd 4	0.013 (0.11)				0.07 (82.8)
mean of dependent variable		1.61	1.61	1.61	1.61
T = 2		85	85	85	85
T = 3		168	168	168	168
T = 4		395	395	395	395
$\bar{R}^2$		0.039	0.083	0.089	0.099
N	1998	1606	1606	1606	1606

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 52: ANCOVA ESTIMATION OF LIVESTOCK HOLDING BY TIME AND ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		1.47 (0.0)	1.36 (0.0)	1.12 (0.0)	1.14 (0.0)
Upfront	0.785 (0.41)	0.39 (0.6)	0.37 (0.4)	0.35 (0.8)	0.30 (0.7)
WithGrace	0.512 (0.50)	−0.38 (2.6)	−0.35 (1.9)	−0.33 (3.7)	−0.31 (3.4)
InKind	0.264 (0.44)	−0.06 (59.8)	−0.05 (68.3)	−0.05 (62.1)	−0.05 (63.8)
rd 3	0.348 (0.48)	−0.02 (71.4)	0.00 (97.3)	0.00 (93.8)	0.00 (94.5)
Upfront × rd 3	0.269 (0.44)	−0.05 (74.9)	−0.05 (75.5)	−0.05 (77.9)	−0.02 (91.3)
WithGrace × rd 3	0.176 (0.38)	0.24 (17.1)	0.25 (14.2)	0.25 (14.7)	0.27 (13.1)
InKind × rd 3	0.091 (0.29)	−0.02 (90.7)	−0.05 (75.1)	−0.05 (72.5)	−0.07 (64.2)
rd 4	0.326 (0.47)	0.16 (1.0)	0.18 (0.5)	0.19 (0.4)	0.19 (0.3)
Upfront × rd 4	0.260 (0.44)	0.04 (80.3)	0.04 (81.9)	0.05 (78.2)	0.08 (62.6)
WithGrace × rd 4	0.166 (0.37)	0.36 (7.8)	0.35 (8.3)	0.36 (8.4)	0.37 (6.9)
InKind × rd 4	0.085 (0.28)	−0.06 (73.2)	−0.05 (77.4)	−0.05 (76.1)	−0.08 (66.3)
HadCattle	0.195 (0.40)				0.16 (40.9)
HadCattle × rd 3	0.067 (0.25)				0.05 (69.7)
HadCattle × rd 4	0.061 (0.24)				−0.05 (74.4)
FloodInRd1	0.491 (0.50)			0.05 (57.2)	0.05 (50.6)
Head literate0	0.114 (0.32)			0.02 (85.6)	0.02 (85.2)
NumCattle0	0.266 (0.62)		0.31 (0.3)	0.29 (0.6)	0.19 (21.1)
HHsize0	4.219 (1.43)			0.05 (3.7)	0.05 (4.2)
HadCattle × Upfront	0.157 (0.36)				0.70 (4.4)
HadCattle × Upfront × rd 3	0.054 (0.23)				0.15 (63.4)
HadCattle × Upfront × rd 4	0.050 (0.22)				0.10 (81.6)
HadCattle × WithGrace	0.094 (0.29)				−0.21 (53.3)
HadCattle × WithGrace × rd 3	0.033 (0.18)				−0.33 (37.2)
HadCattle × WithGrace × rd 4	0.029 (0.17)				−0.71 (11.0)
HadCattle × InKind	0.045 (0.21)				−0.22 (22.0)
HadCattle × InKind × rd 3	0.016 (0.13)				0.32 (34.1)
HadCattle × InKind × rd 4	0.013 (0.11)				0.68 (6.1)
mean of dependent variable		1.61	1.61	1.61	1.61
$T = 2$		85	85	85	85
$T = 3$		168	168	168	168
$T = 4$		395	395	395	395
$\bar{R}^2$		0.039	0.083	0.089	0.099
N	1998	1606	1606	1606	1606

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Regressand is TotalImputedValue, a sum of all livestock holding values evaluated at respective median market prices in the same year.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

Finding III.3 FIGURE 13 shows increasing livestock accumulation in all arms but traditional. FIGURE 15 shows increasng cow ownership relative to traditional in the bottom panel while the holding per owner is similar across all arms. This is evidence of an acceleration of becoming a large livestock owner for the large sized arms relative to the small size arm. Given that the number of cows per owner remains the similar, it does not provide evidence for accelerated growth of livestock after becoming an owner.

III.5.4 Productive assets

```
Number of obs by Arm and attrition
            AttritIn
Arm           2    3    4    9  Sum
  traditional  6    4   20  144  174
  large        5    2    1  191  199
  large grace 22    3    3  170  198
  cattle       5    5   13  176  199
  Sum         38   14   37  681  770


Number of obs by membership status and attrition
                    AttritIn
BStatus               2    3    4    9  Sum
  borrower            8    6    8  575  597
  pure saver          0    0    0    0    0
  individual rejection 9    4    1   75   89
  group rejection     9    4    0   55   68
  rejection by flood 12    0   28    0   40
  Sum                38   14   37  705  794
```

```
[1] excl
[[1]]
PAssetAmount ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
PAssetAmount ~ dummyLarge + dummyLargeGrace + dummyCattle + PAssetAmount0

[[3]]
PAssetAmount ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + PAssetAmount0

[[4]]
PAssetAmount ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    dummyHadCows.Large + dummyHadCows.LargeGrace + dummyHadCows.Cattle

[[5]]
PAssetAmount ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + PAssetAmount0 + NumCows0

[[6]]
PAssetAmount ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    NumCows0 + dummyHadCows.Large + dummyHadCows.LargeGrace +
    dummyHadCows.Cattle
```

```
[1] exclP
[[1]]
PAssetAmount ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
PAssetAmount ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + PAssetAmount0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
PAssetAmount ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[4]]
PAssetAmount ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[[5]]
PAssetAmount ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[6]]
PAssetAmount ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[1] excla
[[1]]
PAssetAmount ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
PAssetAmount ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    PAssetAmount0

[[3]]
PAssetAmount ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + PAssetAmount0

[[4]]
PAssetAmount ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    dummyHadCows.LargeSize + dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
PAssetAmount ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + PAssetAmount0 + NumCows0

[[6]]
PAssetAmount ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
```

```
    NumCows0 + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[1] exclT
[[1]]
PAssetAmount ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
PAssetAmount ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + PAssetAmount0

[[3]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + PAssetAmount0

[[4]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[[5]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    NumCows0

[[6]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + NumCows0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[1] exclTa
[[1]]
PAssetAmount ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
PAssetAmount ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
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```
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + PAssetAmount0

[[3]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + PAssetAmount0

[[4]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    NumCows0

[[6]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + NumCows0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[1] exclTPa
[[1]]
PAssetAmount ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[2]]
PAssetAmount ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    PAssetAmount0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[3]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
```
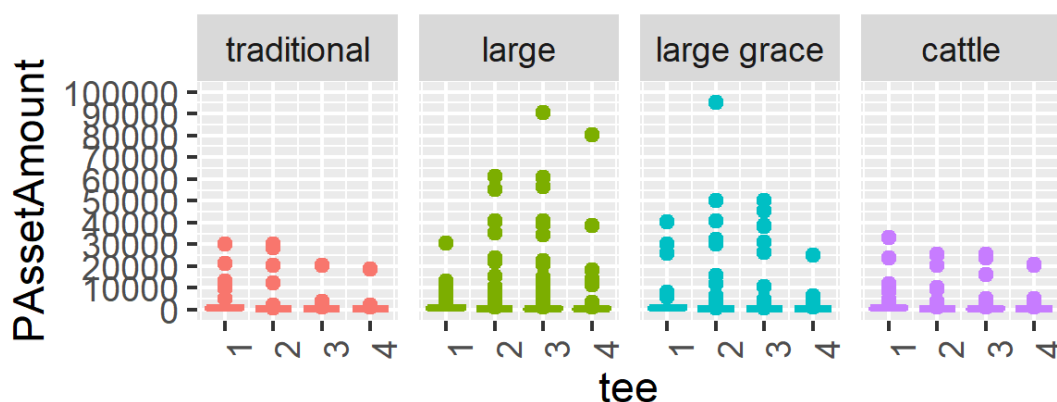
```
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[4]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[6]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4
```

FIGURE 17: PRODUCTIVE ASSET HOLDING

Source: Survey data.

Note:

TABLE 53: ANCOVA ESTIMATION OF PRODUCTIVE ASSETS

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		571.2	200.5	313.7	358.2	331.2
		(0.0)	(16.1)	(30.8)	(33.6)	(33.9)
Large	0.021	1240.1	1166.3	1281.1	1526.2	1354.3
	(0.45)	(3.6)	(4.2)	(2.8)	(2.5)	(2.7)
LargeGrace	0.002	796.4	655.8	609.1	667.1	644.3
	(0.43)	(9.6)	(16.2)	(17.9)	(17.8)	(15.7)
Cattle	0.017	149.9	188.5	253.7	291.3	350.6
	(0.44)	(39.8)	(32.3)	(23.5)	(21.4)	(13.7)
HadCattle	0.218				88.4	
	(0.41)				(83.9)	
FloodInRd1	0.487			−662.6	−867.9	−709.0
	(0.50)			(8.8)	(6.3)	(9.6)
Head literate0	0.121			−595.0	−692.3	−622.5
	(0.33)			(2.0)	(4.2)	(2.7)
productive asset value$_1$	1255.054		0.4	0.3	0.4	0.4
	(2646.96)		(0.3)	(0.5)	(0.2)	(0.2)
HHsize0	4.306			58.9	48.3	35.3
	(1.43)			(52.5)	(68.1)	(74.2)
HadCattle × Large	0.016				139.7	
	(0.22)				(90.6)	
HadCattle × LargeGrace	0.004				1548.0	
	(0.20)				(21.3)	
HadCattle × Cattle	−0.006				201.2	
	(0.19)				(59.7)	
NumCattle0	0.300					93.8
	(0.66)					(79.0)
mean of dependent variable		1125	1125	1125	1125	1125
T = 2		20	20	20	17	14
T = 3		101	101	101	57	56
T = 4		632	625	625	529	604
$\bar{R}^2$		0.005	0.026	0.028	0.031	0.03
N	1718	2118	2097	2097	1718	1938

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Only households that are observed for all 4 rounds are used. Households are continuing members and replacing members of early rejecters and received loans prior to 2015 January. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 54: ANCOVA ESTIMATION OF PRODUCTIVE ASSETS BY ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		571.2	200.5	313.7	358.2	331.2
		(0.0)	(16.1)	(30.8)	(33.6)	(33.9)
Upfront	0.040	1240.1	1166.3	1281.1	1526.2	1354.3
	(0.41)	(3.6)	(4.2)	(2.8)	(2.5)	(2.7)
WithGrace	0.019	−443.7	−510.4	−672.0	−859.2	−710.0
	(0.50)	(55.6)	(48.6)	(35.4)	(30.3)	(35.1)
InKind	0.017	−646.5	−467.3	−355.5	−375.8	−293.7
	(0.44)	(19.7)	(34.2)	(44.8)	(45.0)	(53.4)
HadCattle	0.218				88.4	
	(0.41)				(83.9)	
FloodInRd1	0.487			−662.6	−867.9	−709.0
	(0.50)			(8.8)	(6.3)	(9.6)
Head literate0	0.121			−595.0	−692.3	−622.5
	(0.33)			(2.0)	(4.2)	(2.7)
productive asset value1	1255.054		0.4	0.3	0.4	0.4
	(2646.96)		(0.3)	(0.5)	(0.2)	(0.2)
HHsize0	4.306			58.9	48.3	35.3
	(1.43)			(52.5)	(68.1)	(74.2)
HadCattle × Upfront	0.014				139.7	
	(0.18)				(90.6)	
HadCattle × WithGrace	−0.002				1408.3	
	(0.23)				(40.1)	
HadCattle × InKind	−0.006				−1346.8	
	(0.19)				(28.3)	
NumCattle0	0.300					93.8
	(0.66)					(79.0)
mean of dependent variable		1125	1125	1125	1125	1125
$T = 2$		20	20	20	17	14
$T = 3$		101	101	101	57	56
$T = 4$		632	625	625	529	604
$\bar{R}^2$		0.005	0.026	0.028	0.031	0.03
N	1718	2118	2097	2097	1718	1938

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Only households that are observed for all 4 rounds are used. Households are continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 55: ANCOVA ESTIMATION OF BROAD PRODUCTIVE ASSETS BY PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		841.5 (0.0)	470.6 (1.7)	591.4 (10.7)	657.3 (12.0)	606.0 (13.4)
Large	0.021 (0.45)	1460.4 (3.5)	1388.4 (4.0)	1505.5 (2.8)	1737.5 (2.7)	1545.9 (2.8)
LargeGrace	0.002 (0.43)	928.2 (10.5)	791.6 (15.9)	744.0 (17.4)	766.8 (18.4)	755.4 (16.2)
Cattle	0.017 (0.44)	117.7 (51.4)	165.6 (39.0)	232.5 (28.4)	270.7 (28.1)	307.4 (19.9)
rd 3	0.342 (0.47)	−293.2 (19.3)	−300.5 (18.8)	−303.4 (18.4)	−334.6 (19.3)	−275.7 (22.4)
Large × rd 3	0.094 (0.29)	−814.3 (28.0)	−822.5 (27.8)	−820.2 (27.9)	−826.4 (35.6)	−701.6 (35.5)
LargeGrace × rd 3	0.084 (0.28)	−157.1 (73.3)	−157.3 (73.8)	−144.5 (75.8)	47.8 (92.2)	−26.8 (95.4)
Cattle × rd 3	0.089 (0.28)	228.4 (33.1)	149.8 (55.0)	158.0 (53.3)	182.6 (44.4)	315.4 (21.3)
rd 4	0.316 (0.47)	−746.5 (0.8)	−745.6 (0.8)	−747.7 (0.8)	−855.6 (0.5)	−758.7 (0.7)
Large × rd 4	0.093 (0.29)	−1534.3 (7.1)	−1544.9 (7.0)	−1566.5 (6.8)	−1540.0 (11.0)	−1441.9 (9.0)
LargeGrace × rd 4	0.079 (0.27)	−1223.1 (9.0)	−1260.4 (8.6)	−1271.0 (8.6)	−1178.3 (10.4)	−1189.4 (10.5)
Cattle × rd 4	0.082 (0.27)	115.3 (65.0)	96.3 (71.2)	67.3 (80.4)	75.0 (76.9)	207.1 (44.0)
HadCattle	0.218 (0.41)				173.8 (74.1)	
HadCattle × rd 3	0.075 (0.26)				−164.7 (71.5)	
HadCattle × rd 4	0.068 (0.25)				−829.9 (31.7)	
FloodInRd1	0.487 (0.50)			−666.2 (8.8)	−868.0 (6.4)	−707.9 (9.7)
Head literate0	0.121 (0.33)			−596.9 (2.0)	−685.4 (4.5)	−621.8 (2.7)
productive asset value₁	1255.054 (2646.96)		0.4 (0.3)	0.3 (0.6)	0.4 (0.2)	0.4 (0.2)
HHsize0	4.306 (1.43)			57.8 (53.4)	48.3 (68.3)	35.9 (73.9)
HadCattle × Large	0.016 (0.22)				40.2 (97.6)	
HadCattle × Large × rd 3	0.005 (0.13)				841.8 (46.3)	
HadCattle × Large × rd 4	0.006 (0.13)				153.9 (92.8)	
HadCattle × LargeGrace	0.004 (0.20)				2070.8 (19.4)	
HadCattle × LargeGrace × rd 3	0.001 (0.12)				−2020.7 (14.6)	
HadCattle × LargeGrace × rd 4	0.002 (0.12)				−3922.5 (16.7)	
HadCattle × Cattle	−0.006 (0.19)				286.1 (47.1)	
HadCattle × Cattle × rd 3	−0.001 (0.11)				−583.7 (16.7)	
HadCattle × Cattle × rd 4	−0.003 (0.10)				−621.5 (15.3)	
NumCattle0	0.300 (0.66)					93.3 (79.2)
mean of dependent variable		1125	1125	1125	1125	1125
T = 2		20	20	20	17	14
T = 3		101	101	101	57	56
T = 4		632	625	625	529	604
$\bar{R}^2$		0.007	0.027	0.029	0.029	0.031
N	1718	2118	2097	2097	1718	1938

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Only households that are observed for all 4 rounds are used. Households are continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

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TABLE 56: ANCOVA ESTIMATION OF BROAD PRODUCTIVE ASSETS BY ATTRIBUTES AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		841.5 (0.0)	470.6 (1.7)	591.4 (10.7)	657.3 (12.0)	606.0 (13.4)
Unfront	0.040 (0.41)	1460.4 (3.5)	1388.4 (4.0)	1505.5 (2.8)	1737.5 (2.7)	1545.9 (2.8)
WithGrace	0.019 (0.50)	−532.2 (54.9)	−596.8 (49.2)	−761.5 (37.6)	−970.7 (31.4)	−790.5 (37.0)
InKind	0.017 (0.44)	−810.6 (16.7)	−626.0 (27.6)	−511.5 (35.2)	−496.1 (38.4)	−448.0 (41.0)
rd 3	0.342 (0.47)	−293.2 (19.3)	−300.5 (18.8)	−303.4 (18.4)	−334.6 (19.3)	−275.7 (22.4)
Unfront × rd 3	0.267 (0.44)	−814.3 (28.0)	−822.5 (27.8)	−820.2 (27.9)	−826.4 (35.6)	−701.6 (35.5)
WithGrace × rd 3	0.173 (0.38)	657.2 (43.8)	665.2 (43.6)	675.7 (43.1)	874.2 (36.9)	674.9 (42.8)
InKind × rd 3	0.089 (0.28)	385.5 (39.3)	307.1 (50.9)	302.6 (51.5)	134.8 (76.1)	342.1 (44.8)
rd 4	0.316 (0.47)	−746.5 (0.8)	−745.6 (0.8)	−747.7 (0.8)	−855.6 (0.5)	−758.7 (0.7)
Unfront × rd 4	0.254 (0.44)	−1534.3 (7.1)	−1544.9 (7.0)	−1566.5 (6.8)	−1540.0 (11.0)	−1441.9 (9.0)
WithGrace × rd 4	0.161 (0.37)	311.2 (77.2)	284.4 (79.4)	295.5 (78.7)	361.7 (75.4)	252.6 (81.6)
InKind × rd 4	0.082 (0.27)	1338.4 (5.9)	1356.8 (6.0)	1338.3 (6.3)	1253.3 (6.3)	1396.5 (5.4)
HadCattle	0.218 (0.41)				173.8 (74.1)	
HadCattle × rd 3	0.075 (0.26)				−164.7 (71.5)	
HadCattle × rd 4	0.068 (0.25)				−829.9 (31.7)	
FloodInRd1	0.487 (0.50)			−666.2 (8.8)	−868.0 (6.4)	−707.9 (9.7)
Head literate0	0.121 (0.33)			−596.9 (2.0)	−685.4 (4.5)	−621.8 (2.7)
productive asset value₁	1255.054 (2646.96)		0.4 (0.3)	0.3 (0.6)	0.4 (0.2)	0.4 (0.2)
HHsize0	4.306 (1.43)			57.8 (53.4)	48.3 (68.3)	35.9 (73.9)
HadCattle × Unfront	0.014 (0.18)				40.2 (97.6)	
HadCattle × Upfront × rd 3	0.004 (0.11)				841.8 (46.3)	
HadCattle × Upfront × rd 4	0.005 (0.10)				153.9 (92.8)	
HadCattle × WithGrace	−0.002 (0.23)				2030.5 (32.3)	
HadCattle × WithGrace × rd 3	−0.000 (0.14)				−2862.5 (10.4)	
HadCattle × WithGrace × rd 4	−0.001 (0.13)				−4076.3 (21.6)	
HadCattle × InKind	−0.006 (0.19)				−1784.7 (26.6)	
HadCattle × InKind × rd 3	−0.001 (0.11)				1437.0 (30.6)	
HadCattle × InKind × rd 4	−0.003 (0.10)				3300.9 (24.3)	
NumCattle0	0.300 (0.66)					93.3 (79.2)
mean of dependent variable		1125	1125	1125	1125	1125
T = 2		20	20	20	17	14
T = 3		101	101	101	57	56
T = 4		632	625	625	529	604
$\bar{R}^2$		0.007	0.027	0.029	0.029	0.031
N	1718	2118	2097	2097	1718	1938

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Only households that are observed for all 4 rounds are used. Households are continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 57: ANCOVA ESTIMATION OF BROAD PRODUCTIVE ASSETS BY ATTRIBUTES, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		869.2 (0.0)	499.8 (1.7)	643.9 (9.1)	693.1 (11.9)	657.0 (11.9)
Upfront	0.040 (0.41)	1428.7 (4.0)	1349.6 (4.6)	1455.0 (3.1)	1699.9 (3.4)	1489.2 (3.0)
WithGrace	0.019 (0.50)	−572.1 (51.9)	−640.3 (46.0)	−820.9 (34.0)	−1073.4 (27.5)	−849.4 (33.6)
InKind	0.017 (0.44)	−760.9 (19.6)	−569.2 (32.6)	−438.7 (43.1)	−396.5 (48.4)	−378.2 (49.0)
UltraPoor	0.625 (0.48)	−148.6 (75.7)	−144.4 (76.6)	−147.0 (76.3)	−194.3 (73.0)	−146.4 (76.7)
Upfront × UltraPoor	0.051 (0.30)	−1260.9 (47.2)	−1332.1 (45.5)	−1682.8 (37.4)	−2034.2 (35.7)	−1655.9 (39.5)
WithGrace × UltraPoor	0.036 (0.39)	1494.4 (40.5)	1550.3 (39.1)	1723.2 (35.6)	2278.0 (29.5)	1762.8 (35.2)
InKind × UltraPoor	0.019 (0.35)	−714.1 (22.5)	−778.3 (15.9)	−847.1 (12.4)	−1232.3 (4.2)	−837.1 (13.4)
rd 3	0.342 (0.47)	−298.5 (18.3)	−304.6 (17.9)	−308.1 (17.5)	−344.4 (17.5)	−287.0 (20.5)
UltraPoor × rd 3	0.210 (0.41)	−217.1 (57.1)	−249.2 (52.1)	−257.3 (50.8)	−343.9 (40.7)	−233.6 (54.3)
Upfront × rd 3	0.267 (0.44)	−786.6 (30.7)	−796.5 (30.4)	−794.1 (30.6)	−758.6 (40.1)	−657.1 (40.0)
WithGrace × rd 3	0.173 (0.38)	682.0 (41.1)	692.9 (40.8)	705.1 (40.2)	914.3 (33.2)	704.9 (39.9)
InKind × rd 3	0.089 (0.28)	362.8 (37.7)	286.0 (49.7)	280.6 (50.6)	95.9 (81.0)	312.1 (44.7)
Upfront × UltraPoor × rd 3	0.017 (0.18)	−252.8 (85.3)	−265.7 (84.7)	−278.5 (83.9)	−40.3 (97.8)	−209.7 (87.7)
WithGrace × UltraPoor × rd 3	0.012 (0.23)	287.4 (84.0)	297.2 (83.6)	310.3 (82.8)	367.9 (80.7)	426.1 (76.2)
InKind × UltraPoor × rd 3	0.006 (0.20)	320.9 (58.7)	211.7 (72.5)	204.4 (73.8)	59.7 (93.0)	239.8 (69.3)
rd 4	0.316 (0.47)	−729.0 (0.8)	−725.6 (0.9)	−729.8 (0.9)	−837.4 (0.4)	−747.5 (0.7)
UltraPoor × rd 4	0.202 (0.40)	−358.9 (45.2)	−368.4 (44.3)	−381.1 (42.9)	−595.8 (26.5)	−418.6 (38.2)
Upfront × rd 4	0.254 (0.44)	−1489.3 (8.4)	−1498.5 (8.3)	−1511.3 (8.2)	−1443.4 (13.6)	−1370.0 (11.4)
WithGrace × rd 4	0.161 (0.37)	421.2 (68.6)	403.5 (70.1)	415.5 (69.4)	494.0 (65.6)	371.3 (72.4)
InKind × rd 4	0.082 (0.27)	1222.5 (6.1)	1232.9 (6.3)	1213.9 (6.6)	1118.4 (6.7)	1271.8 (5.8)
Upfront × UltraPoor × rd 4	0.017 (0.17)	268.9 (87.0)	253.0 (87.8)	243.1 (88.3)	421.7 (81.3)	344.4 (83.3)
WithGrace × UltraPoor × rd 4	0.011 (0.23)	−1379.7 (44.3)	−1394.1 (44.0)	−1385.5 (44.3)	−1740.3 (38.4)	−1390.7 (43.7)
InKind × UltraPoor × rd 4	0.006 (0.20)	1581.2 (6.6)	1589.5 (6.6)	1565.8 (7.4)	1855.4 (9.2)	1604.9 (6.3)
HadCattle	0.218 (0.41)				139.7 (79.2)	
HadCattle × rd 3	0.075 (0.26)				−131.8 (77.0)	
HadCattle × rd 4	0.068 (0.25)				−804.0 (33.0)	
FloodInRd1	0.487 (0.50)			−728.9 (8.5)	−953.4 (6.4)	−765.9 (9.6)
Head literate0	0.121 (0.33)			−693.8 (2.4)	−812.3 (4.2)	−708.4 (2.9)
productive asset value1	1255.054 (2646.96)		0.4 (0.3)	0.3 (0.5)	0.4 (0.2)	0.4 (0.2)
HHsize0	4.306 (1.43)			66.7 (49.6)	68.7 (59.3)	46.6 (68.3)
HadCattle × Upfront	0.014 (0.18)				89.0 (94.8)	
HadCattle × Upfront × rd 3	0.004 (0.11)				701.4 (53.2)	
HadCattle × Upfront × rd 4	0.005 (0.10)				21.4 (99.0)	
HadCattle × WithGrace	−0.002 (0.23)				2221.2 (28.2)	
HadCattle × WithGrace × rd 3	−0.000 (0.14)				−2893.1 (9.9)	
HadCattle × WithGrace × rd 4	−0.001 (0.13)				−4285.7 (19.0)	
HadCattle × InKind	−0.006 (0.19)				−1874.9 (24.0)	
HadCattle × InKind × rd 3	−0.001 (0.11)				1463.0 (31.1)	
HadCattle × InKind × rd 4	−0.003 (0.10)				3551.3 (21.3)	
NumCattle0	0.300 (0.66)					90.8 (79.8)
mean of dependent variable		1125	1125	1125	1125	1125
T = 2		20	20	20	17	14

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III.5.5 Narrow productive assets

Narrow productive assets are productive assets that are reported in all rounds. They are bees-box, brooder, cage incubator, country boat, dheki, ginning machine, gola (grain storage), hand pump, husking machine, jata, ladder(moi), sickle/dao/axe/spade, spray, weeder

```
Number of obs by Arm and attrition
            AttritIn
Arm             2    3    4    9  Sum
  traditional   6    4   20  144  174
  large         5    2    1  191  199
  large grace  22    3    3  170  198
  cattle        5    5   13  176  199
  Sum          38   14   37  681  770


Number of obs by membership status and attrition
                    AttritIn
BStatus              2    3    4    9  Sum
  borrower           8    6    8  575  597
  pure saver         0    0    0    0    0
  individual rejection   9    4    1   75   89
  group rejection    9    4    0   55   68
  rejection by flood 12    0   28    0   40
  Sum               38   14   37  705  794
```

```
[1] excl
[[1]]
NarrowPAssetAmount ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
NarrowPAssetAmount ~ dummyLarge + dummyLargeGrace + dummyCattle +
    NarrowPAssetAmount0

[[3]]
NarrowPAssetAmount ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0

[[4]]
NarrowPAssetAmount ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyHadCows + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0 +
    dummyHadCows.Large + dummyHadCows.LargeGrace + dummyHadCows.Cattle

[[5]]
NarrowPAssetAmount ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0 +
    NumCows0

[[6]]
NarrowPAssetAmount ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyHadCows + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0 +
    NumCows0 + dummyHadCows.Large + dummyHadCows.LargeGrace +
    dummyHadCows.Cattle

[1] exclP
[[1]]
NarrowPAssetAmount ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
```

```
    dummyInKind.UltraPoor

[[2]]
NarrowPAssetAmount ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NarrowPAssetAmount0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
NarrowPAssetAmount ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    NarrowPAssetAmount0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[4]]
NarrowPAssetAmount ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NarrowPAssetAmount0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[[5]]
NarrowPAssetAmount ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    NarrowPAssetAmount0 + NumCows0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[6]]
NarrowPAssetAmount ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NarrowPAssetAmount0 + NumCows0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyHadCows.LargeSize +
    dummyHadCows.WithGrace + dummyHadCows.InKind

[1] excla
[[1]]
NarrowPAssetAmount ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NarrowPAssetAmount ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    NarrowPAssetAmount0

[[3]]
NarrowPAssetAmount ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0

[[4]]
NarrowPAssetAmount ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0 +
    dummyHadCows.LargeSize + dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
NarrowPAssetAmount ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0 +
    NumCows0

[[6]]
NarrowPAssetAmount ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0 +
    NumCows0 + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind
```

116

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[1] exclT
[[1]]
NarrowPAssetAmount ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
NarrowPAssetAmount ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + NarrowPAssetAmount0

[[3]]
NarrowPAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0

[[4]]
NarrowPAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NarrowPAssetAmount0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[[5]]
NarrowPAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0 +
    NumCows0

[[6]]
NarrowPAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NarrowPAssetAmount0 + NumCows0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[1] exclTa
[[1]]
NarrowPAssetAmount ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NarrowPAssetAmount ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NarrowPAssetAmount0
```

```
[[3]]
NarrowPAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0

[[4]]
NarrowPAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NarrowPAssetAmount0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
NarrowPAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0 +
    NumCows0

[[6]]
NarrowPAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NarrowPAssetAmount0 + NumCows0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[1] exclTPa
[[1]]
NarrowPAssetAmount ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[2]]
NarrowPAssetAmount ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    NarrowPAssetAmount0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[3]]
NarrowPAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0 +
```

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        dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
        dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
        dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
        dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[4]]
NarrowPAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
        dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
        dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
        dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
        dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
        NarrowPAssetAmount0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
        dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
        dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
        dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
        dummyInKind.UltraPoor.Time4 + dummyHadCows.Time3 + dummyHadCows.Time4 +
        dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
        dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
        dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
NarrowPAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
        dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
        dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
        dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
        dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NarrowPAssetAmount0 +
        NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
        dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
        dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
        dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
        dummyInKind.UltraPoor.Time4

[[6]]
NarrowPAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
        dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
        dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
        dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
        dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
        NarrowPAssetAmount0 + NumCows0 + dummyLargeSize.UltraPoor +
        dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
        dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
        dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
        dummyInKind.UltraPoor.Time4 + dummyHadCows.Time3 + dummyHadCows.Time4 +
        dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
        dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
        dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4
```

FIGURE 18: NARROW PRODUCTIVE ASSET HOLDING
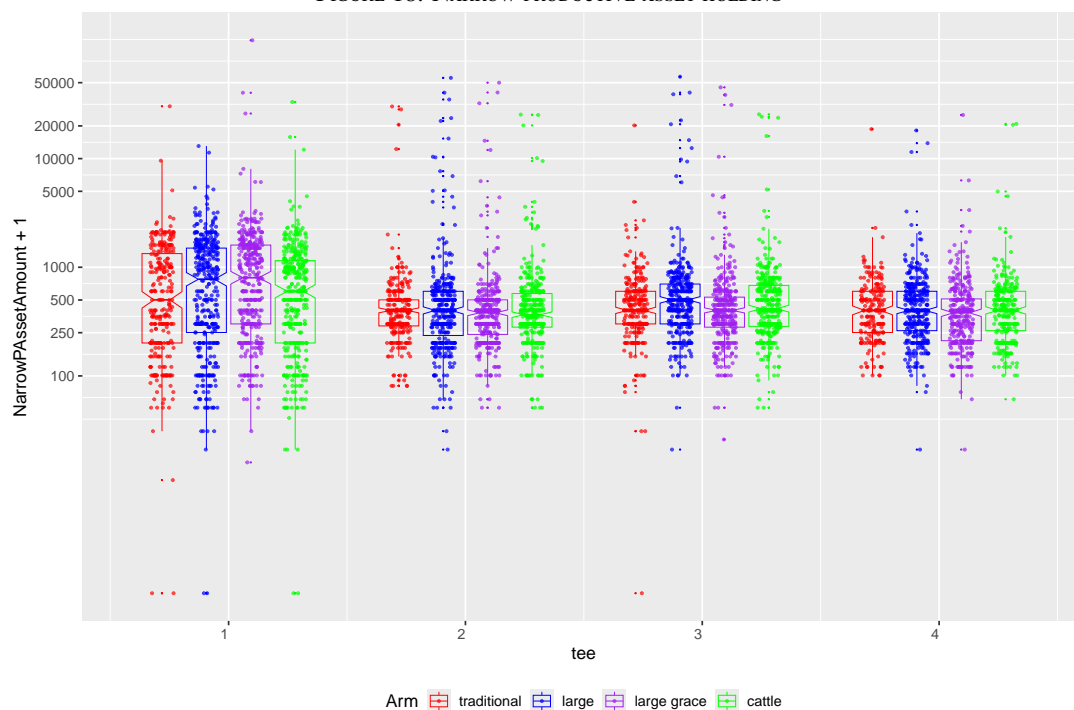
Source: Survey data.

Note: Narrow productive assets are productive assets that are reported in all rounds. They are bees-box, brooder, cage incubator, country boat, dheki, ginning machine, gola (grain storage), hand pump, husking machine, jata, ladder(moi), sickle/dao/axe/spade, spray, weeder.

TABLE 58: ANCOVA ESTIMATION OF NARROW PRODUCTIVE ASSETS

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		567.5 (0.0)	233.9 (12.9)	134.3 (53.8)	157.2 (57.2)	99.7 (67.8)
Large	0.021 (0.45)	418.8 (9.1)	375.3 (11.4)	363.5 (11.4)	406.3 (7.6)	399.6 (8.0)
LargeGrace	0.002 (0.43)	337.9 (15.2)	145.1 (43.0)	154.6 (40.9)	157.7 (48.1)	159.0 (41.3)
Cattle	0.017 (0.44)	151.2 (39.5)	144.9 (43.8)	153.4 (40.8)	168.2 (38.6)	249.8 (21.7)
HadCattle	0.218 (0.41)				110.4 (66.3)	
FloodInRd1	0.487 (0.50)			70.8 (67.3)	23.0 (90.3)	96.0 (59.0)
Head literate0	0.121 (0.33)			−279.1 (10.4)	−275.4 (17.3)	−300.6 (10.0)
Narrowproductive asset value₁	1041.643 (2111.49)		0.4 (1.4)	0.4 (1.5)	0.5 (0.4)	0.5 (0.3)
HHsize0	4.306 (1.43)			23.0 (69.2)	−6.2 (93.2)	1.8 (97.7)
HadCattle × Large	0.016 (0.22)				1082.5 (19.8)	
HadCattle × LargeGrace	0.004 (0.20)				−114.0 (77.3)	
HadCattle × Cattle	−0.006 (0.19)				7.2 (98.0)	
NumCattle0	0.300 (0.66)					39.0 (77.8)
mean of dependent variable		796	796	796	796	796
T = 2		20	20	20	17	14
T = 3		101	101	101	57	56
T = 4		632	625	625	529	604
R̄²		0.002	0.076	0.076	0.1	0.092
N	1718	2118	2097	2097	1718	1938

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Sample is continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 59: ANCOVA ESTIMATION OF NARROW PRODUCTIVE ASSETS BY ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		567.5	233.9	134.3	157.2	99.7
		(0.0)	(12.9)	(53.8)	(57.2)	(67.8)
Upfront	0.040	418.8	375.3	363.5	406.3	399.6
	(0.41)	(9.1)	(11.4)	(11.4)	(7.6)	(8.0)
WithGrace	0.019	−80.9	−230.2	−208.9	−248.6	−240.6
	(0.50)	(80.4)	(42.6)	(45.0)	(38.8)	(38.5)
InKind	0.017	−186.7	−0.2	−1.3	10.4	90.8
	(0.44)	(50.2)	(99.9)	(99.6)	(96.7)	(71.3)
HadCattle	0.218				110.4	
	(0.41)				(66.3)	
FloodInRd1	0.487			70.8	23.0	96.0
	(0.50)			(67.3)	(90.3)	(59.0)
Head literate0	0.121			−279.1	−275.4	−300.6
	(0.33)			(10.4)	(17.3)	(10.0)
Narrowproductive asset value$_1$	1041.643		0.4	0.4	0.5	0.5
	(2111.49)		(1.4)	(1.5)	(0.4)	(0.3)
HHsize0	4.306			23.0	−6.2	1.8
	(1.43)			(69.2)	(93.2)	(97.7)
HadCattle × Upfront	0.014				1082.5	
	(0.18)				(19.8)	
HadCattle × WithGrace	−0.002				−1196.5	
	(0.23)				(19.4)	
HadCattle × InKind	−0.006				121.2	
	(0.19)				(79.0)	
NumCattle0	0.300					39.0
	(0.66)					(77.8)
mean of dependent variable		796	796	796	796	796
T = 2		20	20	20	17	14
T = 3		101	101	101	57	56
T = 4		632	625	625	529	604
$\bar{R}^2$		0.002	0.076	0.076	0.1	0.092
N	1718	2118	2097	2097	1718	1938

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Sample is continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		648.1 (0.0)	313.2 (7.4)	216.3 (38.4)	248.7 (43.1)	189.0 (49.0)
Large	0.021 (0.45)	478.7 (10.4)	436.4 (12.5)	425.1 (12.4)	445.0 (10.4)	444.5 (10.3)
LargeGrace	0.002 (0.43)	348.2 (17.4)	155.7 (40.9)	165.5 (38.8)	141.3 (53.6)	157.5 (42.9)
Cattle	0.017 (0.44)	117.7 (51.5)	121.8 (51.8)	132.2 (48.5)	147.4 (49.2)	205.9 (32.2)
rd 3	0.342 (0.47)	−1.3 (99.0)	−9.2 (93.0)	−10.9 (91.8)	−13.4 (90.6)	5.5 (95.9)
Large × rd 3	0.094 (0.29)	−69.8 (79.3)	−75.5 (77.9)	−75.6 (77.9)	18.2 (95.5)	1.8 (99.5)
LargeGrace × rd 3	0.084 (0.28)	234.2 (46.8)	246.7 (45.0)	244.1 (45.7)	424.3 (27.0)	324.8 (34.7)
Cattle × rd 3	0.089 (0.28)	235.5 (31.6)	149.6 (55.3)	143.0 (57.4)	177.4 (45.7)	309.1 (22.0)
rd 4	0.316 (0.47)	−267.6 (5.0)	−262.7 (5.5)	−264.9 (5.4)	−311.0 (2.0)	−282.2 (4.1)
Large × rd 4	0.093 (0.29)	−547.6 (22.3)	−555.8 (21.9)	−557.5 (21.8)	−410.9 (36.8)	−463.2 (30.3)
LargeGrace × rd 4	0.079 (0.27)	−323.9 (31.2)	−338.6 (29.4)	−341.7 (29.3)	−200.5 (55.7)	−263.9 (41.6)
Cattle × rd 4	0.082 (0.27)	121.7 (63.2)	99.1 (70.5)	85.6 (74.8)	90.5 (72.0)	226.2 (38.7)
HadCattle	0.218 (0.41)				167.5 (55.0)	
HadCattle × rd 3	0.075 (0.26)				−104.0 (53.1)	
HadCattle × rd 4	0.068 (0.25)				−574.1 (20.5)	
FloodInRd1	0.487 (0.50)			69.0 (68.1)	22.4 (90.7)	95.9 (59.1)
Head literate0	0.121 (0.33)			−278.7 (10.6)	−273.3 (17.9)	−299.5 (10.2)
Narrowproductive asset value₁	1041.643 (2111.49)		0.4 (1.4)	0.4 (1.5)	0.5 (0.4)	0.5 (0.3)
HHsize0	4.306 (1.43)			22.7 (69.7)	−6.3 (93.2)	2.1 (97.3)
HadCattle × Large	0.016 (0.22)				1203.8 (20.4)	
HadCattle × Large × rd 3	0.005 (0.13)				−259.0 (52.8)	
HadCattle × Large × rd 4	0.006 (0.13)				−1275.4 (31.4)	
HadCattle × LargeGrace	0.004 (0.20)				68.4 (87.9)	
HadCattle × LargeGrace × rd 3	0.001 (0.12)				−675.5 (15.8)	
HadCattle × LargeGrace × rd 4	0.002 (0.12)				−1445.6 (23.4)	
HadCattle × Cattle	−0.006 (0.19)				90.9 (78.1)	
HadCattle × Cattle × rd 3	−0.001 (0.11)				−576.2 (17.2)	
HadCattle × Cattle × rd 4	−0.003 (0.10)				−592.4 (15.3)	
NumCattle0	0.300 (0.66)					39.0 (77.8)
mean of dependent variable		796	796	796	796	796
T = 2		20	20	20	17	14
T = 3		101	101	101	57	56
T = 4		632	625	625	529	604
$\bar{R}^2$		0.002	0.076	0.076	0.098	0.092
N	1718	2118	2097	2097	1718	1938

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 61: ANCOVA ESTIMATION OF NARROW PRODUCTIVE ASSETS BY ATTRIBUTES AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		648.1 (0.0)	313.2 (7.4)	216.3 (38.4)	248.7 (43.1)	189.0 (49.0)
Unfront	0.040 (0.41)	478.7 (10.4)	436.4 (12.5)	425.1 (12.4)	445.0 (10.4)	444.5 (10.3)
WithGrace	0.019 (0.50)	−130.5 (72.3)	−280.7 (38.5)	−259.6 (40.2)	−303.7 (32.6)	−287.0 (34.6)
InKind	0.017 (0.44)	−230.5 (42.1)	−33.9 (88.4)	−33.3 (88.2)	6.0 (98.0)	48.4 (83.6)
rd 3	0.342 (0.47)	−1.3 (99.0)	−9.2 (93.0)	−10.9 (91.8)	−13.4 (90.6)	5.5 (95.9)
Unfront × rd 3	0.267 (0.44)	−69.8 (79.3)	−75.5 (77.9)	−75.6 (77.9)	18.2 (95.5)	1.8 (99.5)
WithGrace × rd 3	0.173 (0.38)	304.0 (36.3)	322.2 (33.9)	319.7 (34.4)	406.1 (29.5)	323.0 (35.3)
InKind × rd 3	0.089 (0.28)	1.3 (99.7)	−97.1 (76.4)	−101.1 (75.4)	−246.9 (43.8)	−15.7 (96.2)
rd 4	0.316 (0.47)	−267.6 (5.0)	−262.7 (5.5)	−264.9 (5.4)	−311.0 (2.0)	−282.2 (4.1)
Unfront × rd 4	0.254 (0.44)	−547.6 (22.3)	−555.8 (21.9)	−557.5 (21.8)	−410.9 (36.8)	−463.2 (30.3)
WithGrace × rd 4	0.161 (0.37)	223.7 (63.6)	217.2 (64.7)	215.8 (64.9)	210.4 (64.9)	199.4 (67.5)
InKind × rd 4	0.082 (0.27)	445.5 (12.8)	437.7 (13.5)	427.3 (14.3)	291.1 (25.8)	490.1 (10.2)
HadCattle	0.218 (0.41)				167.5 (55.0)	
HadCattle × rd 3	0.075 (0.26)				−104.0 (53.1)	
HadCattle × rd 4	0.068 (0.25)				−574.1 (20.5)	
FloodInRd1	0.487 (0.50)			69.0 (68.1)	22.4 (90.7)	95.9 (59.1)
Head literate0	0.121 (0.33)			−278.7 (10.6)	−273.3 (17.9)	−299.5 (10.2)
Narrowproductive asset value₁	1041.643 (2111.49)		0.4 (1.4)	0.4 (1.5)	0.5 (0.4)	0.5 (0.3)
HHsize0	4.306 (1.43)			22.7 (69.7)	−6.3 (93.2)	2.1 (97.3)
HadCattle × Unfront	0.014 (0.18)				1203.8 (20.4)	
HadCattle × Unfront × rd 3	0.004 (0.11)				−259.0 (52.8)	
HadCattle × Unfront × rd 4	0.005 (0.10)				−1275.4 (31.4)	
HadCattle × WithGrace	−0.002 (0.23)				−1135.4 (27.4)	
HadCattle × WithGrace × rd 3	−0.000 (0.14)				−416.5 (41.6)	
HadCattle × WithGrace × rd 4	−0.001 (0.13)				−170.2 (92.1)	
HadCattle × InKind	−0.006 (0.19)				22.4 (96.5)	
HadCattle × InKind × rd 3	−0.001 (0.11)				99.4 (84.9)	
HadCattle × InKind × rd 4	−0.003 (0.10)				853.2 (48.6)	
NumCattle0	0.300 (0.66)					39.0 (77.8)
mean of dependent variable		796	796	796	796	796
T = 2		20	20	20	17	14
T = 3		101	101	101	57	56
T = 4		632	625	625	529	604
$\bar{R}^2$		0.002	0.076	0.076	0.098	0.092
N	1718	2118	2097	2097	1718	1938

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 62: ANCOVA ESTIMATION OF NARROW PRODUCTIVE ASSETS BY ATTRIBUTES, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		685.6 (0.0)	361.4 (5.6)	279.4 (28.5)	333.2 (33.0)	258.0 (37.9)
Upfront	0.040 (0.41)	447.2 (13.3)	393.1 (17.0)	384.2 (16.8)	396.6 (17.1)	401.2 (15.1)
WithGrace	0.019 (0.50)	−101.1 (79.0)	−255.6 (45.9)	−238.7 (47.4)	−281.6 (41.2)	−268.6 (41.3)
InKind	0.017 (0.44)	−250.7 (42.2)	−49.7 (85.7)	−44.5 (86.8)	−5.2 (98.6)	35.8 (89.6)
UltraPoor	0.625 (0.48)	−132.5 (61.2)	−77.4 (76.4)	−90.6 (73.0)	−113.2 (69.9)	−76.1 (77.4)
Upfront × UltraPoor	0.051 (0.30)	−440.8 (50.9)	−496.5 (46.0)	−532.5 (41.4)	−533.2 (45.0)	−473.2 (46.9)
WithGrace × UltraPoor	0.036 (0.39)	−152.2 (87.2)	−132.6 (88.6)	−111.6 (90.1)	−194.2 (84.4)	−113.1 (90.1)
InKind × UltraPoor	0.019 (0.35)	116.0 (88.5)	40.5 (95.8)	15.6 (98.4)	−19.2 (98.3)	39.8 (96.0)
rd 3	0.342 (0.47)	−18.0 (86.2)	−25.2 (81.3)	−27.0 (80.0)	−43.0 (72.0)	−18.3 (86.8)
UltraPoor × rd 3	0.210 (0.41)	13.2 (93.9)	−20.4 (90.8)	−19.8 (91.1)	−83.0 (67.3)	4.5 (98.0)
Upfront × rd 3	0.267 (0.44)	−36.5 (90.4)	−42.9 (88.8)	−43.5 (88.6)	92.6 (80.5)	53.9 (86.6)
WithGrace × rd 3	0.173 (0.38)	276.3 (38.1)	293.0 (35.5)	290.5 (36.0)	361.5 (32.7)	290.6 (37.6)
InKind × rd 3	0.089 (0.28)	27.8 (92.2)	−64.8 (82.7)	−69.0 (81.7)	−203.6 (49.1)	11.7 (96.9)
Upfront × UltraPoor × rd 3	0.017 (0.18)	158.1 (76.2)	149.5 (77.5)	145.2 (78.2)	372.3 (56.7)	259.4 (63.0)
WithGrace × UltraPoor × rd 3	0.012 (0.23)	443.3 (39.9)	453.9 (39.2)	454.8 (39.1)	701.7 (19.7)	490.0 (36.3)
InKind × UltraPoor × rd 3	0.006 (0.20)	−239.0 (58.8)	−367.7 (41.9)	−370.5 (41.8)	−661.0 (13.7)	−266.5 (57.4)
rd 4	0.316 (0.47)	−277.7 (4.2)	−273.0 (4.5)	−275.5 (4.4)	−333.6 (1.7)	−299.2 (3.0)
UltraPoor × rd 4	0.202 (0.40)	85.2 (76.6)	82.5 (77.4)	83.8 (77.2)	−37.9 (90.4)	59.1 (83.6)
Upfront × rd 4	0.254 (0.44)	−505.2 (27.3)	−509.0 (27.1)	−510.8 (27.1)	−334.8 (49.7)	−396.3 (39.4)
WithGrace × rd 4	0.161 (0.37)	229.7 (61.1)	223.8 (62.1)	222.2 (62.3)	212.9 (63.5)	202.0 (65.7)
InKind × rd 4	0.082 (0.27)	438.1 (10.6)	429.0 (11.3)	418.3 (12.1)	302.5 (19.6)	480.3 (8.5)
Upfront × UltraPoor × rd 4	0.017 (0.17)	824.6 (40.6)	803.8 (41.8)	803.6 (41.9)	1074.8 (32.8)	961.2 (33.4)
WithGrace × UltraPoor × rd 4	0.011 (0.23)	−649.3 (52.1)	−651.7 (52.2)	−648.7 (52.3)	−606.2 (58.2)	−686.0 (50.0)
InKind × UltraPoor × rd 4	0.006 (0.20)	300.0 (55.5)	291.9 (57.4)	293.5 (57.6)	129.0 (83.4)	349.0 (51.5)
HadCattle	0.218 (0.41)				133.6 (64.1)	
HadCattle × rd 3	0.075 (0.26)				−51.7 (76.8)	
HadCattle × rd 4	0.068 (0.25)				−510.2 (26.2)	
FloodInRd1	0.487 (0.50)			51.1 (75.1)	9.5 (95.8)	81.1 (63.8)
Head literate0	0.121 (0.33)			−314.7 (8.7)	−314.9 (14.6)	−327.4 (9.1)
Narrowproductive asset value1	1041.643 (2111.49)		0.4 (1.5)	0.4 (1.6)	0.5 (0.5)	0.5 (0.3)
HHsize0	4.306 (1.43)			22.2 (70.0)	−7.0 (92.2)	1.7 (97.8)
HadCattle × Upfront	0.014 (0.18)				1297.3 (16.5)	
HadCattle × Upfront × rd 3	0.004 (0.11)				−416.8 (39.9)	
HadCattle × Upfront × rd 4	0.005 (0.10)				−1417.5 (25.2)	
HadCattle × WithGrace	−0.002 (0.23)				−1153.9 (26.7)	
HadCattle × WithGrace × rd 3	−0.000 (0.14)				−358.1 (44.1)	
HadCattle × WithGrace × rd 4	−0.001 (0.13)				−190.0 (91.1)	
HadCattle × InKind	−0.006 (0.19)				52.3 (92.8)	
HadCattle × InKind × rd 3	−0.001 (0.11)				44.2 (92.8)	
HadCattle × InKind × rd 4	−0.003 (0.10)				900.2 (48.2)	
NumCattle0	0.300 (0.66)					31.7 (82.2)
mean of dependent variable		796	796	796	796	796
T = 2		20	20	20	17	14

III.5.6 Productive assets+livestock

```
Number of obs by Arm and attrition
            AttritIn
Arm              2    3    4    9  Sum
  traditional    6    4   20  144  174
  large          5    2    1  191  199
  large grace   22    3    3  170  198
  cattle         5    5   13  176  199
  Sum           38   14   37  681  770


Number of obs by membership status and attrition
                    AttritIn
BStatus              2    3    4    9  Sum
  borrower           8    6    8  575  597
  pure saver         0    0    0    0    0
  individual rejection  9    4    1   75   89
  group rejection    9    4    0   55   68
  rejection by flood  12    0   28    0   40
  Sum               38   14   37  705  794
```

```
[1] excl
[[1]]
ProdValue ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
ProdValue ~ dummyLarge + dummyLargeGrace + dummyCattle + ProdValue0

[[3]]
ProdValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + ProdValue0

[[4]]
ProdValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + ProdValue0 + dummyHadCows.Large +
    dummyHadCows.LargeGrace + dummyHadCows.Cattle

[[5]]
ProdValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NumCows0 + ProdValue0

[[6]]
ProdValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + ProdValue0 +
    dummyHadCows.Large + dummyHadCows.LargeGrace + dummyHadCows.Cattle

[1] exclP
[[1]]
ProdValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
ProdValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + ProdValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor
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[[3]]
ProdValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + ProdValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[4]]
ProdValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + ProdValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyHadCows.LargeSize + dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
ProdValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0 + ProdValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[6]]
ProdValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 +
    ProdValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[1] excla
[[1]]
ProdValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
ProdValue ~ dummyLargeSize + dummyWithGrace + dummyInKind + ProdValue0

[[3]]
ProdValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + ProdValue0

[[4]]
ProdValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyHadCows + HHsize0 + HeadLiteracy0 + ProdValue0 + dummyHadCows.LargeSize +
    dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
ProdValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NumCows0 + ProdValue0

[[6]]
ProdValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + ProdValue0 +
    dummyHadCows.LargeSize + dummyHadCows.WithGrace + dummyHadCows.InKind

[1] exclT
[[1]]
ProdValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
ProdValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + ProdValue0
```

```
[[3]]
ProdValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + ProdValue0

[[4]]
ProdValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    ProdValue0 + dummyHadCows.Large + dummyHadCows.Time3 + dummyHadCows.Large.Time3 +
    dummyHadCows.Time4 + dummyHadCows.Large.Time4 + dummyHadCows.LargeGrace +
    dummyHadCows.LargeGrace.Time3 + dummyHadCows.LargeGrace.Time4 +
    dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 + dummyHadCows.Cattle.Time4

[[5]]
ProdValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    ProdValue0

[[6]]
ProdValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + ProdValue0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[1] exclTa
[[1]]
ProdValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
ProdValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + ProdValue0

[[3]]
ProdValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + ProdValue0

[[4]]
ProdValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    ProdValue0 + dummyHadCows.Time3 + dummyHadCows.Time4 + dummyHadCows.LargeSize +
    dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
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        dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
ProdValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    ProdValue0

[[6]]
ProdValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + ProdValue0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[1] exclTPa
[[1]]
ProdValue ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[2]]
ProdValue ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    ProdValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[3]]
ProdValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    HHsize0 + HeadLiteracy0 + ProdValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[4]]
ProdValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyHadCows + HHsize0 + HeadLiteracy0 + ProdValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
```

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    dummyInKind.UltraPoor.Time4 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
ProdValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    HHsize0 + HeadLiteracy0 + NumCows0 + ProdValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[6]]
ProdValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + ProdValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4 +
    dummyHadCows.Time3 + dummyHadCows.Time4 + dummyHadCows.LargeSize +
    dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4
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TABLE 63: ANCOVA ESTIMATION OF PRODUCTIVE AND LIVESTOCK ASSETS

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		15563.7 (0.0)	13100.4 (0.0)	5334.4 (4.0)	13085.9 (0.0)	8045.2 (0.4)	12887.7 (0.0)
Large	0.021 (0.45)	13961.4 (0.0)	12466.4 (0.0)	12331.6 (0.0)	9904.3 (0.0)	10515.4 (0.0)	9910.8 (0.0)
LargeGrace	0.002 (0.43)	8559.5 (0.2)	7242.1 (0.6)	7387.7 (0.4)	5547.8 (2.0)	5297.3 (3.5)	5168.8 (2.7)
Cattle	0.017 (0.44)	7030.3 (0.1)	6856.9 (0.1)	6934.0 (0.1)	4489.0 (1.9)	6017.3 (0.4)	4610.4 (1.6)
HadCattle	0.218 (0.41)				4013.0 (26.1)		7100.0 (12.0)
FloodInRd1	0.487 (0.50)			106.7 (94.4)	596.1 (73.0)	−142.5 (93.3)	591.5 (74.2)
Head literate0	0.121 (0.33)			−943.9 (63.8)	−1533.1 (46.3)	−2136.7 (30.7)	−1429.0 (49.6)
ProdValue0	7262.039 (13742.94)		0.5 (0.0)	0.5 (0.0)	0.3 (2.0)	1.1 (0.4)	1.1 (0.5)
HHsize0	4.306 (1.43)			1888.5 (0.0)	1519.5 (0.9)	1844.4 (0.1)	1385.4 (1.7)
HadCattle × Large	0.016 (0.22)				12282.4 (13.3)		12934.8 (11.9)
HadCattle × LargeGrace	0.004 (0.20)				2432.1 (63.1)		2340.6 (64.1)
HadCattle × Cattle	−0.006 (0.19)				3860.3 (43.5)		3972.2 (42.2)
NumCattle0	0.300 (0.66)					−13720.1 (12.2)	−18339.1 (5.5)
mean of dependent variable		23038	23038	23038	23038	23038	23038
$T = 2$		20	20	20	17	14	17
$T = 3$		101	101	101	57	56	55
$T = 4$		632	625	625	529	604	529
$\bar{R}^2$		0.046	0.129	0.141	0.106	0.125	0.115
N	1718	2118	2097	2097	1718	1938	1714

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Sample is continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 64: ANCOVA ESTIMATION OF PRODUCTIVE AND LIVESTOCK ASSETS BY ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		15563.7 (0.0)	13100.4 (0.0)	5334.4 (4.0)	13085.9 (0.0)	8045.2 (0.4)	12887.7 (0.0)
Upfront	0.040 (0.41)	13961.4 (0.0)	12466.4 (0.0)	12331.6 (0.0)	9904.3 (0.0)	10515.4 (0.0)	9910.8 (0.0)
WithGrace	0.019 (0.50)	−5401.9 (13.8)	−5224.3 (9.9)	−4943.9 (11.9)	−4356.5 (14.8)	−5218.0 (11.5)	−4742.0 (12.6)
InKind	0.017 (0.44)	−1529.2 (56.1)	−385.2 (88.5)	−453.8 (85.8)	−1058.7 (64.2)	720.0 (77.2)	−558.4 (80.3)
HadCattle	0.218 (0.41)				4013.0 (26.1)		7100.0 (12.0)
FloodInRd1	0.487 (0.50)			106.7 (94.4)	596.1 (73.0)	−142.5 (93.3)	591.5 (74.2)
Head literate0	0.121 (0.33)			−943.9 (63.8)	−1533.1 (46.3)	−2136.7 (30.7)	−1429.0 (49.6)
ProdValue0	7262.039 (13742.94)		0.5 (0.0)	0.5 (0.0)	0.3 (2.0)	1.1 (0.4)	1.1 (0.5)
HHsize0	4.306 (1.43)			1888.5 (0.0)	1519.5 (0.9)	1844.4 (0.1)	1385.4 (1.7)
HadCattle × Upfront	0.014 (0.18)				12282.4 (13.3)		12934.8 (11.9)
HadCattle × WithGrace	−0.002 (0.23)				−9850.3 (21.9)		−10594.2 (18.6)
HadCattle × InKind	−0.006 (0.19)				1428.2 (75.3)		1631.6 (70.0)
NumCattle0	0.300 (0.66)					−13720.1 (12.2)	−18339.1 (5.5)
mean of dependent variable		23038	23038	23038	23038	23038	23038
$T = 2$		20	20	20	17	14	17
$T = 3$		101	101	101	57	56	55
$T = 4$		632	625	625	529	604	529
$\bar{R}^2$		0.046	0.129	0.141	0.106	0.125	0.115
N	1718	2118	2097	2097	1718	1938	1714

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Sample is continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 65: ANCOVA ESTIMATION OF LIVESTOCK AND PRODUCTIVE ASSETS BY PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		14420.6 (0.0)	11841.6 (0.0)	4005.4 (14.4)	10007.4 (0.1)	5794.2 (4.6)	9779.9 (0.2)
Large	0.021 (0.45)	14232.7 (0.0)	12706.2 (0.0)	12579.7 (0.0)	10230.5 (0.0)	10789.6 (0.0)	10203.8 (0.0)
LargeGrace	0.002 (0.43)	8475.5 (0.2)	7135.2 (0.5)	7270.7 (0.3)	5444.8 (1.7)	5213.2 (3.1)	5069.8 (2.5)
Cattle	0.017 (0.44)	7063.4 (0.1)	6828.7 (0.2)	6892.9 (0.1)	4395.0 (2.4)	5853.1 (0.5)	4521.3 (2.0)
rd 3	0.342 (0.47)	1011.9 (28.2)	1198.6 (19.8)	1232.8 (18.9)	3148.7 (0.2)	2610.8 (0.4)	3217.2 (0.2)
Large × rd 3	0.094 (0.29)	−2343.1 (42.2)	−2175.1 (45.8)	−2226.5 (45.0)	−3264.6 (35.2)	−2616.3 (39.1)	−3059.7 (38.4)
LargeGrace × rd 3	0.084 (0.28)	−401.3 (83.8)	−117.8 (95.2)	−79.4 (96.8)	−700.7 (77.2)	−331.0 (88.2)	−716.7 (76.8)
Cattle × rd 3	0.089 (0.28)	−1360.8 (57.1)	−1326.6 (56.7)	−1283.2 (58.1)	−815.8 (73.8)	−487.9 (81.2)	−843.0 (73.0)
rd 4	0.316 (0.47)	2208.3 (5.4)	2418.5 (3.7)	2473.8 (3.4)	5600.9 (0.0)	4082.8 (0.0)	5642.4 (0.0)
Large × rd 4	0.093 (0.29)	−832.8 (81.9)	−705.1 (84.6)	−754.0 (83.5)	−2453.6 (54.4)	−1260.0 (73.4)	−2184.1 (59.0)
LargeGrace × rd 4	0.079 (0.27)	1093.8 (61.4)	1019.8 (64.1)	1083.0 (62.0)	426.9 (87.6)	599.9 (80.7)	412.3 (88.0)
Cattle × rd 4	0.082 (0.27)	988.6 (70.8)	1653.0 (53.4)	1717.2 (51.5)	1179.7 (67.1)	2559.7 (29.8)	1097.4 (68.9)
HadCattle	0.218 (0.41)				4803.8 (17.4)		7901.7 (8.2)
HadCattle × rd 3	0.075 (0.26)				−4650.0 (2.6)		−4706.6 (2.3)
HadCattle × rd 4	0.068 (0.25)				−4965.5 (9.7)		−5180.3 (8.0)
FloodInRd1	0.487 (0.50)			103.0 (94.6)	599.3 (73.1)	−156.4 (92.7)	592.6 (74.2)
Head literate0	0.121 (0.33)			−875.6 (66.2)	−1510.2 (47.1)	−2060.1 (32.5)	−1401.3 (50.6)
ProdValue0	7262.039 (13742.94)		0.5 (0.0)	0.5 (0.0)	0.3 (2.0)	1.1 (0.4)	1.1 (0.5)
HHsize0	4.306 (1.43)			1897.6 (0.0)	1527.3 (0.8)	1852.3 (0.1)	1393.2 (1.6)
HadCattle × Large	0.016 (0.22)				11293.3 (14.7)		11981.0 (13.1)
HadCattle × Large × rd 3	0.005 (0.13)				6632.7 (24.7)		6292.2 (26.9)
HadCattle × Large × rd 4	0.006 (0.13)				6928.4 (42.4)		6797.2 (42.9)
HadCattle × LargeGrace	0.004 (0.20)				4373.9 (38.4)		4279.7 (39.7)
HadCattle × LargeGrace × rd 3	0.001 (0.12)				−9568.2 (9.3)		−9648.5 (9.0)
HadCattle × LargeGrace × rd 4	0.002 (0.12)				−11453.1 (15.5)		−11283.1 (16.0)
HadCattle × Cattle	−0.006 (0.19)				3396.8 (50.2)		3525.5 (48.7)
HadCattle × Cattle × rd 3	−0.001 (0.11)				4770.5 (30.7)		4704.9 (31.4)
HadCattle × Cattle × rd 4	−0.003 (0.10)				4092.8 (57.3)		3779.0 (59.2)
NumCattle0	0.300 (0.66)					−13688.1 (12.4)	−18274.2 (5.8)
mean of dependent variable		23038	23038	23038	23038	23038	23038
T = 2		20	20	20	17	14	17
T = 3		101	101	101	57	56	55
T = 4		632	625	625	529	604	529
$\bar{R}^2$		0.045	0.128	0.14	0.114	0.128	0.123
N	1718	2118	2097	2097	1718	1938	1714

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

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covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		14420.6 (0.0)	11841.6 (0.0)	4005.4 (14.4)	10007.4 (0.1)	5794.2 (4.6)	9779.9 (0.2)
Upfront	0.040 (0.41)	14232.7 (0.0)	12706.2 (0.0)	12579.7 (0.0)	10230.5 (0.0)	10789.6 (0.0)	10203.8 (0.0)
WithGrace	0.019 (0.50)	−5757.2 (10.4)	−5571.0 (6.9)	−5309.0 (8.3)	−4785.7 (10.4)	−5576.4 (8.1)	−5134.0 (9.1)
InKind	0.017 (0.44)	−1412.1 (57.6)	−306.5 (90.5)	−377.8 (87.7)	−1049.9 (63.6)	639.9 (79.1)	−548.5 (80.1)
rd 3	0.342 (0.47)	1011.9 (28.2)	1198.6 (19.8)	1232.8 (18.9)	3148.7 (0.2)	2610.8 (0.4)	3217.2 (0.2)
Upfront × rd 3	0.267 (0.44)	−2343.1 (42.2)	−2175.1 (45.8)	−2226.5 (45.0)	−3264.6 (35.2)	−2616.3 (39.1)	−3059.7 (38.4)
WithGrace × rd 3	0.173 (0.38)	1941.9 (49.3)	2057.3 (46.8)	2147.2 (45.2)	2563.9 (41.7)	2285.4 (44.1)	2343.0 (45.9)
InKind × rd 3	0.089 (0.28)	−959.6 (67.6)	−1208.8 (58.4)	−1203.8 (59.0)	−115.1 (95.2)	−156.9 (93.6)	−126.4 (94.8)
rd 4	0.316 (0.47)	2208.3 (5.4)	2418.5 (3.7)	2473.8 (3.4)	5600.9 (0.0)	4082.8 (0.0)	5642.4 (0.0)
Upfront × rd 4	0.254 (0.44)	−832.8 (81.9)	−705.1 (84.6)	−754.0 (83.5)	−2453.6 (54.4)	−1260.0 (73.4)	−2184.1 (59.0)
WithGrace × rd 4	0.161 (0.37)	1926.6 (59.7)	1724.8 (64.0)	1837.0 (61.9)	2880.5 (45.5)	1859.8 (62.1)	2596.4 (50.3)
InKind × rd 4	0.082 (0.27)	−105.2 (96.8)	633.2 (81.8)	634.3 (81.8)	752.9 (76.4)	1959.8 (44.3)	685.1 (78.4)
HadCattle	0.218 (0.41)				4803.8 (17.4)		7901.7 (8.2)
HadCattle × rd 3	0.075 (0.26)				−4650.0 (2.6)		−4706.6 (2.3)
HadCattle × rd 4	0.068 (0.25)				−4965.5 (9.7)		−5180.3 (8.0)
FloodInRd1	0.487 (0.50)			103.0 (94.6)	599.3 (73.1)	−156.4 (92.7)	592.6 (74.2)
Head literate0	0.121 (0.33)			−875.6 (66.2)	−1510.2 (47.1)	−2060.1 (32.5)	−1401.3 (50.6)
ProdValue0	7262.039 (13742.94)		0.5 (0.0)	0.5 (0.0)	0.3 (2.0)	1.1 (0.4)	1.1 (0.5)
HHsize0	4.306 (1.43)			1897.6 (0.0)	1527.3 (0.8)	1852.3 (0.1)	1393.2 (1.6)
HadCattle × Upfront	0.014 (0.18)				11293.3 (14.7)		11981.0 (13.1)
HadCattle × Upfront × rd 3	0.004 (0.11)				6632.7 (24.7)		6292.2 (26.9)
HadCattle × Upfront × rd 4	0.005 (0.10)				6928.4 (42.4)		6797.2 (42.9)
HadCattle × WithGrace	−0.002 (0.23)				−6919.5 (35.4)		−7701.2 (30.4)
HadCattle × WithGrace × rd 3	−0.000 (0.14)				−16200.9 (1.8)		−15940.7 (1.9)
HadCattle × WithGrace × rd 4	−0.001 (0.13)				−18381.5 (5.0)		−18080.3 (5.3)
HadCattle × InKind	−0.006 (0.19)				−977.0 (82.4)		−754.3 (85.6)
HadCattle × InKind × rd 3	−0.001 (0.11)				14338.7 (1.8)		14353.4 (1.8)
HadCattle × InKind × rd 4	−0.003 (0.10)				15545.9 (5.7)		15062.1 (6.2)
NumCattle0	0.300 (0.66)					−13688.1 (12.4)	−18274.2 (5.8)
mean of dependent variable		23038	23038	23038	23038	23038	23038
T = 2		20	20	20	17	14	17
T = 3		101	101	101	57	56	55
T = 4		632	625	625	529	604	529
$\bar{R}^2$		0.045	0.128	0.14	0.114	0.128	0.123
N	1718	2118	2097	2097	1718	1938	1714

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 67: ANCOVA ESTIMATION OF LIVESTOCK AND PRODUCTIVE ASSETS BY ATTRIBUTES, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		14401.0 (0.0)	11633.4 (0.0)	3754.5 (18.5)	9723.0 (0.2)	5638.5 (5.8)	9498.6 (0.3)
Upfront	0.040 (0.41)	14266.1 (0.0)	12870.8 (0.0)	12729.5 (0.0)	10490.9 (0.0)	10845.2 (0.0)	10467.4 (0.0)
WithGrace	0.019 (0.50)	−5649.0 (10.0)	−5521.7 (6.0)	−5294.4 (7.2)	−5076.1 (7.5)	−5604.3 (7.0)	−5430.3 (6.6)
InKind	0.017 (0.44)	−1456.2 (55.7)	−270.5 (91.5)	−305.4 (90.0)	−826.6 (70.8)	717.7 (76.5)	−328.0 (88.0)
UltraPoor	0.625 (0.48)	−2493.8 (8.5)	−2552.4 (8.5)	−2522.4 (9.8)	−2488.8 (12.6)	−2058.7 (19.9)	−2437.5 (13.7)
Upfront × UltraPoor	0.051 (0.30)	−5914.9 (22.1)	−4590.9 (32.8)	−5367.9 (28.0)	−7581.5 (16.8)	−6178.3 (24.2)	−7447.9 (17.6)
WithGrace × UltraPoor	0.036 (0.39)	5256.3 (26.2)	6138.7 (19.4)	6921.7 (16.0)	10587.3 (4.2)	7418.7 (14.5)	10554.8 (4.8)
InKind × UltraPoor	0.019 (0.35)	−179.0 (95.2)	−922.6 (78.7)	−944.2 (78.0)	−2040.5 (53.6)	−606.9 (85.9)	−2215.4 (51.9)
rd 3	0.342 (0.47)	976.8 (29.6)	1195.3 (19.7)	1234.3 (18.7)	3089.4 (0.2)	2551.8 (0.5)	3159.8 (0.2)
UltraPoor × rd 3	0.210 (0.41)	−481.6 (79.2)	−643.6 (72.5)	−652.2 (72.3)	−335.7 (86.8)	−69.0 (97.0)	−345.1 (86.5)
Upfront × rd 3	0.267 (0.44)	−1998.1 (47.8)	−1871.1 (50.9)	−1937.9 (49.6)	−2942.8 (38.8)	−2216.4 (45.0)	−2715.2 (42.7)
WithGrace × rd 3	0.173 (0.38)	2243.3 (43.0)	2415.7 (39.7)	2513.5 (38.2)	2951.4 (34.8)	2557.6 (38.8)	2721.6 (38.8)
InKind × rd 3	0.089 (0.28)	−1281.3 (59.3)	−1584.2 (49.4)	−1583.3 (49.9)	−472.2 (81.6)	−468.2 (82.3)	−491.0 (80.9)
Upfront × UltraPoor × rd 3	0.017 (0.18)	5637.5 (29.6)	5130.8 (33.8)	5145.9 (33.7)	5677.0 (36.5)	5733.3 (29.7)	5768.7 (36.1)
WithGrace × UltraPoor × rd 3	0.012 (0.23)	−6356.8 (30.6)	−6644.8 (28.5)	−6835.7 (27.3)	−6518.0 (33.3)	−5979.9 (33.9)	−6582.2 (33.1)
InKind × UltraPoor × rd 3	0.006 (0.20)	4689.2 (33.1)	4892.8 (31.5)	4731.6 (33.3)	6163.2 (21.5)	5787.7 (22.6)	6235.0 (21.0)
rd 4	0.316 (0.47)	2155.4 (5.3)	2438.0 (3.3)	2494.8 (2.9)	5510.9 (0.0)	3998.5 (0.0)	5554.3 (0.0)
UltraPoor × rd 4	0.202 (0.40)	577.7 (79.1)	66.7 (97.6)	83.6 (97.0)	−87.8 (97.4)	604.5 (79.1)	−4.8 (99.9)
Upfront × rd 4	0.254 (0.44)	−471.5 (89.2)	−454.0 (89.6)	−507.4 (88.3)	−2034.2 (59.8)	−811.8 (81.9)	−1761.2 (65.0)
WithGrace × rd 4	0.161 (0.37)	2007.6 (56.8)	1844.3 (60.6)	1958.7 (58.4)	3052.6 (41.2)	1907.5 (60.0)	2769.9 (46.0)
InKind × rd 4	0.082 (0.27)	−171.6 (94.9)	611.6 (82.9)	604.4 (83.2)	639.2 (80.2)	1879.7 (47.9)	552.2 (82.8)
Upfront × UltraPoor × rd 4	0.017 (0.17)	10244.2 (13.6)	9570.9 (15.9)	9621.6 (15.5)	11557.7 (18.1)	11336.8 (11.3)	11533.9 (18.4)
WithGrace × UltraPoor × rd 4	0.011 (0.23)	−7758.9 (29.6)	−7982.9 (28.6)	−8190.7 (27.4)	−6882.7 (41.4)	−7485.9 (31.2)	−6994.9 (40.9)
InKind × UltraPoor × rd 4	0.006 (0.20)	1739.8 (73.6)	342.8 (95.3)	78.8 (98.9)	1266.9 (82.9)	1104.0 (84.5)	1649.6 (77.7)
HadCattle	0.218 (0.41)				4489.1 (20.5)		7563.7 (9.9)
HadCattle × rd 3	0.075 (0.26)				−4454.0 (3.7)		−4511.2 (3.4)
HadCattle × rd 4	0.068 (0.25)				−4501.4 (13.3)		−4727.8 (11.1)
FloodInRd1	0.487 (0.50)			29.2 (98.5)	355.9 (84.0)	−257.9 (88.1)	366.1 (84.1)
Head literate0	0.121 (0.33)			−1189.9 (56.0)	−1933.6 (34.6)	−2321.0 (27.6)	−1777.2 (38.9)
ProdValue0	7262.039 (13742.94)		0.5 (0.0)	0.5 (0.0)	0.3 (1.8)	1.1 (0.4)	1.1 (0.4)
HHsize0	4.306 (1.43)			1928.9 (0.0)	1608.0 (0.5)	1896.5 (0.1)	1472.4 (1.0)
HadCattle × Upfront	0.014 (0.18)				10435.3 (19.3)		11117.8 (17.1)
HadCattle × Upfront × rd 3	0.004 (0.11)				6306.5 (27.8)		5930.8 (30.5)
HadCattle × Upfront × rd 4	0.005 (0.10)				6233.8 (46.5)		6100.3 (47.1)
HadCattle × WithGrace	−0.002 (0.23)				−6154.7 (41.8)		−6921.5 (36.7)
HadCattle × WithGrace × rd 3	−0.000 (0.14)				−16995.8 (1.3)		−16720.1 (1.4)
HadCattle × WithGrace × rd 4	−0.001 (0.13)				−19088.4 (3.8)		−18784.2 (4.1)
HadCattle × InKind	−0.006 (0.19)				−1103.6 (80.1)		−901.6 (82.9)
HadCattle × InKind × rd 3	−0.001 (0.11)				14819.5 (1.8)		14840.7 (1.8)
HadCattle × InKind × rd 4	−0.003 (0.10)				15913.8 (5.7)		15428.6 (6.3)
NumCattle0	0.300 (0.66)					−13650.7 (12.3)	−18058.6 (5.9)
mean of dependent variable		23038	23038	23038	23038	23038	23038
T = 2		20	20	20	17	14	17

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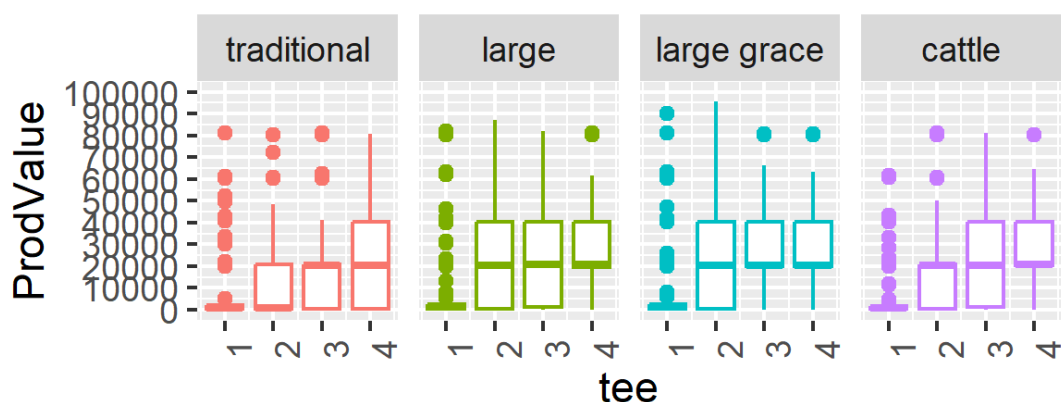
Source: Survey data.

Note:

III.5.7   Broad net assets: Broad assets+Livestock-GUK Debt-Other Debts

Broad net assets = Broad assets + net saving - debt to GUK - debts to relatives and money lenders.

```
Number of obs by Arm and attrition
            AttritIn
Arm            2    3    4    9  Sum
  traditional  6    4   20  144  174
  large        5    2    1  191  199
  large grace  22   3    3  170  198
  cattle       5    5   13  176  199
  Sum         38   14   37  681  770


Number of obs by membership status and attrition
                    AttritIn
BStatus               2    3    4    9  Sum
  borrower            8    6    8  575  597
  pure saver          0    0    0    0    0
  individual rejection 9    4    1   75   89
  group rejection     9    4    0   55   68
  rejection by flood  12    0   28    0   40
  Sum                38   14   37  705  794
```

```
[1] excl
[[1]]
BroadNetValue ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
BroadNetValue ~ dummyLarge + dummyLargeGrace + dummyCattle +
    BroadNetValue0

[[3]]
BroadNetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + BroadNetValue0

[[4]]
BroadNetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + BroadNetValue0

[[5]]
```

```
BroadNetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NumCows0 + BroadNetValue0

[[6]]
BroadNetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + BroadNetValue0 +
    dummyHadCows.Large + dummyHadCows.LargeGrace + dummyHadCows.Cattle

[1] exclP
[[1]]
BroadNetValue ~ dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor

[[2]]
BroadNetValue ~ dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor + BroadNetValue0

[[3]]
BroadNetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor + HHsize0 + HeadLiteracy0 + BroadNetValue0

[[4]]
BroadNetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor + dummyHadCows + HHsize0 + HeadLiteracy0 +
    BroadNetValue0

[[5]]
BroadNetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor + HHsize0 + HeadLiteracy0 + NumCows0 + BroadNetValue0

[[6]]
BroadNetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + BroadNetValue0 + dummyHadCows.Large + dummyHadCows.LargeGrace +
    dummyHadCows.Cattle

[1] excla
[[1]]
BroadNetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
BroadNetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    BroadNetValue0

[[3]]
BroadNetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + BroadNetValue0

[[4]]
BroadNetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + BroadNetValue0

[[5]]
BroadNetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0 + BroadNetValue0

[[6]]
BroadNetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 +
    BroadNetValue0 + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind
```

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```
[1] exclT
[[1]]
BroadNetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
BroadNetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + BroadNetValue0

[[3]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + BroadNetValue0

[[4]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    BroadNetValue0

[[5]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    BroadNetValue0

[[6]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + BroadNetValue0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[1] exclTa
[[1]]
BroadNetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
BroadNetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + BroadNetValue0

[[3]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
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    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + BroadNetValue0

[[4]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    BroadNetValue0

[[5]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    BroadNetValue0

[[6]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + BroadNetValue0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[1] exclTP
[[1]]
BroadNetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[2]]
BroadNetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    BroadNetValue0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[3]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + BroadNetValue0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4

[[4]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
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      dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
      dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
      dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
      dummyHadCows + HHsize0 + HeadLiteracy0 + BroadNetValue0 +
      dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
      dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
      dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
      dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[5]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
      dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
      dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
      dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
      HHsize0 + HeadLiteracy0 + NumCows0 + BroadNetValue0 + dummyLarge.UltraPoor +
      dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
      dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
      dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
      dummyCattle.UltraPoor.Time4

[[6]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
      dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
      dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
      dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
      dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + BroadNetValue0 +
      dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
      dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
      dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
      dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
      dummyHadCows.Large + dummyHadCows.Time3 + dummyHadCows.Large.Time3 +
      dummyHadCows.Time4 + dummyHadCows.Large.Time4 + dummyHadCows.LargeGrace +
      dummyHadCows.LargeGrace.Time3 + dummyHadCows.LargeGrace.Time4 +
      dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 + dummyHadCows.Cattle.Time4

[1] exclTPa
[[1]]
BroadNetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
      dummyCattle + dummyUltraPoor + dummyLargeGrace.Time3 + dummyCattle.Time3 +
      dummyUltraPoor.Time3 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
      dummyUltraPoor.Time4

[[2]]
BroadNetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
      dummyCattle + dummyUltraPoor + dummyLargeGrace.Time3 + dummyCattle.Time3 +
      dummyUltraPoor.Time3 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
      dummyUltraPoor.Time4 + BroadNetValue0

[[3]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
      dummyCattle + dummyUltraPoor + dummyLargeGrace.Time3 + dummyCattle.Time3 +
      dummyUltraPoor.Time3 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
      dummyUltraPoor.Time4 + HHsize0 + HeadLiteracy0 + BroadNetValue0

[[4]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
      dummyCattle + dummyUltraPoor + dummyLargeGrace.Time3 + dummyCattle.Time3 +
      dummyUltraPoor.Time3 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
      dummyUltraPoor.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
      BroadNetValue0
```

```
[[5]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyUltraPoor.Time3 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    dummyUltraPoor.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    BroadNetValue0

[[6]]
BroadNetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyUltraPoor.Time3 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    dummyUltraPoor.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + BroadNetValue0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Time4 + dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4
```

```
[1] excl
[[1]]
Net2Value ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
Net2Value ~ dummyLarge + dummyLargeGrace + dummyCattle + Net2Value0

[[3]]
Net2Value ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + Net2Value0

[[4]]
Net2Value ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + Net2Value0 + dummyHadCows.Large +
    dummyHadCows.LargeGrace + dummyHadCows.Cattle

[[5]]
Net2Value ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NumCows0 + Net2Value0

[[6]]
Net2Value ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + Net2Value0 +
    dummyHadCows.Large + dummyHadCows.LargeGrace + dummyHadCows.Cattle

[1] exclP
[[1]]
Net2Value ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
Net2Value ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + Net2Value0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[3]]
Net2Value ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + Net2Value0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[4]]
Net2Value ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + Net2Value0 +
```

```
        dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
        dummyHadCows.LargeSize + dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
Net2Value ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0 + Net2Value0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[6]]
Net2Value ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 +
    Net2Value0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[1] excla
[[1]]
Net2Value ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
Net2Value ~ dummyLargeSize + dummyWithGrace + dummyInKind + Net2Value0

[[3]]
Net2Value ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + Net2Value0

[[4]]
Net2Value ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyHadCows + HHsize0 + HeadLiteracy0 + Net2Value0 + dummyHadCows.LargeSize +
    dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
Net2Value ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NumCows0 + Net2Value0

[[6]]
Net2Value ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + Net2Value0 +
    dummyHadCows.LargeSize + dummyHadCows.WithGrace + dummyHadCows.InKind

[1] exclT
[[1]]
Net2Value ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
Net2Value ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + Net2Value0

[[3]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + Net2Value0

[[4]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
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    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    Net2Value0 + dummyHadCows.Large + dummyHadCows.Time3 + dummyHadCows.Large.Time3 +
    dummyHadCows.Time4 + dummyHadCows.Large.Time4 + dummyHadCows.LargeGrace +
    dummyHadCows.LargeGrace.Time3 + dummyHadCows.LargeGrace.Time4 +
    dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 + dummyHadCows.Cattle.Time4

[[5]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    Net2Value0

[[6]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + Net2Value0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[1] exclTa
[[1]]
Net2Value ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
Net2Value ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + Net2Value0

[[3]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + Net2Value0

[[4]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    Net2Value0 + dummyHadCows.Time3 + dummyHadCows.Time4 + dummyHadCows.LargeSize +
    dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    Net2Value0
```

```
[[6]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + Net2Value0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[1] exclTP
[[1]]
Net2Value ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[2]]
Net2Value ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    Net2Value0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[3]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + Net2Value0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4

[[4]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyHadCows + HHsize0 + HeadLiteracy0 + Net2Value0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[[5]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
```

```
        dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
        dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
        HHsize0 + HeadLiteracy0 + NumCows0 + Net2Value0 + dummyLarge.UltraPoor +
        dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
        dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
        dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
        dummyCattle.UltraPoor.Time4

[[6]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
        dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
        dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
        dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
        dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + Net2Value0 +
        dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
        dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
        dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
        dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
        dummyHadCows.Large + dummyHadCows.Time3 + dummyHadCows.Large.Time3 +
        dummyHadCows.Time4 + dummyHadCows.Large.Time4 + dummyHadCows.LargeGrace +
        dummyHadCows.LargeGrace.Time3 + dummyHadCows.LargeGrace.Time4 +
        dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 + dummyHadCows.Cattle.Time4

[1] exclTPa
[[1]]
Net2Value ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
        dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
        dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
        dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
        dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
        dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
        dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
        dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[2]]
Net2Value ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
        dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
        dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
        dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
        Net2Value0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
        dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
        dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
        dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
        dummyInKind.UltraPoor.Time4

[[3]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
        dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
        dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
        dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
        HHsize0 + HeadLiteracy0 + Net2Value0 + dummyLargeSize.UltraPoor +
        dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
        dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
        dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
        dummyInKind.UltraPoor.Time4

[[4]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
        dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
        dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
        dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
```

```
         dummyHadCows + HHsize0 + HeadLiteracy0 + Net2Value0 + dummyLargeSize.UltraPoor +
         dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
         dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
         dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
         dummyInKind.UltraPoor.Time4 + dummyHadCows.Time3 + dummyHadCows.Time4 +
         dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
         dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
         dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
         dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
         dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
         dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
         HHsize0 + HeadLiteracy0 + NumCows0 + Net2Value0 + dummyLargeSize.UltraPoor +
         dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
         dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
         dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
         dummyInKind.UltraPoor.Time4

[[6]]
Net2Value ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
         dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
         dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
         dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
         dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + Net2Value0 +
         dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
         dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
         dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
         dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4 +
         dummyHadCows.Time3 + dummyHadCows.Time4 + dummyHadCows.LargeSize +
         dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
         dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
         dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4
```
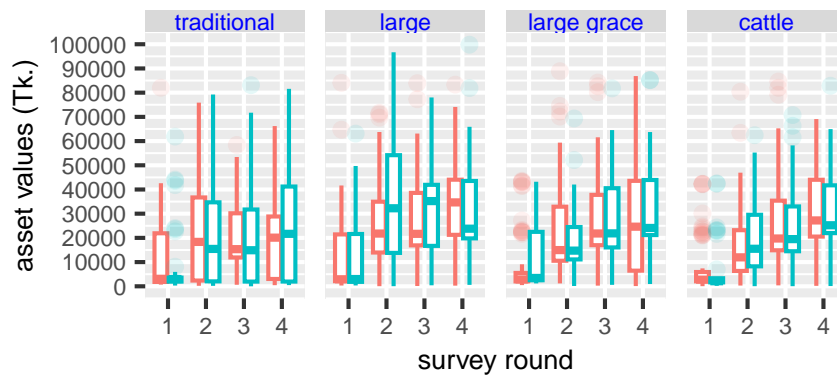
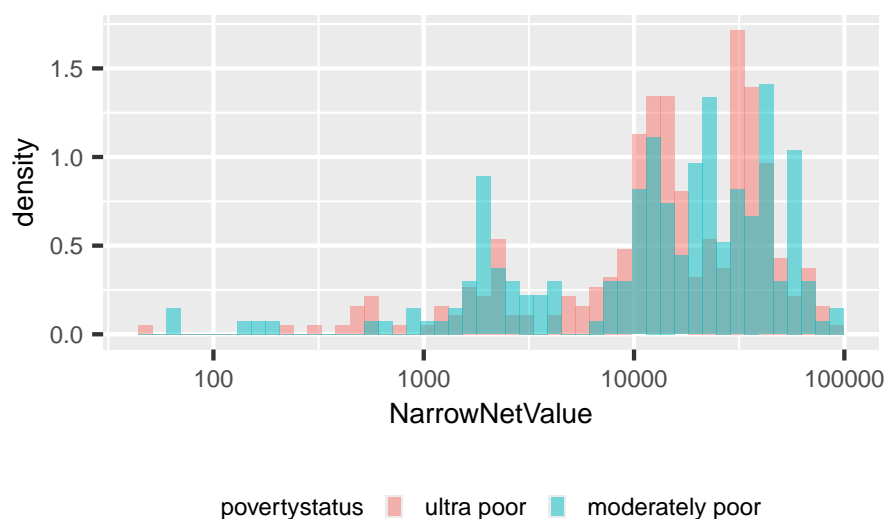FIGURE 20: TOTAL AND BROAD NET ASSET VALUES

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FIGURE 21: BROAD NET ASSET VALUES AT ROUND 1

FIGURE 22: TOTAL BROAD ASSET DYNAMICS OF NONBORROWERS
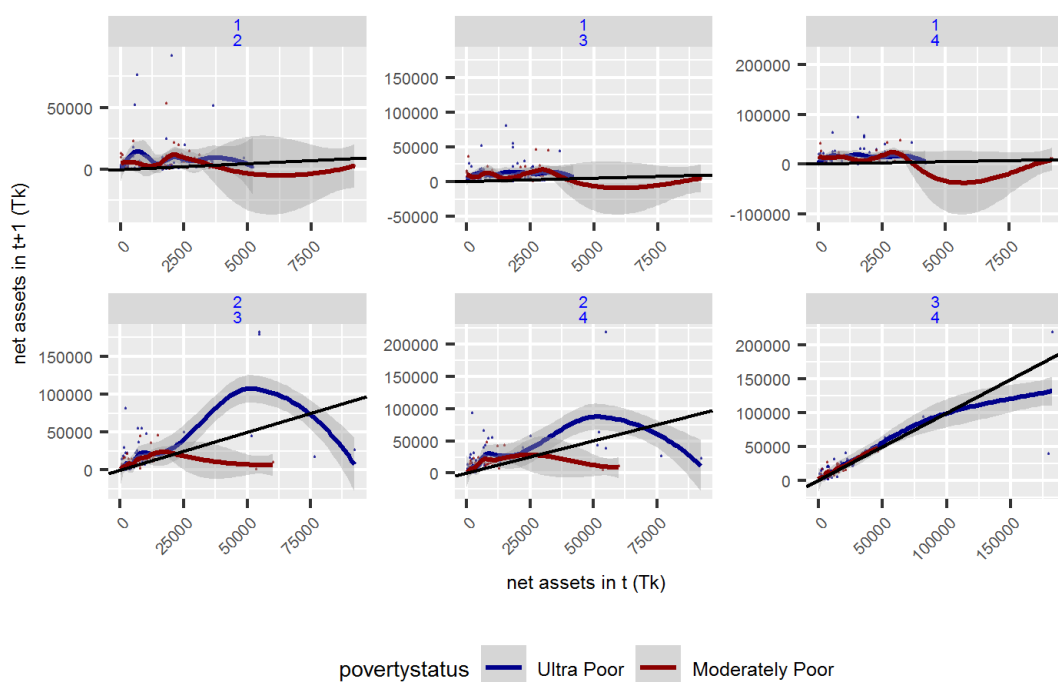
TABLE 68: ANCOVA ESTIMATION OF BROAD NET ASSETS

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		14585.8 (0.0)	11444.9 (0.0)	4940.3 (22.1)	14751.7 (0.1)	9090.1 (3.4)	13716.5 (0.3)
Large	0.048 (0.46)	14065.9 (0.0)	14591.9 (0.0)	14384.3 (0.0)	7238.2 (4.5)	11311.1 (0.7)	7314.8 (4.7)
LargeGrace	0.006 (0.43)	7649.2 (1.2)	7041.8 (5.6)	7234.6 (4.6)	2349.8 (45.7)	3847.5 (26.5)	2182.4 (49.8)
Cattle	0.009 (0.44)	6883.4 (0.2)	6589.3 (2.4)	6703.6 (2.1)	1419.3 (58.7)	4083.1 (11.7)	1492.2 (56.3)
HadCattle	0.265 (0.44)				6968.8 (25.6)		9519.6 (14.5)
FloodInRd1	0.414 (0.49)			302.7 (88.7)	1888.4 (42.2)	429.3 (85.9)	2083.2 (39.9)
Head literate0	0.149 (0.36)			−670.1 (80.6)	−1730.8 (55.9)	−2351.7 (40.7)	−1752.8 (55.7)
net asset value$_1$	10261.899 (15197.09)		0.5 (0.0)	0.5 (0.0)	0.2 (36.8)	0.6 (4.8)	0.7 (3.8)
HHsize0	4.538 (1.35)			1464.3 (6.2)	1291.8 (16.8)	1546.9 (8.1)	1218.4 (19.1)
HadCattle × Large	0.024 (0.25)				18150.2 (10.2)		18479.7 (9.5)
HadCattle × LargeGrace	0.009 (0.23)				2418.7 (71.1)		3246.7 (61.0)
HadCattle × Cattle	−0.012 (0.21)				10713.3 (9.1)		10679.0 (8.0)
NumCattle0	0.380 (0.73)					−3331.3 (62.1)	−12731.1 (13.5)
mean of dependent variable		21897	21897	21897	21897	21897	21897
$T = 2$		42	13	13	13	10	13
$T = 3$		134	81	81	38	40	36
$T = 4$		569	377	377	327	362	327
$\bar{R}^2$		0.041	0.126	0.13	0.088	0.091	0.09
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 69: ANCOVA ESTIMATION OF BROAD NET ASSETS BY ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		14585.8 (0.0)	11444.9 (0.0)	4940.3 (22.1)	14751.7 (0.1)	9090.1 (3.4)	13716.5 (0.3)
Upfront	0.063 (0.39)	14065.9 (0.0)	14591.9 (0.0)	14384.3 (0.0)	7238.2 (4.5)	11311.1 (0.7)	7314.8 (4.7)
WithGrace	0.014 (0.50)	−6416.7 (8.5)	−7550.1 (6.6)	−7149.7 (9.0)	−4888.4 (19.3)	−7463.6 (10.2)	−5132.5 (19.1)
InKind	0.009 (0.44)	−765.8 (77.4)	−452.6 (88.3)	−530.9 (85.8)	−930.5 (73.3)	235.7 (93.9)	−690.1 (80.6)
HadCattle	0.265 (0.44)				6968.8 (25.6)		9519.6 (14.5)
FloodInRd1	0.414 (0.49)			302.7 (88.7)	1888.4 (42.2)	429.3 (85.9)	2083.2 (39.9)
Head literate0	0.149 (0.36)			−670.1 (80.6)	−1730.8 (55.9)	−2351.7 (40.7)	−1752.8 (55.7)
net asset value$_1$	10261.899 (15197.09)		0.5 (0.0)	0.5 (0.0)	0.2 (36.8)	0.6 (4.8)	0.7 (3.8)
HHsize0	4.538 (1.35)			1464.3 (6.2)	1291.8 (16.8)	1546.9 (8.1)	1218.4 (19.1)
HadCattle × Upfront	0.021 (0.20)				18150.2 (10.2)		18479.7 (9.5)
HadCattle × WithGrace	−0.003 (0.26)				−15731.5 (13.9)		−15233.0 (16.0)
HadCattle × InKind	−0.012 (0.21)				8294.6 (13.2)		7432.3 (17.7)
NumCattle0	0.380 (0.73)					−3331.3 (62.1)	−12731.1 (13.5)
mean of dependent variable		21897	21897	21897	21897	21897	21897
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.041	0.126	0.13	0.088	0.091	0.09
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		9846.6 (0.0)	6795.3 (2.7)	−166.6 (97.0)	8022.1 (9.8)	3297.9 (47.0)	6994.4 (15.5)
Large	0.048 (0.46)	13609.2 (0.0)	13772.5 (0.1)	13573.3 (0.1)	6523.4 (8.6)	10458.4 (1.4)	6586.4 (8.6)
LargeGrace	0.006 (0.43)	5904.1 (4.9)	4728.4 (20.2)	4894.7 (18.1)	−142.5 (96.4)	1685.6 (62.1)	−291.9 (92.7)
Cattle	0.009 (0.44)	5675.4 (1.1)	5305.6 (9.6)	5392.0 (8.7)	135.8 (96.2)	2761.9 (32.7)	215.5 (93.9)
rd 3	0.342 (0.47)	5637.3 (0.0)	5935.1 (0.0)	6002.1 (0.0)	8494.7 (0.0)	7501.6 (0.0)	8592.1 (0.0)
Large × rd 3	0.104 (0.30)	1040.0 (76.0)	2877.7 (48.7)	2863.9 (49.1)	2191.4 (65.3)	3249.5 (45.3)	2519.2 (60.6)
LargeGrace × rd 3	0.085 (0.28)	7109.0 (1.8)	9327.4 (1.8)	9400.5 (1.8)	10981.5 (1.8)	9269.2 (3.3)	10942.2 (1.9)
Cattle × rd 3	0.087 (0.28)	3298.4 (24.1)	4431.4 (16.9)	4449.5 (16.3)	5346.2 (16.3)	5803.4 (7.2)	5332.1 (16.5)
rd 4	0.315 (0.46)	10333.5 (0.0)	10421.8 (0.0)	10531.5 (0.0)	14091.2 (0.0)	12042.9 (0.0)	14153.5 (0.0)
Large × rd 4	0.102 (0.30)	3138.6 (47.5)	4950.7 (26.4)	4896.4 (27.0)	4129.9 (37.8)	5601.6 (21.5)	4453.6 (34.2)
LargeGrace × rd 4	0.080 (0.27)	9211.8 (0.4)	12281.8 (0.2)	12367.1 (0.2)	15469.4 (0.1)	12581.3 (0.3)	15375.2 (0.1)
Cattle × rd 4	0.079 (0.27)	7367.6 (2.2)	8548.4 (1.3)	8680.4 (1.1)	9955.1 (0.8)	10302.6 (0.2)	9753.9 (0.9)
HadCattle	0.265 (0.44)				7844.7 (20.3)		10322.0 (11.8)
HadCattle × rd 3	0.092 (0.29)				−4533.7 (11.0)		−4613.9 (10.2)
HadCattle × rd 4	0.084 (0.28)				−2318.8 (54.3)		−2443.7 (52.1)
FloodInRd1	0.414 (0.49)			217.4 (92.0)	1956.7 (41.3)	377.2 (87.7)	2134.2 (39.4)
Head literate0	0.149 (0.36)			−231.7 (93.2)	−1625.8 (58.6)	−2035.7 (47.3)	−1618.0 (59.1)
net asset value$_1$	10261.899 (15197.09)		0.5 (0.0)	0.5 (0.0)	0.2 (38.7)	0.6 (5.5)	0.7 (4.7)
HHsize0	4.538 (1.35)			1551.0 (5.0)	1341.8 (15.2)	1633.0 (6.6)	1273.0 (17.1)
HadCattle × Large	0.024 (0.25)				17624.6 (11.2)		17922.7 (10.5)
HadCattle × Large × rd 3	0.008 (0.15)				3450.3 (69.2)		3020.9 (72.8)
HadCattle × Large × rd 4	0.009 (0.14)				818.9 (94.2)		665.8 (95.2)
HadCattle × LargeGrace	0.009 (0.23)				7123.7 (32.2)		7883.5 (26.1)
HadCattle × LargeGrace × rd 3	0.003 (0.14)				−24243.5 (1.1)		−24292.4 (1.1)
HadCattle × LargeGrace × rd 4	0.004 (0.13)				−29993.9 (1.7)		−29696.8 (1.8)
HadCattle × Cattle	−0.012 (0.21)				11774.6 (8.6)		11719.1 (7.9)
HadCattle × Cattle × rd 3	−0.004 (0.12)				−3368.5 (65.9)		−3444.3 (65.1)
HadCattle × Cattle × rd 4	−0.005 (0.11)				−7135.7 (45.5)		−6917.8 (46.7)
NumCattle0	0.380 (0.73)					−2867.9 (66.8)	−12092.9 (15.4)
mean of dependent variable		21897	21897	21897	21897	21897	21897
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.07	0.151	0.156	0.138	0.127	0.141
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 71: ANCOVA ESTIMATION OF BROAD NET ASSETS BY ATTRIBUTES AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		9846.6 (0.0)	6795.3 (2.7)	−166.6 (97.0)	8022.1 (9.8)	3297.9 (47.0)	6994.4 (15.5)
Upfront	0.063 (0.39)	13609.2 (0.0)	13772.5 (0.1)	13573.3 (0.1)	6523.4 (8.6)	10458.4 (1.4)	6586.4 (8.6)
WithGrace	0.014 (0.50)	−7705.1 (3.4)	−9044.1 (2.4)	−8678.6 (3.5)	−6666.0 (7.1)	−8772.8 (4.5)	−6878.3 (7.3)
InKind	0.009 (0.44)	−228.6 (92.8)	577.2 (84.7)	497.3 (86.3)	278.3 (91.6)	1076.3 (71.2)	507.4 (85.1)
rd 3	0.342 (0.47)	5637.3 (0.0)	5935.1 (0.0)	6002.1 (0.0)	8494.7 (0.0)	7501.6 (0.0)	8592.1 (0.0)
Upfront × rd 3	0.276 (0.45)	1040.0 (76.0)	2877.7 (48.7)	2863.9 (49.1)	2191.4 (65.3)	3249.5 (45.3)	2519.2 (60.6)
WithGrace × rd 3	0.172 (0.38)	6069.0 (9.1)	6449.8 (15.5)	6536.6 (15.3)	8790.2 (6.4)	6019.7 (20.7)	8423.0 (7.5)
InKind × rd 3	0.087 (0.28)	−3810.6 (20.9)	−4896.0 (19.3)	−4951.0 (18.9)	−5635.3 (12.4)	−3465.8 (36.3)	−5610.1 (12.4)
rd 4	0.315 (0.46)	10333.5 (0.0)	10421.8 (0.0)	10531.5 (0.0)	14091.2 (0.0)	12042.9 (0.0)	14153.5 (0.0)
Upfront × rd 4	0.260 (0.44)	3138.6 (47.5)	4950.7 (26.4)	4896.4 (27.0)	4129.9 (37.8)	5601.6 (21.5)	4453.6 (34.2)
WithGrace × rd 4	0.158 (0.37)	6073.2 (19.5)	7331.1 (14.4)	7470.7 (13.9)	11339.5 (2.9)	6979.7 (18.3)	10921.6 (3.4)
InKind × rd 4	0.079 (0.27)	−1844.2 (60.8)	−3733.4 (37.8)	−3686.7 (38.3)	−5514.3 (20.3)	−2278.7 (59.8)	−5621.3 (19.7)
HadCattle	0.265 (0.44)				7844.7 (20.3)		10322.0 (11.8)
HadCattle × rd 3	0.092 (0.29)				−4533.7 (11.0)		−4613.9 (10.2)
HadCattle × rd 4	0.084 (0.28)				−2318.8 (54.3)		−2443.7 (52.1)
FloodInRd1	0.414 (0.49)			217.4 (92.0)	1956.7 (41.3)	377.2 (87.7)	2134.2 (39.4)
Head literate0	0.149 (0.36)			−231.7 (93.2)	−1625.8 (58.6)	−2035.7 (47.3)	−1618.0 (59.1)
net asset value$_1$	10261.899 (15197.09)		0.5 (0.0)	0.5 (0.0)	0.2 (38.7)	0.6 (5.5)	0.7 (4.7)
HHsize0	4.538 (1.35)			1551.0 (5.0)	1341.8 (15.2)	1633.0 (6.6)	1273.0 (17.1)
HadCattle × Upfront	0.021 (0.20)				17624.6 (11.2)		17922.7 (10.5)
HadCattle × Upfront × rd 3	0.006 (0.12)				3450.3 (69.2)		3020.9 (72.8)
HadCattle × Upfront × rd 4	0.007 (0.11)				818.9 (94.2)		665.8 (95.2)
HadCattle × WithGrace	−0.003 (0.26)				−10500.8 (31.2)		−10039.2 (34.1)
HadCattle × WithGrace × rd 3	−0.001 (0.15)				−27693.8 (0.1)		−27313.3 (0.1)
HadCattle × WithGrace × rd 4	−0.001 (0.14)				−30812.8 (1.0)		−30362.7 (1.1)
HadCattle × InKind	−0.012 (0.21)				4650.9 (41.6)		3835.7 (50.2)
HadCattle × InKind × rd 3	−0.004 (0.12)				20875.1 (0.5)		20848.1 (0.5)
HadCattle × InKind × rd 4	−0.005 (0.11)				22858.2 (2.9)		22779.1 (2.9)
NumCattle0	0.380 (0.73)					−2867.9 (66.8)	−12092.9 (15.4)
mean of dependent variable		21897	21897	21897	21897	21897	21897
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.07	0.151	0.156	0.138	0.127	0.141
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

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TABLE 72: ANCOVA ESTIMATION OF BROAD NET ASSETS BY ARM, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		9459.5 (0.0)	6006.4 (8.0)	−1241.0 (79.4)	7082.7 (15.4)	2480.2 (61.7)	5923.2 (24.5)
Large	0.048 (0.46)	13843.8 (0.0)	14510.3 (0.0)	14364.7 (0.1)	7508.6 (5.0)	11049.6 (1.2)	7649.0 (4.9)
LargeGrace	0.006 (0.43)	6320.4 (3.3)	5241.1 (17.3)	5486.2 (15.4)	45.2 (98.9)	2043.9 (58.5)	−114.9 (97.3)
Cattle	0.009 (0.44)	6141.2 (0.5)	5927.8 (8.3)	6103.5 (7.2)	622.4 (84.2)	3262.9 (31.7)	768.2 (80.7)
UltraPoor	0.607 (0.49)	−3853.9 (1.2)	−3536.2 (8.3)	−3741.7 (6.6)	−3429.9 (12.0)	−3093.2 (15.4)	−3269.3 (13.9)
Large × UltraPoor	0.045 (0.37)	−5124.2 (31.2)	−5152.9 (42.2)	−5420.0 (41.8)	−10297.4 (14.1)	−6934.7 (33.5)	−9742.9 (16.8)
LargeGrace × UltraPoor	0.027 (0.35)	2507.0 (43.3)	5286.4 (27.8)	5334.0 (25.6)	5148.5 (28.3)	4198.2 (41.5)	6480.1 (19.5)
Cattle × UltraPoor	0.001 (0.34)	−7.9 (99.8)	−349.3 (94.3)	−53.2 (99.2)	914.8 (87.0)	−97.2 (98.6)	1232.1 (82.6)
rd 3	0.342 (0.47)	5622.4 (0.0)	5939.2 (0.0)	6005.6 (0.0)	8409.4 (0.0)	7403.5 (0.0)	8518.2 (0.0)
Large × rd 3	0.104 (0.30)	1719.3 (60.7)	3296.1 (44.9)	3255.2 (45.5)	3066.1 (54.2)	3960.2 (39.1)	3429.5 (49.7)
LargeGrace × rd 3	0.085 (0.28)	7933.9 (1.4)	10165.6 (2.8)	10190.4 (2.9)	12851.2 (1.3)	10298.2 (4.1)	12836.1 (1.3)
Cattle × rd 3	0.087 (0.28)	3679.8 (19.7)	5087.6 (15.1)	5058.5 (14.9)	6788.3 (9.5)	6747.0 (6.6)	6779.7 (9.6)
UltraPoor × rd 3	0.204 (0.40)	−288.7 (89.2)	826.6 (77.5)	930.3 (74.8)	143.8 (96.5)	1529.2 (60.1)	134.5 (96.7)
Large × UltraPoor × rd 3	0.014 (0.21)	6909.8 (26.7)	8732.1 (24.8)	8732.3 (24.8)	11429.2 (17.1)	9920.7 (20.4)	11482.0 (17.2)
LargeGrace × UltraPoor × rd 3	0.010 (0.21)	−1198.5 (84.0)	−1377.4 (87.7)	−1296.5 (88.5)	−2623.9 (81.0)	528.9 (95.5)	−2610.2 (81.1)
Cattle × UltraPoor × rd 3	−0.000 (0.19)	6969.4 (9.2)	6109.7 (25.1)	6065.2 (25.6)	12323.3 (4.6)	9830.8 (9.0)	12377.2 (4.6)
rd 4	0.315 (0.46)	10411.2 (0.0)	10655.2 (0.0)	10759.0 (0.0)	14209.8 (0.0)	12224.6 (0.0)	14285.9 (0.0)
Large × rd 4	0.102 (0.30)	3379.0 (42.0)	4037.2 (37.8)	3965.4 (38.7)	3790.8 (43.3)	4808.3 (30.7)	4114.0 (39.7)
LargeGrace × rd 4	0.080 (0.27)	9376.5 (0.6)	11353.7 (1.4)	11395.8 (1.4)	15566.2 (0.3)	11699.1 (1.8)	15465.5 (0.3)
Cattle × rd 4	0.079 (0.27)	7206.8 (2.8)	7884.4 (4.3)	7966.7 (3.7)	10073.9 (1.4)	9756.3 (1.1)	9854.6 (1.6)
UltraPoor × rd 4	0.195 (0.40)	2844.1 (26.0)	5151.7 (7.5)	5199.8 (7.3)	3773.1 (25.7)	6025.0 (3.7)	3789.8 (25.6)
Large × UltraPoor × rd 4	0.016 (0.21)	10217.6 (19.4)	5895.4 (46.5)	6082.2 (45.0)	8060.4 (39.4)	7172.6 (37.8)	8124.8 (39.2)
LargeGrace × UltraPoor × rd 4	0.008 (0.20)	−1411.8 (81.4)	−3313.4 (66.7)	−3040.4 (69.6)	−2782.9 (76.7)	−1073.3 (89.6)	−2836.3 (76.3)
Cattle × UltraPoor × rd 4	−0.001 (0.19)	6055.2 (19.5)	1043.0 (84.6)	961.3 (86.0)	7501.8 (24.6)	4461.2 (43.0)	7483.2 (24.5)
HadCattle	0.265 (0.44)				8201.7 (18.5)		10868.0 (10.7)
HadCattle × rd 3	0.092 (0.29)				−4604.1 (10.5)		−4700.3 (9.5)
HadCattle × rd 4	0.084 (0.28)				−2566.2 (51.5)		−2711.1 (49.1)
FloodInRd1	0.414 (0.49)			152.9 (94.4)	1582.2 (51.0)	202.6 (93.4)	1813.4 (47.4)
Head literate0	0.149 (0.36)			−659.9 (81.7)	−2041.6 (49.9)	−2419.1 (41.3)	−1951.1 (52.0)
net asset value₁	10261.899 (15197.09)		0.5 (0.0)	0.5 (0.0)	0.2 (41.6)	0.6 (5.0)	0.7 (4.0)
HHsize0	4.538 (1.35)			1621.4 (3.9)	1477.5 (10.9)	1713.7 (5.2)	1403.1 (12.7)
HadCattle × Large	0.024 (0.25)				16251.4 (14.2)		16436.7 (13.6)
HadCattle × Large × rd 3	0.008 (0.15)				2819.2 (72.2)		2354.9 (76.5)
HadCattle × Large × rd 4	0.009 (0.14)				1764.4 (87.5)		1601.7 (88.6)
HadCattle × LargeGrace	0.009 (0.23)				7162.6 (31.8)		8007.8 (24.5)
HadCattle × LargeGrace × rd 3	0.003 (0.14)				−27087.1 (0.5)		−27149.5 (0.4)
HadCattle × LargeGrace × rd 4	0.004 (0.13)				−30352.9 (2.1)		−30071.5 (2.2)
HadCattle × Cattle	−0.012 (0.21)				11221.7 (10.3)		11051.8 (9.6)
HadCattle × Cattle × rd 3	−0.004 (0.12)				−5263.1 (44.6)		−5335.2 (43.9)
HadCattle × Cattle × rd 4	−0.005 (0.11)				−7993.4 (42.1)		−7746.0 (43.3)
NumCattle0	0.380 (0.73)		**152**			−2855.6 (66.5)	−12408.5 (14.7)
mean of dependent variable		21897	21897	21897	21897	21897	21897
T = 2		42	13	13	13	10	13

TABLE 73: ANCOVA ESTIMATION OF BROAD NET ASSETS BY ATTRIBUTES, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		9459.5 (0.0)	6006.4 (8.0)	−1241.0 (79.4)	7082.7 (15.4)	2480.2 (61.7)	5923.2 (24.5)
Upfront	0.063 (0.39)	13843.8 (0.0)	14510.3 (0.0)	14364.7 (0.1)	7508.6 (5.0)	11049.6 (1.2)	7649.0 (4.9)
WithGrace	0.014 (0.50)	−7523.5 (2.8)	−9269.2 (1.7)	−8878.6 (2.6)	−7463.4 (3.5)	−9005.7 (3.5)	−7763.8 (3.5)
InKind	0.009 (0.44)	−179.2 (94.2)	686.7 (81.6)	617.4 (82.9)	577.2 (82.7)	1219.0 (67.6)	883.1 (74.4)
UltraPoor	0.607 (0.49)	−3853.9 (1.2)	−3536.2 (8.3)	−3741.7 (6.6)	−3429.9 (12.0)	−3093.2 (15.4)	−3269.3 (13.9)
Upfront × UltraPoor	0.072 (0.27)	−5124.2 (31.2)	−5152.9 (42.2)	−5420.0 (41.8)	−10297.4 (14.1)	−6934.7 (33.5)	−9742.9 (16.8)
WithGrace × UltraPoor	0.027 (0.39)	7631.2 (12.6)	10439.3 (11.2)	10754.0 (11.0)	15445.9 (2.6)	11132.9 (10.1)	16223.0 (2.1)
InKind × UltraPoor	0.001 (0.34)	−2514.9 (44.3)	−5635.7 (25.5)	−5387.2 (27.8)	−4233.6 (43.5)	−4295.4 (39.4)	−5248.0 (34.3)
rd 3	0.342 (0.47)	5622.4 (0.0)	5939.2 (0.0)	6005.6 (0.0)	8409.4 (0.0)	7403.5 (0.0)	8518.2 (0.0)
UltraPoor × rd 3	0.204 (0.40)	−288.7 (89.2)	826.6 (77.5)	930.3 (74.8)	143.8 (96.5)	1529.2 (60.1)	134.5 (96.7)
Upfront × rd 3	0.276 (0.45)	1719.3 (60.7)	3296.1 (44.9)	3255.2 (45.5)	3066.1 (54.2)	3960.2 (39.1)	3429.5 (49.7)
WithGrace × rd 3	0.172 (0.38)	6214.6 (8.9)	6869.6 (15.7)	6935.2 (15.6)	9785.1 (5.3)	6338.0 (21.1)	9406.7 (6.2)
InKind × rd 3	0.087 (0.28)	−4254.1 (18.4)	−5078.0 (22.3)	−5131.9 (22.1)	−6062.9 (13.8)	−3551.2 (39.9)	−6056.5 (13.6)
Upfront × UltraPoor × rd 3	0.024 (0.16)	6909.8 (26.7)	8732.1 (24.8)	8732.3 (24.8)	11429.2 (17.1)	9920.7 (20.4)	11482.0 (17.2)
WithGrace × UltraPoor × rd 3	0.010 (0.23)	−8108.3 (27.4)	−10109.5 (31.8)	−10028.8 (32.4)	−14053.1 (22.3)	−9391.8 (35.9)	−14092.1 (22.2)
InKind × UltraPoor × rd 3	−0.000 (0.19)	8167.9 (15.7)	7487.1 (38.0)	7361.7 (39.0)	14947.2 (13.6)	9301.9 (28.4)	14987.4 (13.5)
rd 4	0.315 (0.46)	10411.2 (0.0)	10655.2 (0.0)	10759.0 (0.0)	14209.8 (0.0)	12224.6 (0.0)	14285.9 (0.0)
UltraPoor × rd 4	0.195 (0.40)	2844.1 (26.0)	5151.7 (7.5)	5199.8 (7.3)	3773.1 (25.7)	6025.0 (3.7)	3789.8 (25.6)
Upfront × rd 4	0.260 (0.44)	3379.0 (42.0)	4037.2 (37.8)	3965.4 (38.7)	3790.8 (43.3)	4808.3 (30.7)	4114.0 (39.7)
WithGrace × rd 4	0.158 (0.37)	5997.5 (18.2)	7316.5 (15.2)	7430.4 (14.8)	11775.4 (2.7)	6890.9 (19.6)	11351.5 (3.3)
InKind × rd 4	0.079 (0.27)	−2169.7 (55.4)	−3469.3 (44.5)	−3429.0 (45.1)	−5492.3 (23.7)	−1942.8 (67.1)	−5610.9 (22.9)
Upfront × UltraPoor × rd 4	0.024 (0.16)	10217.6 (19.4)	5895.4 (46.5)	6082.2 (45.0)	8060.4 (39.4)	7172.6 (37.8)	8124.8 (39.2)
WithGrace × UltraPoor × rd 4	0.008 (0.22)	−11629.4 (18.6)	−9208.8 (36.2)	−9122.6 (36.7)	−10843.4 (34.6)	−8245.9 (41.3)	−10961.1 (34.3)
InKind × UltraPoor × rd 4	−0.001 (0.19)	7467.0 (22.0)	4356.5 (58.9)	4001.8 (62.3)	10284.7 (26.2)	5534.5 (49.5)	10319.5 (26.0)
HadCattle	0.265 (0.44)				8201.7 (18.5)		10868.0 (10.7)
HadCattle × rd 3	0.092 (0.29)				−4604.1 (10.5)		−4700.3 (9.5)
HadCattle × rd 4	0.084 (0.28)				−2566.2 (51.5)		−2711.1 (49.1)
FloodInRd1	0.414 (0.49)			152.9 (94.4)	1582.2 (51.0)	202.6 (93.4)	1813.4 (47.4)
Head literate0	0.149 (0.36)			−659.9 (81.7)	−2041.6 (49.9)	−2419.1 (41.3)	−1951.1 (52.0)
net asset value₁	10261.899 (15197.09)		0.5 (0.0)	0.5 (0.0)	0.2 (41.6)	0.6 (5.0)	0.7 (4.0)
HHsize0	4.538 (1.35)			1621.4 (3.9)	1477.5 (10.9)	1713.7 (5.2)	1403.1 (12.7)
HadCattle × Upfront	0.021 (0.20)				16251.4 (14.2)		16436.7 (13.6)
HadCattle × Upfront × rd 3	0.006 (0.12)				2819.2 (72.2)		2354.9 (76.5)
HadCattle × Upfront × rd 4	0.007 (0.11)				1764.4 (87.5)		1601.7 (88.6)
HadCattle × WithGrace	−0.003 (0.26)				−9088.9 (38.4)		−8428.9 (42.7)
HadCattle × WithGrace × rd 3	−0.001 (0.15)				−29906.2 (0.1)		−29504.4 (0.1)
HadCattle × WithGrace × rd 4	−0.001 (0.14)				−32117.3 (0.9)		−31673.2 (1.0)
HadCattle × InKind	−0.012 (0.21)				4059.1 (49.4)		3044.0 (60.5)
HadCattle × InKind × rd 3	−0.004 (0.12)				21824.0 (0.9)		21814.3 (0.8)
HadCattle × InKind × rd 4	−0.005 (0.11)				22359.5 (4.7)		22325.5 (4.7)
NumCattle0	0.380 (0.73)					−2855.6 (66.5)	−12408.5 (14.7)
mean of dependent variable		21897	21897	21897	21897	21897	21897
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36

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TABLE 74: ANCOVA ESTIMATION OF BROAD NET ASSETS USING ANNUAL PRICES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		21122.2 (0.0)	16056.8 (0.0)	7574.8 (16.6)	21880.7 (0.1)	13342.9 (2.4)	20636.3 (0.2)
Large	0.048 (0.46)	19833.4 (0.0)	20493.5 (0.0)	20216.7 (0.0)	10595.0 (4.2)	16179.2 (0.7)	10689.6 (4.4)
LargeGrace	0.006 (0.43)	11660.6 (0.7)	11113.6 (3.4)	11380.3 (2.8)	5361.2 (25.6)	7015.8 (16.1)	5160.9 (28.1)
Cattle	0.009 (0.44)	10302.7 (0.1)	9859.2 (1.2)	10029.6 (1.1)	3345.3 (35.5)	6826.5 (5.4)	3442.0 (33.4)
HadCattle	0.265 (0.44)				7049.3 (42.2)		10101.8 (28.6)
FloodInRd1	0.414 (0.49)			440.3 (88.6)	2628.5 (43.8)	705.4 (84.0)	2829.5 (42.6)
Head literate0	0.149 (0.36)			−1269.7 (74.8)	−2658.4 (53.3)	−3717.1 (36.5)	−2747.7 (52.4)
net asset value$_1$	10261.899 (15197.09)		0.7 (0.0)	0.7 (0.0)	0.3 (27.1)	0.8 (4.2)	1.0 (4.1)
HHsize0	4.538 (1.35)			1915.6 (7.9)	1468.7 (26.5)	1987.7 (10.3)	1385.5 (28.8)
HadCattle × Large	0.024 (0.25)				25506.6 (11.1)		25905.6 (10.4)
HadCattle × LargeGrace	0.009 (0.23)				−1085.0 (90.2)		−88.2 (99.2)
HadCattle × Cattle	−0.012 (0.21)				12000.2 (15.9)		11962.1 (14.6)
NumCattle0	0.380 (0.73)					−4056.0 (66.8)	−15243.8 (20.9)
mean of dependent variable		31787	31787	31787	31787	31787	31787
$T = 2$		42	13	13	13	10	13
$T = 3$		134	81	81	38	40	36
$T = 4$		569	377	377	327	362	327
$\bar{R}^2$		0.035	0.113	0.115	0.074	0.079	0.075
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Sample is continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 75: ANCOVA ESTIMATION OF BROAD NET ASSETS USING ANNUAL PRICES BY ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		21122.2 (0.0)	16056.8 (0.0)	7574.8 (16.6)	21880.7 (0.1)	13342.9 (2.4)	20636.3 (0.2)
Upfront	0.063 (0.39)	19833.4 (0.0)	20493.5 (0.0)	20216.7 (0.0)	10595.0 (4.2)	16179.2 (0.7)	10689.6 (4.4)
WithGrace	0.014 (0.50)	−8172.9 (13.3)	−9379.9 (12.3)	−8836.4 (16.0)	−5233.8 (35.4)	−9163.5 (17.9)	−5528.7 (34.6)
InKind	0.009 (0.44)	−1357.8 (72.6)	−1254.3 (78.4)	−1350.7 (76.1)	−2015.9 (62.2)	−189.3 (96.7)	−1718.9 (68.1)
HadCattle	0.265 (0.44)				7049.3 (42.2)		10101.8 (28.6)
FloodInRd1	0.414 (0.49)			440.3 (88.6)	2628.5 (43.8)	705.4 (84.0)	2829.5 (42.6)
Head literate0	0.149 (0.36)			−1269.7 (74.8)	−2658.4 (53.3)	−3717.1 (36.5)	−2747.7 (52.4)
net asset value$_1$	10261.899 (15197.09)		0.7 (0.0)	0.7 (0.0)	0.3 (27.1)	0.8 (4.2)	1.0 (4.1)
HHsize0	4.538 (1.35)			1915.6 (7.9)	1468.7 (26.5)	1987.7 (10.3)	1385.5 (28.8)
HadCattle × Upfront	0.021 (0.20)				25506.6 (11.1)		25905.6 (10.4)
HadCattle × WithGrace	−0.003 (0.26)				−26591.6 (8.9)		−25993.9 (10.4)
HadCattle × InKind	−0.012 (0.21)				13085.2 (9.2)		12050.3 (11.8)
NumCattle0	0.380 (0.73)					−4056.0 (66.8)	−15243.8 (20.9)
mean of dependent variable		31787	31787	31787	31787	31787	31787
$T = 2$		42	13	13	13	10	13
$T = 3$		134	81	81	38	40	36
$T = 4$		569	377	377	327	362	327
$\bar{R}^2$		0.035	0.113	0.115	0.074	0.079	0.075
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Sample is continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 76: ANCOVA ESTIMATION OF BROAD NET ASSETS USING ANNUAL PRICES BY PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		7645.8 (0.3)	2389.7 (52.7)	−7235.9 (20.6)	4233.9 (50.5)	−2792.4 (64.5)	3059.3 (64.0)
Large	0.048 (0.46)	17517.7 (0.0)	17643.0 (0.0)	17382.0 (0.1)	8416.3 (8.6)	13607.7 (1.3)	8556.9 (8.5)
LargeGrace	0.006 (0.43)	8510.9 (2.8)	7071.7 (14.3)	7293.8 (12.5)	1539.3 (71.4)	3431.0 (44.7)	1371.1 (74.7)
Cattle	0.009 (0.44)	7911.6 (0.6)	7590.3 (5.6)	7710.6 (5.0)	1392.4 (69.5)	4821.7 (17.1)	1481.2 (67.3)
rd 3	0.342 (0.47)	11102.9 (0.0)	11799.3 (0.0)	11894.3 (0.0)	15189.0 (0.0)	13763.1 (0.0)	15298.3 (0.0)
Large × rd 3	0.104 (0.30)	3894.8 (30.3)	6219.2 (17.2)	6199.9 (17.5)	3700.9 (47.3)	5886.1 (21.9)	4068.9 (43.1)
LargeGrace × rd 3	0.085 (0.28)	8841.6 (0.8)	11452.4 (0.8)	11556.4 (0.8)	11662.7 (2.3)	10450.9 (2.9)	11619.1 (2.3)
Cattle × rd 3	0.087 (0.28)	4701.5 (13.5)	5941.5 (7.6)	5975.8 (7.0)	5863.8 (14.4)	6815.2 (4.2)	5848.6 (14.6)
rd 4	0.315 (0.46)	33203.1 (0.0)	33959.1 (0.0)	34114.2 (0.0)	43152.0 (0.0)	38418.2 (0.0)	43291.2 (0.0)
Large × rd 4	0.102 (0.30)	16331.8 (2.3)	19941.1 (1.0)	19863.7 (1.0)	10772.5 (13.0)	17497.5 (3.1)	11400.8 (11.0)
LargeGrace × rd 4	0.080 (0.27)	18191.0 (0.1)	22763.0 (0.1)	22882.5 (0.1)	21492.8 (0.8)	19914.4 (0.8)	21386.9 (0.8)
Cattle × rd 4	0.079 (0.27)	15157.1 (0.3)	16026.6 (0.3)	16219.6 (0.2)	13804.5 (0.8)	16369.1 (0.1)	13579.6 (0.9)
HadCattle	0.265 (0.44)				7188.9 (40.8)		10048.0 (28.8)
HadCattle × rd 3	0.092 (0.29)				−1756.2 (58.9)		−1845.3 (56.8)
HadCattle × rd 4	0.084 (0.28)				9728.9 (14.0)		9503.3 (14.9)
FloodInRd1	0.414 (0.49)			212.2 (94.6)	2761.2 (42.4)	514.6 (88.5)	2916.7 (41.8)
Head literate0	0.149 (0.36)			−219.6 (95.5)	−2446.5 (56.6)	−2985.2 (46.6)	−2433.7 (57.3)
net asset value$_1$	10261.899 (15197.09)	0.8 (0.0)	0.7 (0.0)	0.3 (29.9)	0.7 (5.6)	0.9 (6.0)	
HHsize0	4.538 (1.35)			2148.6 (5.1)	1622.4 (21.1)	2222.3 (6.9)	1553.0 (22.6)
HadCattle × Large	0.024 (0.25)				23182.6 (11.6)		23410.4 (11.1)
HadCattle × Large × rd 3	0.008 (0.15)				7260.7 (47.7)		6785.0 (50.6)
HadCattle × Large × rd 4	0.009 (0.14)				15246.9 (47.6)		14746.2 (48.9)
HadCattle × LargeGrace	0.009 (0.23)				4678.2 (59.9)		5509.6 (52.6)
HadCattle × LargeGrace × rd 3	0.003 (0.14)				−26617.2 (0.8)		−26671.8 (0.8)
HadCattle × LargeGrace × rd 4	0.004 (0.13)				−42333.3 (2.0)		−41999.1 (2.1)
HadCattle × Cattle	−0.012 (0.21)				13590.3 (11.0)		13501.3 (10.3)
HadCattle × Cattle × rd 3	−0.004 (0.12)				−2358.4 (76.7)		−2442.9 (75.9)
HadCattle × Cattle × rd 4	−0.005 (0.11)				−6461.5 (63.4)		−6223.4 (64.5)
NumCattle0	0.380 (0.73)					−2722.6 (76.8)	−13546.2 (25.6)
mean of dependent variable		31787	31787	31787	31787	31787	31787
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.173	0.242	0.245	0.287	0.241	0.289
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Sample is continuing members and replacing members of early rejecters and received loans prior to 2015 January. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		7645.8 (0.3)	2389.7 (52.7)	−7235.9 (20.6)	4233.9 (50.5)	−2792.4 (64.5)	3059.3 (64.0)
Upfront	0.063 (0.39)	17517.7 (0.0)	17643.0 (0.0)	17382.0 (0.1)	8416.3 (8.6)	13607.7 (1.3)	8556.9 (8.5)
WithGrace	0.014 (0.50)	−9006.7 (5.7)	−10571.3 (4.6)	−10088.1 (6.6)	−6877.0 (16.9)	−10176.7 (8.7)	−7185.8 (16.5)
InKind	0.009 (0.44)	−599.3 (85.6)	518.7 (89.9)	416.8 (91.5)	−146.9 (96.7)	1390.7 (72.5)	110.1 (97.6)
rd 3	0.342 (0.47)	11102.9 (0.0)	11799.3 (0.0)	11894.3 (0.0)	15189.0 (0.0)	13763.1 (0.0)	15298.3 (0.0)
Upfront × rd 3	0.276 (0.45)	3894.8 (30.3)	6219.2 (17.2)	6199.9 (17.5)	3700.9 (47.3)	5886.1 (21.9)	4068.9 (43.1)
WithGrace × rd 3	0.172 (0.38)	4946.8 (22.8)	5233.2 (32.0)	5356.5 (31.3)	7961.8 (13.8)	4564.7 (41.7)	7550.2 (15.7)
InKind × rd 3	0.087 (0.28)	−4140.1 (24.0)	−5510.9 (20.5)	−5580.6 (20.0)	−5798.9 (17.2)	−3635.6 (41.4)	−5770.5 (17.3)
rd 4	0.315 (0.46)	33203.1 (0.0)	33959.1 (0.0)	34114.2 (0.0)	43152.0 (0.0)	38418.2 (0.0)	43291.2 (0.0)
Upfront × rd 4	0.260 (0.44)	16331.8 (2.3)	19941.1 (1.0)	19863.7 (1.0)	10772.5 (13.0)	17497.5 (3.1)	11400.8 (11.0)
WithGrace × rd 4	0.158 (0.37)	1859.2 (81.9)	2821.9 (76.0)	3018.7 (74.5)	10720.4 (22.2)	2416.8 (80.6)	9986.1 (25.6)
InKind × rd 4	0.079 (0.27)	−3033.9 (63.0)	−6736.4 (36.8)	−6662.8 (37.6)	−7688.3 (29.0)	−3545.3 (63.5)	−7807.3 (28.5)
HadCattle	0.265 (0.44)				7188.9 (40.8)		10048.0 (28.8)
HadCattle × rd 3	0.092 (0.29)				−1756.2 (58.9)		−1845.3 (56.8)
HadCattle × rd 4	0.084 (0.28)				9728.9 (14.0)		9503.3 (14.9)
FloodInRd1	0.414 (0.49)			212.2 (94.6)	2761.2 (42.4)	514.6 (88.5)	2916.7 (41.8)
Head literate0	0.149 (0.36)			−219.6 (95.5)	−2446.5 (56.6)	−2985.2 (46.6)	−2433.7 (57.3)
net asset value$_1$	10261.899 (15197.09)		0.8 (0.0)	0.7 (0.0)	0.3 (29.9)	0.7 (5.6)	0.9 (6.0)
HHsize0	4.538 (1.35)			2148.6 (5.1)	1622.4 (21.1)	2222.3 (6.9)	1553.0 (22.6)
HadCattle × Upfront	0.021 (0.20)				23182.6 (11.6)		23410.4 (11.1)
HadCattle × Upfront × rd 3	0.006 (0.12)				7260.7 (47.7)		6785.0 (50.6)
HadCattle × Upfront × rd 4	0.007 (0.11)				15246.9 (47.6)		14746.2 (48.9)
HadCattle × WithGrace	−0.003 (0.26)				−18504.3 (18.5)		−17900.8 (20.8)
HadCattle × WithGrace × rd 3	−0.001 (0.15)				−33877.9 (0.1)		−33456.8 (0.1)
HadCattle × WithGrace × rd 4	−0.001 (0.14)				−57580.2 (1.0)		−56745.3 (1.1)
HadCattle × InKind	−0.012 (0.21)				8912.1 (20.3)		7991.8 (25.1)
HadCattle × InKind × rd 3	−0.004 (0.12)				24258.8 (0.3)		24228.9 (0.3)
HadCattle × InKind × rd 4	−0.005 (0.11)				35871.8 (1.7)		35775.7 (1.8)
NumCattle0	0.380 (0.73)					−2722.6 (76.8)	−13546.2 (25.6)
mean of dependent variable		31787	31787	31787	31787	31787	31787
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.173	0.242	0.245	0.287	0.241	0.289
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Sample is continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 78: ANCOVA ESTIMATION OF BROAD NET ASSETS USING ANNUAL PRICES BY ARM, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		7195.8 (0.5)	1405.1 (73.5)	−8524.4 (16.7)	3187.6 (62.5)	−3748.3 (56.5)	1867.5 (78.3)
Large	0.048 (0.46)	17819.8 (0.0)	18518.9 (0.0)	18329.9 (0.1)	9526.2 (5.0)	14283.2 (1.1)	9754.7 (4.8)
LargeGrace	0.006 (0.43)	9027.9 (1.8)	7606.7 (12.3)	7928.9 (10.7)	1715.4 (69.2)	3754.1 (43.4)	1533.6 (72.8)
Cattle	0.009 (0.44)	8462.9 (0.3)	8360.5 (4.6)	8591.9 (3.9)	1941.1 (60.7)	5407.1 (17.2)	2099.4 (57.8)
UltraPoor	0.607 (0.49)	−4401.4 (1.4)	−3675.1 (13.4)	−3946.8 (10.6)	−3682.7 (16.3)	−2913.7 (26.5)	−3494.3 (18.6)
Large × UltraPoor	0.045 (0.37)	−4990.6 (38.8)	−4820.6 (50.9)	−5190.3 (50.1)	−11956.0 (13.9)	−7279.2 (38.4)	−11318.1 (16.5)
LargeGrace × UltraPoor	0.027 (0.35)	2863.1 (46.3)	7190.4 (27.4)	7247.9 (25.1)	5716.2 (35.5)	5646.3 (40.5)	7212.1 (26.2)
Cattle × UltraPoor	0.001 (0.34)	488.3 (91.0)	−483.0 (93.8)	−69.6 (99.1)	1646.1 (81.9)	359.8 (96.0)	2001.7 (78.2)
rd 3	0.342 (0.47)	11091.4 (0.0)	11857.3 (0.0)	11951.4 (0.0)	15117.8 (0.0)	13734.7 (0.0)	15239.7 (0.0)
Large × rd 3	0.104 (0.30)	4615.6 (22.0)	6530.5 (16.9)	6475.1 (17.4)	4687.2 (38.2)	6412.1 (20.7)	5093.6 (34.4)
LargeGrace × rd 3	0.085 (0.28)	9787.3 (0.6)	12256.1 (1.5)	12296.5 (1.6)	13633.7 (1.8)	11363.6 (4.0)	13617.3 (1.8)
Cattle × rd 3	0.087 (0.28)	5138.4 (10.5)	6504.2 (7.4)	6478.4 (7.2)	7407.4 (8.3)	7586.6 (4.7)	7398.1 (8.4)
UltraPoor × rd 3	0.204 (0.40)	−1003.0 (66.0)	516.1 (86.9)	657.1 (83.4)	−254.1 (94.3)	1445.2 (64.8)	−248.6 (94.4)
Large × UltraPoor × rd 3	0.014 (0.21)	5995.7 (35.7)	7274.5 (34.6)	7272.9 (34.5)	10253.3 (23.9)	8289.2 (29.9)	10365.1 (23.8)
LargeGrace × UltraPoor × rd 3	0.010 (0.21)	−1807.4 (77.9)	−2659.0 (78.7)	−2552.3 (79.6)	−2815.0 (81.6)	−1031.1 (92.1)	−2801.4 (81.7)
Cattle × UltraPoor × rd 3	−0.000 (0.19)	7165.6 (11.0)	5691.3 (32.4)	5631.2 (33.1)	13375.7 (5.2)	9584.4 (12.8)	13434.0 (5.3)
rd 4	0.315 (0.46)	33254.0 (0.0)	34278.4 (0.0)	34425.1 (0.0)	43276.0 (0.0)	38751.8 (0.0)	43435.2 (0.0)
Large × rd 4	0.102 (0.30)	16807.9 (1.8)	18689.4 (1.7)	18591.2 (1.7)	10742.5 (13.8)	15985.1 (4.8)	11386.3 (11.9)
LargeGrace × rd 4	0.080 (0.27)	18645.9 (0.1)	21394.6 (0.4)	21458.7 (0.4)	21314.9 (1.1)	18119.2 (2.1)	21202.2 (1.2)
Cattle × rd 4	0.079 (0.27)	15292.3 (0.3)	15071.1 (0.7)	15204.4 (0.7)	13998.4 (1.0)	15132.6 (0.3)	13754.5 (1.1)
UltraPoor × rd 4	0.195 (0.40)	1326.0 (69.4)	5120.1 (19.6)	5182.5 (19.1)	3517.4 (45.7)	7793.5 (5.8)	3550.7 (45.4)
Large × UltraPoor × rd 4	0.016 (0.21)	11728.8 (23.3)	2587.1 (78.9)	2841.0 (76.8)	2361.0 (85.5)	2409.2 (81.9)	2475.5 (84.8)
LargeGrace × UltraPoor × rd 4	0.008 (0.20)	701.0 (93.7)	−4087.9 (73.2)	−3719.5 (75.7)	650.2 (96.4)	−2207.3 (86.5)	586.3 (96.8)
Cattle × UltraPoor × rd 4	−0.001 (0.19)	7904.5 (27.4)	−2111.5 (81.0)	−2237.1 (80.1)	9867.6 (38.8)	3108.1 (75.0)	9844.1 (38.8)
HadCattle	0.265 (0.44)				7582.1 (39.0)		10659.0 (27.5)
HadCattle × rd 3	0.092 (0.29)				−1866.5 (57.2)		−1972.8 (54.7)
HadCattle × rd 4	0.084 (0.28)				9461.2 (17.2)		9207.2 (18.3)
FloodInRd1	0.414 (0.49)			128.9 (96.8)	2279.7 (51.2)	281.8 (93.7)	2505.8 (49.3)
Head literate0	0.149 (0.36)			−711.2 (86.2)	−2950.9 (49.2)	−3405.8 (42.2)	−2820.6 (51.6)
net asset value₁	10261.899 (15197.09)		0.8 (0.0)	0.8 (0.0)	0.3 (32.3)	0.7 (4.7)	0.9 (5.1)
HHsize0	4.538 (1.35)			2223.2 (4.4)	1786.3 (16.5)	2307.3 (5.9)	1709.0 (18.1)
HadCattle × Large	0.024 (0.25)				21676.1 (14.7)		21771.8 (14.2)
HadCattle × Large × rd 3	0.008 (0.15)				6500.6 (50.0)		5986.2 (53.4)
HadCattle × Large × rd 4	0.009 (0.14)				15901.0 (47.3)		15368.2 (48.6)
HadCattle × LargeGrace	0.009 (0.23)				4747.5 (59.9)		5673.8 (51.5)
HadCattle × LargeGrace × rd 3	0.003 (0.14)				−29620.5 (0.4)		−29690.8 (0.4)
HadCattle × LargeGrace × rd 4	0.004 (0.13)				−42160.6 (3.0)		−41843.9 (3.1)
HadCattle × Cattle	−0.012 (0.21)				12883.7 (14.1)		12664.2 (13.4)
HadCattle × Cattle × rd 3	−0.004 (0.12)				−4391.7 (54.8)		−4473.1 (54.0)
HadCattle × Cattle × rd 4	−0.005 (0.11)			158	−7801.3 (60.7)		−7530.6 (61.7)
NumCattle0	0.380 (0.73)					−2822.6 (75.4)	−13899.9 (24.5)
mean of dependent variable		31787	31787	31787	31787	31787	31787

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		7195.8 (0.5)	1405.1 (73.5)	−8524.4 (16.7)	3187.6 (62.5)	−3748.3 (56.5)	1867.5 (78.3)
Upfront	0.063 (0.39)	17819.8 (0.0)	18518.9 (0.0)	18329.9 (0.1)	9526.2 (5.0)	14283.2 (1.1)	9754.7 (4.8)
WithGrace	0.014 (0.50)	−8791.9 (5.4)	−10912.2 (3.5)	−10401.0 (5.4)	−7810.8 (10.7)	−10529.1 (7.3)	−8221.1 (10.1)
InKind	0.009 (0.44)	−565.0 (86.2)	753.8 (85.2)	663.0 (86.5)	225.7 (94.9)	1653.0 (67.6)	565.8 (87.5)
UltraPoor	0.607 (0.49)	−4401.4 (1.4)	−3675.1 (13.4)	−3946.8 (10.6)	−3682.7 (16.3)	−2913.7 (26.5)	−3494.3 (18.6)
Upfront × UltraPoor	0.072 (0.27)	−4990.6 (38.8)	−4820.6 (50.9)	−5190.3 (50.1)	−11956.0 (13.9)	−7279.2 (38.4)	−11318.1 (16.5)
WithGrace × UltraPoor	0.027 (0.39)	7853.7 (16.0)	12010.9 (12.4)	12438.2 (12.1)	17672.2 (2.6)	12925.5 (10.6)	18530.2 (2.1)
InKind × UltraPoor	0.001 (0.34)	−2374.8 (56.0)	−7673.3 (25.0)	−7317.5 (27.3)	−4070.1 (55.5)	−5286.5 (43.1)	−5210.4 (45.8)
rd 3	0.342 (0.47)	11091.4 (0.0)	11857.3 (0.0)	11951.4 (0.0)	15117.8 (0.0)	13734.7 (0.0)	15239.7 (0.0)
UltraPoor × rd 3	0.204 (0.40)	−1003.0 (66.0)	516.1 (86.9)	657.1 (83.4)	−254.1 (94.3)	1445.2 (64.8)	−248.6 (94.4)
Upfront × rd 3	0.276 (0.45)	4615.6 (22.0)	6530.5 (16.9)	6475.1 (17.4)	4687.2 (38.2)	6412.1 (20.7)	5093.6 (34.4)
WithGrace × rd 3	0.172 (0.38)	5171.7 (22.2)	5725.7 (31.0)	5821.4 (30.6)	8946.5 (12.1)	4951.5 (40.6)	8523.7 (13.9)
InKind × rd 3	0.087 (0.28)	−4648.9 (21.2)	−5751.9 (23.0)	−5818.1 (22.8)	−6226.3 (19.1)	−3777.0 (44.1)	−6219.2 (19.0)
Upfront × UltraPoor × rd 3	0.024 (0.16)	5995.7 (35.7)	7274.5 (34.6)	7272.9 (34.5)	10253.3 (23.9)	8289.2 (29.9)	10365.1 (23.8)
WithGrace × UltraPoor × rd 3	0.010 (0.23)	−7803.1 (32.3)	−9933.5 (36.4)	−9825.2 (37.1)	−13068.3 (29.8)	−9320.3 (40.3)	−13166.5 (29.5)
InKind × UltraPoor × rd 3	−0.000 (0.19)	8973.0 (15.7)	8350.2 (38.3)	8183.4 (39.4)	16190.7 (15.3)	10615.5 (28.1)	16235.5 (15.1)
rd 4	0.315 (0.46)	33254.0 (0.0)	34278.4 (0.0)	34425.1 (0.0)	43276.0 (0.0)	38751.8 (0.0)	43435.2 (0.0)
UltraPoor × rd 4	0.195 (0.40)	1326.0 (69.4)	5120.1 (19.6)	5182.5 (19.1)	3517.4 (45.7)	7793.5 (5.8)	3550.7 (45.4)
Upfront × rd 4	0.260 (0.44)	16807.9 (1.8)	18689.4 (1.7)	18591.2 (1.7)	10742.5 (13.8)	15985.1 (4.8)	11386.3 (11.9)
WithGrace × rd 4	0.158 (0.37)	1838.0 (82.0)	2705.2 (77.3)	2867.5 (76.2)	10572.4 (24.1)	2134.2 (83.0)	9815.9 (27.7)
InKind × rd 4	0.079 (0.27)	−3353.5 (59.9)	−6323.5 (41.5)	−6254.3 (42.3)	−7316.6 (33.4)	−2986.7 (69.8)	−7447.7 (32.7)
Upfront × UltraPoor × rd 4	0.024 (0.16)	11728.8 (23.3)	2587.1 (78.9)	2841.0 (76.8)	2361.0 (85.5)	2409.2 (81.9)	2475.5 (84.8)
WithGrace × UltraPoor × rd 4	0.008 (0.22)	−11027.8 (32.8)	−6675.0 (61.2)	−6560.5 (61.9)	−1710.8 (91.0)	−4616.5 (73.0)	−1889.3 (90.1)
InKind × UltraPoor × rd 4	−0.001 (0.19)	7203.5 (42.8)	1976.4 (87.4)	1482.3 (90.6)	9217.4 (50.2)	5315.3 (67.5)	9257.8 (50.0)
HadCattle	0.265 (0.44)				7582.1 (39.0)		10659.0 (27.5)
HadCattle × rd 3	0.092 (0.29)				−1866.5 (57.2)		−1972.8 (54.7)
HadCattle × rd 4	0.084 (0.28)				9461.2 (17.2)		9207.2 (18.3)
FloodInRd1	0.414 (0.49)			128.9 (96.8)	2279.7 (51.2)	281.8 (93.7)	2505.8 (49.3)
Head literate0	0.149 (0.36)			−711.2 (86.2)	−2950.9 (49.2)	−3405.8 (42.2)	−2820.6 (51.6)
net asset value₁	10261.899 (15197.09)		0.8 (0.0)	0.8 (0.0)	0.3 (32.3)	0.7 (4.7)	0.9 (5.1)
HHsize0	4.538 (1.35)			2223.2 (4.4)	1786.3 (16.5)	2307.3 (5.9)	1709.0 (18.1)
HadCattle × Upfront	0.021 (0.20)				21676.1 (14.7)		21771.8 (14.2)
HadCattle × Upfront × rd 3	0.006 (0.12)				6500.6 (50.0)		5986.2 (53.4)
HadCattle × Upfront × rd 4	0.007 (0.11)				15901.0 (47.3)		15368.2 (48.6)
HadCattle × WithGrace	−0.003 (0.26)				−16928.5 (23.0)		−16098.1 (26.4)
HadCattle × WithGrace × rd 3	−0.001 (0.15)				−36121.1 (0.1)		−35677.0 (0.1)
HadCattle × WithGrace × rd 4	−0.001 (0.14)				−58061.6 (1.1)		−57212.1 (1.3)
HadCattle × InKind	−0.012 (0.21)				8136.2 (27.1)		6990.4 (34.0)
HadCattle × InKind × rd 3	−0.004 (0.12)				25228.8 (0.7)		25217.6 (0.6)
HadCattle × InKind × rd 4	−0.005 (0.11)				34359.3 (3.7)		34313.3 (3.7)
NumCattle0	0.380 (0.73)		159			−2822.6 (75.4)	−13899.9 (24.5)
mean of dependent variable		31787	31787	31787	31787	31787	31787
T = 2		42	13	13	13	10	13

III.5.8 Net assets: Assets+Livestock-GUK Debt-Other Debts

Net assets = Assets + net saving - debt to GUK - debts to relatives and money lenders. Assets use only items observed for all 4 rounds for household assets *including* radios and cassette players (which have possibly large errors).

```
Number of obs by Arm and attrition
            AttritIn
Arm            2    3    4    9 Sum
  traditional  6    4   20  144 174
  large        5    2    1  191 199
  large grace 22    3    3  170 198
  cattle       5    5   13  176 199
  Sum         38   14   37  681 770


Number of obs by membership status and attrition
                     AttritIn
BStatus                2    3    4    9 Sum
  borrower             8    6    8  575 597
  pure saver           0    0    0    0   0
  individual rejection 9    4    1   75  89
  group rejection      9    4    0   55  68
  rejection by flood  12    0   28    0  40
  Sum                 38   14   37  705 794
```

```
[1] excl
[[1]]
NetValue ~ dummyLarge + dummyLargeGrace + dummyCattle


[[2]]
NetValue ~ dummyLarge + dummyLargeGrace + dummyCattle + NetValue0


[[3]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NetValue0


[[4]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NetValue0 + dummyHadCows.Large +
    dummyHadCows.LargeGrace + dummyHadCows.Cattle


[[5]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0


[[6]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 +
    dummyHadCows.Large + dummyHadCows.LargeGrace + dummyHadCows.Cattle


[1] exclP
[[1]]
NetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor


[[2]]
```

```
NetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[3]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[4]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyHadCows.LargeSize + dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[6]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 +
    NetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[1] excla
[[1]]
NetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind + NetValue0

[[3]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NetValue0 + dummyHadCows.LargeSize +
    dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0

[[6]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 +
    dummyHadCows.LargeSize + dummyHadCows.WithGrace + dummyHadCows.InKind

[1] exclT
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
```

```
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    NetValue0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NetValue0 + dummyHadCows.Large + dummyHadCows.Time3 + dummyHadCows.Large.Time3 +
    dummyHadCows.Time4 + dummyHadCows.Large.Time4 + dummyHadCows.LargeGrace +
    dummyHadCows.LargeGrace.Time3 + dummyHadCows.LargeGrace.Time4 +
    dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 + dummyHadCows.Cattle.Time4

[[5]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    NetValue0

[[6]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + NetValue0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[1] exclTa
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NetValue0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
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    NetValue0 + dummyHadCows.Time3 + dummyHadCows.Time4 + dummyHadCows.LargeSize +
    dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    NetValue0

[[6]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + NetValue0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[1] exclTP
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    NetValue0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + NetValue0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
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    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[[5]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4

[[6]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    dummyHadCows.Large + dummyHadCows.Time3 + dummyHadCows.Large.Time3 +
    dummyHadCows.Time4 + dummyHadCows.Large.Time4 + dummyHadCows.LargeGrace +
    dummyHadCows.LargeGrace.Time3 + dummyHadCows.LargeGrace.Time4 +
    dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 + dummyHadCows.Cattle.Time4

[1] exclTPa
[[1]]
NetValue ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    NetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
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    HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[6]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4 +
    dummyHadCows.Time3 + dummyHadCows.Time4 + dummyHadCows.LargeSize +
    dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4
```
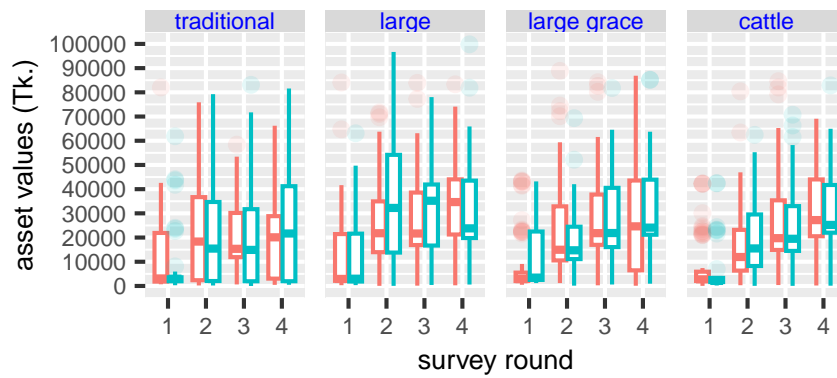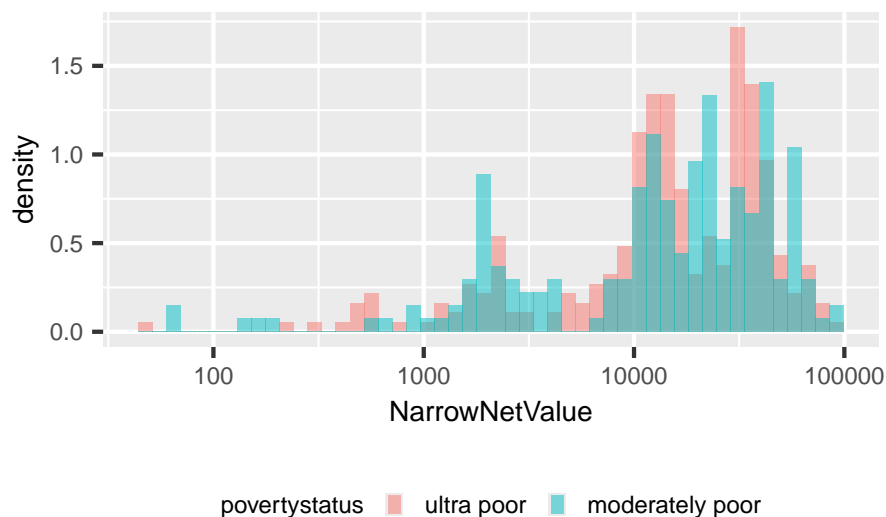
FIGURE 23: TOTAL AND NET ASSET VALUES

FIGURE 24: NET ASSET VALUES AT ROUND 1

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covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		14585.8 (0.0)	11444.9 (0.0)	4940.3 (22.1)	14751.7 (0.1)	9090.1 (3.4)	13716.5 (0.3)
Large	0.048 (0.46)	14065.9 (0.0)	14591.9 (0.0)	14384.3 (0.0)	7238.2 (4.5)	11311.1 (0.7)	7314.8 (4.7)
LargeGrace	0.006 (0.43)	7649.2 (1.2)	7041.8 (5.6)	7234.6 (4.6)	2349.8 (45.7)	3847.5 (26.5)	2182.4 (49.8)
Cattle	0.009 (0.44)	6883.4 (0.2)	6589.3 (2.4)	6703.6 (2.1)	1419.3 (58.7)	4083.1 (11.7)	1492.2 (56.3)
HadCattle	0.265 (0.44)				6968.8 (25.6)		9519.6 (14.5)
FloodInRd1	0.414 (0.49)			302.7 (88.7)	1888.4 (42.2)	429.3 (85.9)	2083.2 (39.9)
Head literate0	0.149 (0.36)			−670.1 (80.6)	−1730.8 (55.9)	−2351.7 (40.7)	−1752.8 (55.7)
net asset value$_1$	10261.899 (15197.09)		0.5 (0.0)	0.5 (0.0)	0.2 (36.8)	0.6 (4.8)	0.7 (3.8)
HHsize0	4.538 (1.35)			1464.3 (6.2)	1291.8 (16.8)	1546.9 (8.1)	1218.4 (19.1)
HadCattle × Large	0.024 (0.25)				18150.2 (10.2)		18479.7 (9.5)
HadCattle × LargeGrace	0.009 (0.23)				2418.7 (71.1)		3246.7 (61.0)
HadCattle × Cattle	−0.012 (0.21)				10713.3 (9.1)		10679.0 (8.0)
NumCattle0	0.380 (0.73)					−3331.3 (62.1)	−12731.1 (13.5)
mean of dependent variable		21897	21897	21897	21897	21897	21897
$T = 2$		42	13	13	13	10	13
$T = 3$		134	81	81	38	40	36
$T = 4$		569	377	377	327	362	327
$\bar{R}^2$		0.041	0.126	0.13	0.088	0.091	0.09
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Net assets use only assets observed for all 4 rounds in household assets. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 81: ANCOVA ESTIMATION OF NET ASSETS BY ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		14585.8 (0.0)	11444.9 (0.0)	4940.3 (22.1)	14751.7 (0.1)	9090.1 (3.4)	13716.5 (0.3)
Upfront	0.063 (0.39)	14065.9 (0.0)	14591.9 (0.0)	14384.3 (0.0)	7238.2 (4.5)	11311.1 (0.7)	7314.8 (4.7)
WithGrace	0.014 (0.50)	−6416.7 (8.5)	−7550.1 (6.6)	−7149.7 (9.0)	−4888.4 (19.3)	−7463.6 (10.2)	−5132.5 (19.1)
InKind	0.009 (0.44)	−765.8 (77.4)	−452.6 (88.3)	−530.9 (85.8)	−930.5 (73.3)	235.7 (93.9)	−690.1 (80.6)
HadCattle	0.265 (0.44)				6968.8 (25.6)		9519.6 (14.5)
FloodInRd1	0.414 (0.49)			302.7 (88.7)	1888.4 (42.2)	429.3 (85.9)	2083.2 (39.9)
Head literate0	0.149 (0.36)			−670.1 (80.6)	−1730.8 (55.9)	−2351.7 (40.7)	−1752.8 (55.7)
net asset value$_1$	10261.899 (15197.09)		0.5 (0.0)	0.5 (0.0)	0.2 (36.8)	0.6 (4.8)	0.7 (3.8)
HHsize0	4.538 (1.35)			1464.3 (6.2)	1291.8 (16.8)	1546.9 (8.1)	1218.4 (19.1)
HadCattle × Upfront	0.021 (0.20)				18150.2 (10.2)		18479.7 (9.5)
HadCattle × WithGrace	−0.003 (0.26)				−15731.5 (13.9)		−15233.0 (16.0)
HadCattle × InKind	−0.012 (0.21)				8294.6 (13.2)		7432.3 (17.7)
NumCattle0	0.380 (0.73)					−3331.3 (62.1)	−12731.1 (13.5)
mean of dependent variable		21897	21897	21897	21897	21897	21897
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.041	0.126	0.13	0.088	0.091	0.09
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Net assets use only assets observed for all 4 rounds in household assets. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 82: ANCOVA ESTIMATION OF NET ASSETS BY PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		9846.6 (0.0)	6795.3 (2.7)	−166.6 (97.0)	8022.1 (9.8)	3297.9 (47.0)	6994.4 (15.5)
Large	0.048 (0.46)	13609.2 (0.0)	13772.5 (0.1)	13573.3 (0.1)	6523.4 (8.6)	10458.4 (1.4)	6586.4 (8.6)
LargeGrace	0.006 (0.43)	5904.1 (4.9)	4728.4 (20.2)	4894.7 (18.1)	−142.5 (96.4)	1685.6 (62.1)	−291.9 (92.7)
Cattle	0.009 (0.44)	5675.4 (1.1)	5305.6 (9.6)	5392.0 (8.7)	135.8 (96.2)	2761.9 (32.7)	215.5 (93.9)
rd 3	0.342 (0.47)	5637.3 (0.0)	5935.1 (0.0)	6002.1 (0.0)	8494.7 (0.0)	7501.6 (0.0)	8592.1 (0.0)
Large × rd 3	0.104 (0.30)	1040.0 (76.0)	2877.7 (48.7)	2863.9 (49.1)	2191.4 (65.3)	3249.5 (45.3)	2519.2 (60.6)
LargeGrace × rd 3	0.085 (0.28)	7109.0 (1.8)	9327.4 (1.8)	9400.5 (1.8)	10981.5 (1.8)	9269.2 (3.3)	10942.2 (1.9)
Cattle × rd 3	0.087 (0.28)	3298.4 (24.1)	4431.4 (16.9)	4449.5 (16.3)	5346.2 (16.3)	5803.4 (7.2)	5332.1 (16.5)
rd 4	0.315 (0.46)	10333.5 (0.0)	10421.8 (0.0)	10531.5 (0.0)	14091.2 (0.0)	12042.9 (0.0)	14153.5 (0.0)
Large × rd 4	0.102 (0.30)	3138.6 (47.5)	4950.7 (26.4)	4896.4 (27.0)	4129.9 (37.8)	5601.6 (21.5)	4453.6 (34.2)
LargeGrace × rd 4	0.080 (0.27)	9211.8 (0.4)	12281.8 (0.2)	12367.1 (0.2)	15469.4 (0.1)	12581.3 (0.3)	15375.2 (0.1)
Cattle × rd 4	0.079 (0.27)	7367.6 (2.2)	8548.4 (1.3)	8680.4 (1.1)	9955.1 (0.8)	10302.6 (0.2)	9753.9 (0.9)
HadCattle	0.265 (0.44)				7844.7 (20.3)		10322.0 (11.8)
HadCattle × rd 3	0.092 (0.29)				−4533.7 (11.0)		−4613.9 (10.2)
HadCattle × rd 4	0.084 (0.28)				−2318.8 (54.3)		−2443.7 (52.1)
FloodInRd1	0.414 (0.49)			217.4 (92.0)	1956.7 (41.3)	377.2 (87.7)	2134.2 (39.4)
Head literate0	0.149 (0.36)			−231.7 (93.2)	−1625.8 (58.6)	−2035.7 (47.3)	−1618.0 (59.1)
net asset value₁	10261.899 (15197.09)		0.5 (0.0)	0.5 (0.0)	0.2 (38.7)	0.6 (5.5)	0.7 (4.7)
HHsize0	4.538 (1.35)			1551.0 (5.0)	1341.8 (15.2)	1633.0 (6.6)	1273.0 (17.1)
HadCattle × Large	0.024 (0.25)				17624.6 (11.2)		17922.7 (10.5)
HadCattle × Large × rd 3	0.008 (0.15)				3450.3 (69.2)		3020.9 (72.8)
HadCattle × Large × rd 4	0.009 (0.14)				818.9 (94.2)		665.8 (95.2)
HadCattle × LargeGrace	0.009 (0.23)				7123.7 (32.2)		7883.5 (26.1)
HadCattle × LargeGrace × rd 3	0.003 (0.14)				−24243.5 (1.1)		−24292.4 (1.1)
HadCattle × LargeGrace × rd 4	0.004 (0.13)				−29993.9 (1.7)		−29696.8 (1.8)
HadCattle × Cattle	−0.012 (0.21)				11774.6 (8.6)		11719.1 (7.9)
HadCattle × Cattle × rd 3	−0.004 (0.12)				−3368.5 (65.9)		−3444.3 (65.1)
HadCattle × Cattle × rd 4	−0.005 (0.11)				−7135.7 (45.5)		−6917.8 (46.7)
NumCattle0	0.380 (0.73)					−2867.9 (66.8)	−12092.9 (15.4)
mean of dependent variable		21897	21897	21897	21897	21897	21897
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.07	0.151	0.156	0.138	0.127	0.141
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets use only assets observed for all 4 rounds in household assets. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 83: ANCOVA ESTIMATION OF NET ASSETS BY ATTRIBUTES AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		9846.6 (0.0)	6795.3 (2.7)	−166.6 (97.0)	8022.1 (9.8)	3297.9 (47.0)	6994.4 (15.5)
Upfront	0.063 (0.39)	13609.2 (0.0)	13772.5 (0.1)	13573.3 (0.1)	6523.4 (8.6)	10458.4 (1.4)	6586.4 (8.6)
WithGrace	0.014 (0.50)	−7705.1 (3.4)	−9044.1 (2.4)	−8678.6 (3.5)	−6666.0 (7.1)	−8772.8 (4.5)	−6878.3 (7.3)
InKind	0.009 (0.44)	−228.6 (92.8)	577.2 (84.7)	497.3 (86.3)	278.3 (91.6)	1076.3 (71.2)	507.4 (85.1)
rd 3	0.342 (0.47)	5637.3 (0.0)	5935.1 (0.0)	6002.1 (0.0)	8494.7 (0.0)	7501.6 (0.0)	8592.1 (0.0)
Upfront × rd 3	0.276 (0.45)	1040.0 (76.0)	2877.7 (48.7)	2863.9 (49.1)	2191.4 (65.3)	3249.5 (45.3)	2519.2 (60.6)
WithGrace × rd 3	0.172 (0.38)	6069.0 (9.1)	6449.8 (15.5)	6536.6 (15.3)	8790.2 (6.4)	6019.7 (20.7)	8423.0 (7.5)
InKind × rd 3	0.087 (0.28)	−3810.6 (20.9)	−4896.0 (19.3)	−4951.0 (18.9)	−5635.3 (12.4)	−3465.8 (36.3)	−5610.1 (12.4)
rd 4	0.315 (0.46)	10333.5 (0.0)	10421.8 (0.0)	10531.5 (0.0)	14091.2 (0.0)	12042.9 (0.0)	14153.5 (0.0)
Upfront × rd 4	0.260 (0.44)	3138.6 (47.5)	4950.7 (26.4)	4896.4 (27.0)	4129.9 (37.8)	5601.6 (21.5)	4453.6 (34.2)
WithGrace × rd 4	0.158 (0.37)	6073.2 (19.5)	7331.1 (14.4)	7470.7 (13.9)	11339.5 (2.9)	6979.7 (18.3)	10921.6 (3.4)
InKind × rd 4	0.079 (0.27)	−1844.2 (60.8)	−3733.4 (37.8)	−3686.7 (38.3)	−5514.3 (20.3)	−2278.7 (59.8)	−5621.3 (19.7)
HadCattle	0.265 (0.44)				7844.7 (20.3)		10322.0 (11.8)
HadCattle × rd 3	0.092 (0.29)				−4533.7 (11.0)		−4613.9 (10.2)
HadCattle × rd 4	0.084 (0.28)				−2318.8 (54.3)		−2443.7 (52.1)
FloodInRd1	0.414 (0.49)			217.4 (92.0)	1956.7 (41.3)	377.2 (87.7)	2134.2 (39.4)
Head literate0	0.149 (0.36)			−231.7 (93.2)	−1625.8 (58.6)	−2035.7 (47.3)	−1618.0 (59.1)
net asset value$_1$	10261.899 (15197.09)		0.5 (0.0)	0.5 (0.0)	0.2 (38.7)	0.6 (5.5)	0.7 (4.7)
HHsize0	4.538 (1.35)			1551.0 (5.0)	1341.8 (15.2)	1633.0 (6.6)	1273.0 (17.1)
HadCattle × Upfront	0.021 (0.20)				17624.6 (11.2)		17922.7 (10.5)
HadCattle × Upfront × rd 3	0.006 (0.12)				3450.3 (69.2)		3020.9 (72.8)
HadCattle × Upfront × rd 4	0.007 (0.11)				818.9 (94.2)		665.8 (95.2)
HadCattle × WithGrace	−0.003 (0.26)				−10500.8 (31.2)		−10039.2 (34.1)
HadCattle × WithGrace × rd 3	−0.001 (0.15)				−27693.8 (0.1)		−27313.3 (0.1)
HadCattle × WithGrace × rd 4	−0.001 (0.14)				−30812.8 (1.0)		−30362.7 (1.1)
HadCattle × InKind	−0.012 (0.21)				4650.9 (41.6)		3835.7 (50.2)
HadCattle × InKind × rd 3	−0.004 (0.12)				20875.1 (0.5)		20848.1 (0.5)
HadCattle × InKind × rd 4	−0.005 (0.11)				22858.2 (2.9)		22779.1 (2.9)
NumCattle0	0.380 (0.73)					−2867.9 (66.8)	−12092.9 (15.4)
mean of dependent variable		21897	21897	21897	21897	21897	21897
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.07	0.151	0.156	0.138	0.127	0.141
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets use only assets observed for all 4 rounds in household assets. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 84: ANCOVA ESTIMATION OF NET ASSETS BY ARM, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		9459.5 (0.0)	6006.4 (8.0)	−1241.0 (79.4)	7082.7 (15.4)	2480.2 (61.7)	5923.2 (24.5)
Large	0.048 (0.46)	13843.8 (0.0)	14510.3 (0.0)	14364.7 (0.1)	7508.6 (5.0)	11049.6 (1.2)	7649.0 (4.9)
LargeGrace	0.006 (0.43)	6320.4 (3.3)	5241.1 (17.3)	5486.2 (15.4)	45.2 (98.9)	2043.9 (58.5)	−114.9 (97.3)
Cattle	0.009 (0.44)	6141.2 (0.5)	5927.8 (8.3)	6103.5 (7.2)	622.4 (84.2)	3262.9 (31.7)	768.2 (80.7)
UltraPoor	0.607 (0.49)	−3853.9 (1.2)	−3536.2 (8.3)	−3741.7 (6.6)	−3429.9 (12.0)	−3093.2 (15.4)	−3269.3 (13.9)
Large × UltraPoor	0.045 (0.37)	−5124.2 (31.2)	−5152.9 (42.2)	−5420.0 (41.8)	−10297.4 (14.1)	−6934.7 (33.5)	−9742.9 (16.8)
LargeGrace × UltraPoor	0.027 (0.35)	2507.0 (43.3)	5286.4 (27.8)	5334.0 (25.6)	5148.5 (28.3)	4198.2 (41.5)	6480.1 (19.5)
Cattle × UltraPoor	0.001 (0.34)	−7.9 (99.8)	−349.3 (94.3)	−53.2 (99.2)	914.8 (87.0)	−97.2 (98.6)	1232.1 (82.6)
rd 3	0.342 (0.47)	5622.4 (0.0)	5939.2 (0.0)	6005.6 (0.0)	8409.4 (0.0)	7403.5 (0.0)	8518.2 (0.0)
Large × rd 3	0.104 (0.30)	1719.3 (60.7)	3296.1 (44.9)	3255.2 (45.5)	3066.1 (54.2)	3960.2 (39.1)	3429.5 (49.7)
LargeGrace × rd 3	0.085 (0.28)	7933.9 (1.4)	10165.6 (2.8)	10190.4 (2.9)	12851.2 (1.3)	10298.2 (4.1)	12836.1 (1.3)
Cattle × rd 3	0.087 (0.28)	3679.8 (19.7)	5087.6 (15.1)	5058.5 (14.9)	6788.3 (9.5)	6747.0 (6.6)	6779.7 (9.6)
UltraPoor × rd 3	0.204 (0.40)	−288.7 (89.2)	826.6 (77.5)	930.3 (74.8)	143.8 (96.5)	1529.2 (60.1)	134.5 (96.7)
Large × UltraPoor × rd 3	0.014 (0.21)	6909.8 (26.7)	8732.1 (24.8)	8732.3 (24.8)	11429.2 (17.1)	9920.7 (20.4)	11482.0 (17.2)
LargeGrace × UltraPoor × rd 3	0.010 (0.21)	−1198.5 (84.0)	−1377.4 (87.7)	−1296.5 (88.5)	−2623.9 (81.0)	528.9 (95.5)	−2610.2 (81.1)
Cattle × UltraPoor × rd 3	−0.000 (0.19)	6969.4 (9.2)	6109.7 (25.1)	6065.2 (25.6)	12323.3 (4.6)	9830.8 (9.0)	12377.2 (4.6)
rd 4	0.315 (0.46)	10411.2 (0.0)	10655.2 (0.0)	10759.0 (0.0)	14209.8 (0.0)	12224.6 (0.0)	14285.9 (0.0)
Large × rd 4	0.102 (0.30)	3379.0 (42.0)	4037.2 (37.8)	3965.4 (38.7)	3790.8 (43.3)	4808.3 (30.7)	4114.0 (39.7)
LargeGrace × rd 4	0.080 (0.27)	9376.5 (0.6)	11353.7 (1.4)	11395.8 (1.4)	15566.2 (0.3)	11699.1 (1.8)	15465.5 (0.3)
Cattle × rd 4	0.079 (0.27)	7206.8 (2.8)	7884.4 (4.3)	7966.7 (3.7)	10073.9 (1.4)	9756.3 (1.1)	9854.6 (1.6)
UltraPoor × rd 4	0.195 (0.40)	2844.1 (26.0)	5151.7 (7.5)	5199.8 (7.3)	3773.1 (25.7)	6025.0 (3.7)	3789.8 (25.6)
Large × UltraPoor × rd 4	0.016 (0.21)	10217.6 (19.4)	5895.4 (46.5)	6082.2 (45.0)	8060.4 (39.4)	7172.6 (37.8)	8124.8 (39.2)
LargeGrace × UltraPoor × rd 4	0.008 (0.20)	−1411.8 (81.4)	−3313.4 (66.7)	−3040.4 (69.6)	−2782.9 (76.7)	−1073.3 (89.6)	−2836.3 (76.3)
Cattle × UltraPoor × rd 4	−0.001 (0.19)	6055.2 (19.5)	1043.0 (84.6)	961.3 (86.0)	7501.8 (24.6)	4461.2 (43.0)	7483.2 (24.5)
HadCattle	0.265 (0.44)				8201.7 (18.5)		10868.0 (10.7)
HadCattle × rd 3	0.092 (0.29)				−4604.1 (10.5)		−4700.3 (9.5)
HadCattle × rd 4	0.084 (0.28)				−2566.2 (51.5)		−2711.1 (49.1)
FloodInRd1	0.414 (0.49)			152.9 (94.4)	1582.2 (51.0)	202.6 (93.4)	1813.4 (47.4)
Head literate0	0.149 (0.36)			−659.9 (81.7)	−2041.6 (49.9)	−2419.1 (41.3)	−1951.1 (52.0)
net asset value₁	10261.899 (15197.09)		0.5 (0.0)	0.5 (0.0)	0.2 (41.6)	0.6 (5.0)	0.7 (4.0)
HHsize0	4.538 (1.35)			1621.4 (3.9)	1477.5 (10.9)	1713.7 (5.2)	1403.1 (12.7)
HadCattle × Large	0.024 (0.25)				16251.4 (14.2)		16436.7 (13.6)
HadCattle × Large × rd 3	0.008 (0.15)				2819.2 (72.2)		2354.9 (76.5)
HadCattle × Large × rd 4	0.009 (0.14)				1764.4 (87.5)		1601.7 (88.6)
HadCattle × LargeGrace	0.009 (0.23)				7162.6 (31.8)		8007.8 (24.5)
HadCattle × LargeGrace × rd 3	0.003 (0.14)				−27087.1 (0.5)		−27149.5 (0.4)
HadCattle × LargeGrace × rd 4	0.004 (0.13)				−30352.9 (2.1)		−30071.5 (2.2)
HadCattle × Cattle	−0.012 (0.21)				11221.7 (10.3)		11051.8 (9.6)
HadCattle × Cattle × rd 3	−0.004 (0.12)				−5263.1 (44.6)		−5335.2 (43.9)
HadCattle × Cattle × rd 4	−0.005 (0.11)				−7993.4 (42.1)		−7746.0 (43.3)
NumCattle0	0.380 (0.73)	**171**				−2855.6 (66.5)	−12408.5 (14.7)
mean of dependent variable		21897	21897	21897	21897	21897	21897
T = 2		42	13	13	13	10	13

TABLE 85: ANCOVA ESTIMATION OF NET ASSETS BY ATTRIBUTES, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		9459.5 (0.0)	6006.4 (8.0)	−1241.0 (79.4)	7082.7 (15.4)	2480.2 (61.7)	5923.2 (24.5)
Upfront	0.063 (0.39)	13843.8 (0.0)	14510.3 (0.0)	14364.7 (0.1)	7508.6 (5.0)	11049.6 (1.2)	7649.0 (4.9)
WithGrace	0.014 (0.50)	−7523.5 (2.8)	−9269.2 (1.7)	−8878.6 (2.6)	−7463.4 (3.5)	−9005.7 (3.5)	−7763.8 (3.5)
InKind	0.009 (0.44)	−179.2 (94.2)	686.7 (81.6)	617.4 (82.9)	577.2 (82.7)	1219.0 (67.6)	883.1 (74.4)
UltraPoor	0.607 (0.49)	−3853.9 (1.2)	−3536.2 (8.3)	−3741.7 (6.6)	−3429.9 (12.0)	−3093.2 (15.4)	−3269.3 (13.9)
Upfront × UltraPoor	0.072 (0.27)	−5124.2 (31.2)	−5152.9 (42.2)	−5420.0 (41.8)	−10297.4 (14.1)	−6934.7 (33.5)	−9742.9 (16.8)
WithGrace × UltraPoor	0.027 (0.39)	7631.2 (12.6)	10439.3 (11.2)	10754.0 (11.0)	15445.9 (2.6)	11132.9 (10.1)	16223.0 (2.1)
InKind × UltraPoor	0.001 (0.34)	−2514.9 (44.3)	−5635.7 (25.5)	−5387.2 (27.8)	−4233.6 (43.5)	−4295.4 (39.4)	−5248.0 (34.3)
rd 3	0.342 (0.47)	5622.4 (0.0)	5939.2 (0.0)	6005.6 (0.0)	8409.4 (0.0)	7403.5 (0.0)	8518.2 (0.0)
UltraPoor × rd 3	0.204 (0.40)	−288.7 (89.2)	826.6 (77.5)	930.3 (74.8)	143.8 (96.5)	1529.2 (60.1)	134.5 (96.7)
Upfront × rd 3	0.276 (0.45)	1719.3 (60.7)	3296.1 (44.9)	3255.2 (45.5)	3066.1 (54.2)	3960.2 (39.1)	3429.5 (49.7)
WithGrace × rd 3	0.172 (0.38)	6214.6 (8.9)	6869.6 (15.7)	6935.2 (15.6)	9785.1 (5.3)	6338.0 (21.1)	9406.7 (6.2)
InKind × rd 3	0.087 (0.28)	−4254.1 (18.4)	−5078.0 (22.3)	−5131.9 (22.1)	−6062.9 (13.8)	−3551.2 (39.9)	−6056.5 (13.6)
Upfront × UltraPoor × rd 3	0.024 (0.16)	6909.8 (26.7)	8732.1 (24.8)	8732.3 (24.8)	11429.2 (17.1)	9920.7 (20.4)	11482.0 (17.2)
WithGrace × UltraPoor × rd 3	0.010 (0.23)	−8108.3 (27.4)	−10109.5 (31.8)	−10028.8 (32.4)	−14053.1 (22.3)	−9391.8 (35.9)	−14092.1 (22.2)
InKind × UltraPoor × rd 3	−0.000 (0.19)	8167.9 (15.7)	7487.1 (38.0)	7361.7 (39.0)	14947.2 (13.6)	9301.9 (28.4)	14987.4 (13.5)
rd 4	0.315 (0.46)	10411.2 (0.0)	10655.2 (0.0)	10759.0 (0.0)	14209.8 (0.0)	12224.6 (0.0)	14285.9 (0.0)
UltraPoor × rd 4	0.195 (0.40)	2844.1 (26.0)	5151.7 (7.5)	5199.8 (7.3)	3773.1 (25.7)	6025.0 (3.7)	3789.8 (25.6)
Upfront × rd 4	0.260 (0.44)	3379.0 (42.0)	4037.2 (37.8)	3965.4 (38.7)	3790.8 (43.3)	4808.3 (30.7)	4114.0 (39.7)
WithGrace × rd 4	0.158 (0.37)	5997.5 (18.2)	7316.5 (15.2)	7430.4 (14.8)	11775.4 (2.7)	6890.9 (19.6)	11351.5 (3.3)
InKind × rd 4	0.079 (0.27)	−2169.7 (55.4)	−3469.3 (44.5)	−3429.0 (45.1)	−5492.3 (23.7)	−1942.8 (67.1)	−5610.9 (22.9)
Upfront × UltraPoor × rd 4	0.024 (0.16)	10217.6 (19.4)	5895.4 (46.5)	6082.2 (45.0)	8060.4 (39.4)	7172.6 (37.8)	8124.8 (39.2)
WithGrace × UltraPoor × rd 4	0.008 (0.22)	−11629.4 (18.6)	−9208.8 (36.2)	−9122.6 (36.7)	−10843.4 (34.6)	−8245.9 (41.3)	−10961.1 (34.3)
InKind × UltraPoor × rd 4	−0.001 (0.19)	7467.0 (22.0)	4356.5 (58.9)	4001.8 (62.3)	10284.7 (26.2)	5534.5 (49.5)	10319.5 (26.0)
HadCattle	0.265 (0.44)				8201.7 (18.5)		10868.0 (10.7)
HadCattle × rd 3	0.092 (0.29)				−4604.1 (10.5)		−4700.3 (9.5)
HadCattle × rd 4	0.084 (0.28)				−2566.2 (51.5)		−2711.1 (49.1)
FloodInRd1	0.414 (0.49)			152.9 (94.4)	1582.2 (51.0)	202.6 (93.4)	1813.4 (47.4)
Head literate0	0.149 (0.36)			−659.9 (81.7)	−2041.6 (49.9)	−2419.1 (41.3)	−1951.1 (52.0)
net asset value₁	10261.899 (15197.09)		0.5 (0.0)	0.5 (0.0)	0.2 (41.6)	0.6 (5.0)	0.7 (4.0)
HHsize0	4.538 (1.35)			1621.4 (3.9)	1477.5 (10.9)	1713.7 (5.2)	1403.1 (12.7)
HadCattle × Upfront	0.021 (0.20)				16251.4 (14.2)		16436.7 (13.6)
HadCattle × Upfront × rd 3	0.006 (0.12)				2819.2 (72.2)		2354.9 (76.5)
HadCattle × Upfront × rd 4	0.007 (0.11)				1764.4 (87.5)		1601.7 (88.6)
HadCattle × WithGrace	−0.003 (0.26)				−9088.9 (38.4)		−8428.9 (42.7)
HadCattle × WithGrace × rd 3	−0.001 (0.15)				−29906.2 (0.1)		−29504.4 (0.1)
HadCattle × WithGrace × rd 4	−0.001 (0.14)				−32117.3 (0.9)		−31673.2 (1.0)
HadCattle × InKind	−0.012 (0.21)				4059.1 (49.4)		3044.0 (60.5)
HadCattle × InKind × rd 3	−0.004 (0.12)				21824.0 (0.9)		21814.3 (0.8)
HadCattle × InKind × rd 4	−0.005 (0.11)				22359.5 (4.7)		22325.5 (4.7)
NumCattle0	0.380 (0.73)					−2855.6 (66.5)	−12408.5 (14.7)
mean of dependent variable		21897	21897	21897	21897	21897	21897
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36

III.5.9 Net non-livestock assets: Non-livestock assets-GUK Debt-Other Debts

Net non-livestock assets = Non livestock assets + net saving - debt to GUK - debts to relatives and money lenders.

```
Number of obs by Arm and attrition
            AttritIn
Arm             2    3    4    9 Sum
  traditional   6    4   20  144 174
  large         5    2    1  191 199
  large grace  22    3    3  170 198
  cattle        5    5   13  176 199
  Sum          38   14   37  681 770


Number of obs by membership status and attrition
                  AttritIn
BStatus              2    3    4    9 Sum
  borrower           8    6    8  575 597
  pure saver         0    0    0    0   0
  individual rejection 9   4    1   75  89
  group rejection    9    4    0   55  68
  rejection by flood 12    0   28    0  40
  Sum               38   14   37  705 794
```

```
[1] excl
[[1]]
NetNLAssetValue ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
NetNLAssetValue ~ dummyLarge + dummyLargeGrace + dummyCattle +
    NetNLAssetValue0

[[3]]
NetNLAssetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + NetNLAssetValue0

[[4]]
NetNLAssetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyHadCows + HHsize0 + HeadLiteracy0 + NetNLAssetValue0 +
    dummyHadCows.Large + dummyHadCows.LargeGrace + dummyHadCows.Cattle

[[5]]
NetNLAssetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + NumCows0 + NetNLAssetValue0

[[6]]
NetNLAssetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 +
    NetNLAssetValue0 + dummyHadCows.Large + dummyHadCows.LargeGrace +
    dummyHadCows.Cattle

[1] exclP
[[1]]
NetNLAssetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor
```

```
[[2]]
NetNLAssetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NetNLAssetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
NetNLAssetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    NetNLAssetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[4]]
NetNLAssetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NetNLAssetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[[5]]
NetNLAssetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    NumCows0 + NetNLAssetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[6]]
NetNLAssetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + NetNLAssetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyHadCows.LargeSize +
    dummyHadCows.WithGrace + dummyHadCows.InKind

[1] excla
[[1]]
NetNLAssetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NetNLAssetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    NetNLAssetValue0

[[3]]
NetNLAssetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NetNLAssetValue0

[[4]]
NetNLAssetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + NetNLAssetValue0 +
    dummyHadCows.LargeSize + dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
NetNLAssetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0 + NetNLAssetValue0

[[6]]
NetNLAssetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 +
    NetNLAssetValue0 + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[1] exclT
[[1]]
NetNLAssetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
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    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
NetNLAssetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + NetNLAssetValue0

[[3]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetNLAssetValue0

[[4]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NetNLAssetValue0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[[5]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    NetNLAssetValue0

[[6]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + NetNLAssetValue0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[1] exclTa
[[1]]
NetNLAssetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NetNLAssetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NetNLAssetValue0

[[3]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
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```
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetNLAssetValue0

[[4]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NetNLAssetValue0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    NetNLAssetValue0

[[6]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + NetNLAssetValue0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[1] exclTP
[[1]]
NetNLAssetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[2]]
NetNLAssetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + NetNLAssetValue0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4

[[3]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetNLAssetValue0 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[4]]
```

```
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NetNLAssetValue0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    dummyHadCows.Large + dummyHadCows.Time3 + dummyHadCows.Large.Time3 +
    dummyHadCows.Time4 + dummyHadCows.Large.Time4 + dummyHadCows.LargeGrace +
    dummyHadCows.LargeGrace.Time3 + dummyHadCows.LargeGrace.Time4 +
    dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 + dummyHadCows.Cattle.Time4

[[5]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    NetNLAssetValue0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[6]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + NetNLAssetValue0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    dummyHadCows.Large + dummyHadCows.Time3 + dummyHadCows.Large.Time3 +
    dummyHadCows.Time4 + dummyHadCows.Large.Time4 + dummyHadCows.LargeGrace +
    dummyHadCows.LargeGrace.Time3 + dummyHadCows.LargeGrace.Time4 +
    dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 + dummyHadCows.Cattle.Time4

[1] exclTPa
[[1]]
NetNLAssetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[2]]
NetNLAssetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NetNLAssetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[3]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
```

```
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetNLAssetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[4]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NetNLAssetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    NetNLAssetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[6]]
NetNLAssetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + NetNLAssetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4
```

TABLE 86: ANCOVA ESTIMATION OF NET NON-LIVESTOCK ASSETS

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		−645.9 (30.8)	−565.0 (49.4)	−65.5 (95.2)	−126.3 (91.8)	295.9 (79.1)	−185.8 (88.2)
Large	0.048 (0.46)	1356.9 (19.0)	2038.4 (10.9)	2279.0 (6.7)	1722.0 (21.0)	1776.7 (17.1)	1708.2 (21.8)
LargeGrace	0.006 (0.43)	−165.2 (87.0)	113.1 (93.4)	47.5 (97.1)	−987.0 (47.0)	−699.7 (60.2)	−992.9 (46.8)
Cattle	0.009 (0.44)	−34.8 (96.3)	156.0 (86.7)	293.7 (74.2)	−780.8 (41.9)	−700.7 (44.8)	−812.9 (40.6)
HadCattle	0.265 (0.44)				−607.5 (47.8)		274.2 (87.9)
FloodInRd1	0.414 (0.49)			−1359.0 (6.1)	−1566.3 (5.7)	−1694.9 (3.1)	−1554.2 (6.3)
Head literate0	0.149 (0.36)			−39.8 (94.6)	−95.8 (88.4)	17.9 (97.5)	−108.0 (87.0)
NetNLAssetValue0	2657.829 (2852.68)		0.1 (32.1)	0.0 (33.3)	0.2 (4.0)	0.2 (7.3)	0.2 (4.0)
HHsize0	4.538 (1.35)			−1.2 (99.6)	135.6 (62.5)	43.2 (87.5)	150.0 (60.2)
HadCattle × Large	0.024 (0.25)				2140.3 (41.7)		2058.3 (43.6)
HadCattle × LargeGrace	0.009 (0.23)				5010.7 (8.3)		5005.6 (8.2)
HadCattle × Cattle	−0.012 (0.21)				4731.7 (2.2)		4594.8 (3.0)
NumCattle0	0.380 (0.73)					−416.0 (48.4)	−621.9 (57.2)
mean of dependent variable		−329	−329	−329	−329	−329	−329
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.003	0.005	0.007	0.011	0.01	0.011
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Non-livestock assets do not include livestock.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 87: ANCOVA ESTIMATION OF NET NON-LIVESTOCK ASSETS BY ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		−645.9	−565.0	−65.5	−126.3	295.9	−185.8
		(30.8)	(49.4)	(95.2)	(91.8)	(79.1)	(88.2)
Upfront	0.063	1356.9	2038.4	2279.0	1722.0	1776.7	1708.2
	(0.39)	(19.0)	(10.9)	(6.7)	(21.0)	(17.1)	(21.8)
WithGrace	0.014	−1522.2	−1925.2	−2231.5	−2709.0	−2476.4	−2701.2
	(0.50)	(17.8)	(18.5)	(10.7)	(6.4)	(7.8)	(6.6)
InKind	0.009	130.4	42.9	246.2	206.2	−1.0	180.1
	(0.44)	(88.1)	(97.1)	(82.3)	(85.3)	(99.9)	(87.0)
HadCattle	0.265				−607.5		274.2
	(0.44)				(47.8)		(87.9)
FloodInRd1	0.414			−1359.0	−1566.3	−1694.9	−1554.2
	(0.49)			(6.1)	(5.7)	(3.1)	(6.3)
Head literate0	0.149			−39.8	−95.8	17.9	−108.0
	(0.36)			(94.6)	(88.4)	(97.5)	(87.0)
NetNLAssetValue0	2657.829		0.1	0.0	0.2	0.2	0.2
	(2852.68)		(32.1)	(33.3)	(4.0)	(7.3)	(4.0)
HHsize0	4.538			−1.2	135.6	43.2	150.0
	(1.35)			(99.6)	(62.5)	(87.5)	(60.2)
HadCattle × Upfront	0.021				2140.3		2058.3
	(0.20)				(41.7)		(43.6)
HadCattle × WithGrace	−0.003				2870.5		2947.3
	(0.26)				(28.7)		(27.2)
HadCattle × InKind	−0.012				−279.0		−410.8
	(0.21)				(90.4)		(85.8)
NumCattle0	0.380					−416.0	−621.9
	(0.73)					(48.4)	(57.2)
mean of dependent variable		−329	−329	−329	−329	−329	−329
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.003	0.005	0.007	0.011	0.01	0.011
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Net non-livestockassets do not include livestock.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 88: ANCOVA ESTIMATION OF NET NON-LIVESTOCK ASSETS BY PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		−4120.4 (0.0)	−4450.1 (0.0)	−4236.5 (0.0)	−3908.8 (0.0)	−3447.2 (0.1)	−3966.9 (0.0)
Large	0.048 (0.46)	745.9 (53.0)	1603.7 (27.3)	1849.9 (20.0)	1240.8 (40.9)	1256.7 (39.1)	1240.6 (41.2)
LargeGrace	0.006 (0.43)	−1721.5 (14.2)	−1442.9 (39.9)	−1513.8 (36.1)	−2624.6 (11.1)	−2247.0 (17.6)	−2629.4 (11.1)
Cattle	0.009 (0.44)	−1324.7 (12.4)	−766.6 (48.7)	−647.9 (55.2)	−1643.8 (14.2)	−1520.5 (17.0)	−1681.7 (13.8)
rd 3	0.342 (0.47)	4649.2 (0.0)	5059.8 (0.0)	5076.3 (0.0)	5370.0 (0.0)	5072.1 (0.0)	5388.3 (0.0)
Large × rd 3	0.104 (0.30)	2908.0 (1.0)	1925.8 (21.5)	1915.9 (22.0)	1787.9 (37.3)	2233.7 (20.5)	1852.4 (35.8)
LargeGrace × rd 3	0.085 (0.28)	7421.6 (0.0)	7467.5 (0.0)	7467.4 (0.0)	8343.5 (0.1)	7659.7 (0.1)	8341.9 (0.1)
Cattle × rd 3	0.087 (0.28)	4930.4 (0.0)	3861.9 (0.9)	3926.3 (0.8)	3988.8 (4.1)	3963.6 (2.1)	3986.5 (4.1)
rd 4	0.315 (0.46)	7748.0 (0.0)	7914.9 (0.0)	7937.7 (0.0)	7895.3 (0.0)	7645.7 (0.0)	7904.8 (0.0)
Large × rd 4	0.102 (0.30)	2885.5 (6.2)	2201.2 (25.0)	2139.4 (26.4)	2865.1 (13.3)	3055.2 (11.9)	2905.4 (12.9)
LargeGrace × rd 4	0.080 (0.27)	7236.2 (0.0)	7417.7 (0.0)	7369.8 (0.4)	9231.2 (0.0)	8094.4 (0.2)	9236.4 (0.0)
Cattle × rd 4	0.079 (0.27)	6614.7 (0.0)	5611.5 (0.2)	5618.4 (0.2)	6444.4 (0.1)	5890.8 (0.2)	6441.1 (0.1)
HadCattle	0.265 (0.44)				−665.3 (55.3)		268.3 (89.2)
HadCattle × rd 3	0.092 (0.29)				58.9 (97.3)		51.4 (97.6)
HadCattle × rd 4	0.084 (0.28)				1180.3 (56.1)		1175.7 (56.3)
FloodInRd1	0.414 (0.49)			−1413.8 (4.9)	−1532.3 (6.6)	−1732.7 (2.7)	−1522.9 (7.1)
Head literate0	0.149 (0.36)			271.7 (65.0)	−8.8 (99.0)	210.2 (72.5)	0.1 (100.0)
NetNLAssetValue0	2657.829 (2852.68)		0.1 (1.2)	0.1 (1.0)	0.2 (6.1)	0.2 (9.6)	0.2 (6.9)
HHsize0	4.538 (1.35)			56.9 (80.8)	169.2 (55.1)	96.9 (72.7)	185.9 (52.7)
HadCattle × Large	0.024 (0.25)				2386.6 (49.1)		2262.8 (51.5)
HadCattle × Large × rd 3	0.008 (0.15)				−1111.6 (85.6)		−1171.7 (84.9)
HadCattle × Large × rd 4	0.009 (0.14)				−2954.3 (64.3)		−2958.0 (64.4)
HadCattle × LargeGrace	0.009 (0.23)				6685.1 (8.9)		6663.2 (8.8)
HadCattle × LargeGrace × rd 3	0.003 (0.14)				−8868.6 (18.0)		−8883.2 (17.8)
HadCattle × LargeGrace × rd 4	0.004 (0.13)				−11657.5 (12.0)		−11648.0 (12.2)
HadCattle × Cattle	−0.012 (0.21)				5578.7 (5.9)		5428.7 (7.3)
HadCattle × Cattle × rd 3	−0.004 (0.12)				−3749.8 (53.4)		−3765.7 (53.2)
HadCattle × Cattle × rd 4	−0.005 (0.11)				−4660.8 (46.7)		−4704.6 (46.2)
NumCattle0	0.380 (0.73)					−422.3 (48.2)	−660.9 (54.7)
mean of dependent variable		−329	−329	−329	−329	−329	−329
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.14	0.113	0.116	0.113	0.113	0.113
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Net non-livestock assets do not include livestock.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 89: ANCOVA ESTIMATION OF NET NON-LIVESTOCK ASSETS BY ATTRIBUTES AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		−4120.4 (0.0)	−4450.1 (0.0)	−4236.5 (0.0)	−3908.8 (0.0)	−3447.2 (0.1)	−3966.9 (0.0)
Upfront	0.063 (0.39)	745.9 (53.0)	1603.7 (27.3)	1849.9 (20.0)	1240.8 (40.9)	1256.7 (39.1)	1240.6 (41.2)
WithGrace	0.014 (0.50)	−2467.4 (7.0)	−3046.7 (8.6)	−3363.7 (4.8)	−3865.4 (2.7)	−3503.6 (4.0)	−3870.0 (2.7)
InKind	0.009 (0.44)	396.8 (71.6)	676.3 (64.9)	865.8 (54.8)	980.8 (49.9)	726.5 (61.1)	947.7 (51.1)
rd 3	0.342 (0.47)	4649.2 (0.0)	5059.8 (0.0)	5076.3 (0.0)	5370.0 (0.0)	5072.1 (0.0)	5388.3 (0.0)
Upfront × rd 3	0.276 (0.45)	2908.0 (1.0)	1925.8 (21.5)	1915.9 (22.0)	1787.9 (37.3)	2233.7 (20.5)	1852.4 (35.8)
WithGrace × rd 3	0.172 (0.38)	4513.6 (0.2)	5541.7 (0.5)	5551.5 (0.4)	6555.5 (0.1)	5426.0 (0.5)	6489.5 (0.1)
InKind × rd 3	0.087 (0.28)	−2491.2 (7.6)	−3605.6 (5.6)	−3541.1 (6.2)	−4354.7 (2.4)	−3696.2 (4.7)	−4355.4 (2.4)
rd 4	0.315 (0.46)	7748.0 (0.0)	7914.9 (0.0)	7937.7 (0.0)	7895.3 (0.0)	7645.7 (0.0)	7904.8 (0.0)
Upfront × rd 4	0.260 (0.44)	2885.5 (6.2)	2201.2 (25.0)	2139.4 (26.4)	2865.1 (13.3)	3055.2 (11.9)	2905.4 (12.9)
WithGrace × rd 4	0.158 (0.37)	4350.7 (2.1)	5216.6 (3.7)	5230.4 (3.6)	6366.1 (1.1)	5039.2 (4.3)	6330.9 (1.2)
InKind × rd 4	0.079 (0.27)	−621.5 (72.2)	−1806.2 (45.6)	−1751.4 (47.1)	−2786.8 (26.2)	−2203.6 (36.3)	−2795.2 (26.2)
HadCattle	0.265 (0.44)				−665.3 (55.3)		268.3 (89.2)
HadCattle × rd 3	0.092 (0.29)				58.9 (97.3)		51.4 (97.6)
HadCattle × rd 4	0.084 (0.28)				1180.3 (56.1)		1175.7 (56.3)
FloodInRd1	0.414 (0.49)			−1413.8 (4.9)	−1532.3 (6.6)	−1732.7 (2.7)	−1522.9 (7.1)
Head literate0	0.149 (0.36)			271.7 (65.0)	−8.8 (99.0)	210.2 (72.5)	0.1 (100.0)
NetNLAssetValue0	2657.829 (2852.68)		0.1 (1.2)	0.1 (1.0)	0.2 (6.1)	0.2 (9.6)	0.2 (6.9)
HHsize0	4.538 (1.35)			56.9 (80.8)	169.2 (55.1)	96.9 (72.7)	185.9 (52.7)
HadCattle × Upfront	0.021 (0.20)				2386.6 (49.1)		2262.8 (51.5)
HadCattle × Upfront × rd 3	0.006 (0.12)				−1111.6 (85.6)		−1171.7 (84.9)
HadCattle × Upfront × rd 4	0.007 (0.11)				−2954.3 (64.3)		−2958.0 (64.4)
HadCattle × WithGrace	−0.003 (0.26)				4298.5 (19.5)		4400.4 (18.1)
HadCattle × WithGrace × rd 3	−0.001 (0.15)				−7757.0 (1.6)		−7711.5 (1.7)
HadCattle × WithGrace × rd 4	−0.001 (0.14)				−8703.1 (8.9)		−8690.1 (8.9)
HadCattle × InKind	−0.012 (0.21)				−1106.4 (71.3)		−1234.6 (67.9)
HadCattle × InKind × rd 3	−0.004 (0.12)				5118.7 (9.3)		5117.5 (9.3)
HadCattle × InKind × rd 4	−0.005 (0.11)				6996.7 (16.9)		6943.4 (17.7)
NumCattle0	0.380 (0.73)					−422.3 (48.2)	−660.9 (54.7)
mean of dependent variable		−329	−329	−329	−329	−329	−329
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.14	0.113	0.116	0.113	0.113	0.113
N	1081	2017	1306	1306	1070	1176	1066

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Net non-livestockassets do not include livestock.

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2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

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TABLE 90: ANCOVA ESTIMATION OF NET NON-LIVESTOCK ASSETS BY ARM, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		−4269.3 (0.0)	−4926.9 (0.0)	−4702.4 (0.0)	−4359.5 (0.0)	−3959.8 (0.0)	−4456.4 (0.0)
Large	0.048 (0.46)	856.1 (44.1)	1987.3 (16.8)	2166.4 (13.2)	1551.3 (31.8)	1597.4 (29.7)	1559.5 (31.6)
LargeGrace	0.006 (0.43)	−1774.9 (12.7)	−1332.7 (44.8)	−1472.9 (38.9)	−2758.8 (11.6)	−2191.2 (21.8)	−2759.0 (11.6)
Cattle	0.009 (0.44)	−1198.5 (15.0)	−401.1 (72.8)	−347.9 (76.6)	−1410.7 (27.9)	−1164.7 (37.2)	−1445.2 (27.1)
Large × UltraPoor	0.045 (0.37)	−335.0 (87.7)	258.3 (93.5)	−394.1 (90.7)	−1489.6 (71.6)	−442.7 (90.7)	−1432.9 (72.8)
LargeGrace × UltraPoor	0.027 (0.35)	3553.5 (5.2)	4745.7 (8.4)	4389.7 (10.7)	4386.4 (19.0)	4476.5 (14.4)	4557.1 (17.3)
Cattle × UltraPoor	0.001 (0.34)	953.6 (48.8)	2372.0 (26.0)	1942.4 (34.0)	949.8 (68.9)	1831.6 (44.1)	1024.0 (66.6)
rd 3	0.342 (0.47)	4623.9 (0.0)	5117.7 (0.0)	5137.5 (0.0)	5467.5 (0.0)	5145.4 (0.0)	5487.8 (0.0)
Large × rd 3	0.104 (0.30)	3134.7 (0.7)	1894.7 (30.3)	1876.9 (31.0)	1779.4 (42.1)	2194.1 (30.4)	1848.9 (40.5)
LargeGrace × rd 3	0.085 (0.28)	7722.5 (0.0)	7626.3 (0.1)	7623.5 (0.1)	8678.6 (0.1)	7838.6 (0.2)	8676.2 (0.1)
Cattle × rd 3	0.087 (0.28)	5069.8 (0.0)	3843.7 (2.9)	3902.0 (2.8)	4113.0 (5.6)	3988.7 (5.5)	4110.0 (5.6)
Large × UltraPoor × rd 3	0.014 (0.21)	2356.7 (21.4)	123.1 (96.9)	51.4 (98.7)	584.9 (86.0)	−12.6 (99.7)	563.9 (86.5)
LargeGrace × UltraPoor × rd 3	0.010 (0.21)	−41.6 (98.7)	−1819.1 (68.2)	−1926.7 (66.5)	−2630.7 (61.9)	−1878.6 (70.1)	−2607.5 (62.3)
Cattle × UltraPoor × rd 3	−0.000 (0.19)	3158.7 (6.1)	1745.1 (55.2)	1704.7 (56.4)	2520.9 (40.6)	1709.9 (60.9)	2526.7 (40.6)
rd 4	0.315 (0.46)	7843.4 (0.0)	8170.5 (0.0)	8194.5 (0.0)	8121.7 (0.0)	7903.8 (0.0)	8132.3 (0.0)
Large × rd 4	0.102 (0.30)	2813.0 (6.3)	1633.1 (44.5)	1574.5 (46.2)	2476.9 (26.7)	2465.0 (28.4)	2520.2 (26.0)
LargeGrace × rd 4	0.080 (0.27)	7438.0 (0.0)	7303.3 (0.7)	7260.9 (0.7)	9362.7 (0.1)	7922.5 (0.5)	9372.2 (0.1)
Cattle × rd 4	0.079 (0.27)	6408.6 (0.0)	5018.2 (1.5)	5031.1 (1.6)	6129.2 (0.7)	5327.4 (1.9)	6125.3 (0.7)
Large × UltraPoor × rd 4	0.016 (0.21)	332.6 (90.1)	−2763.4 (44.1)	−2815.0 (43.5)	−493.9 (89.1)	−2351.1 (53.8)	−445.1 (90.2)
LargeGrace × UltraPoor × rd 4	0.008 (0.20)	−5241.3 (6.2)	−7683.2 (9.7)	−7781.7 (9.4)	−6705.2 (21.9)	−7258.0 (14.4)	−6706.7 (21.8)
Cattle × UltraPoor × rd 4	−0.001 (0.19)	1011.4 (61.2)	−798.4 (80.6)	−926.9 (77.5)	243.0 (94.0)	−1145.3 (74.2)	268.0 (93.4)
HadCattle	0.265 (0.44)				−472.7 (67.2)		731.2 (70.4)
HadCattle × rd 3	0.092 (0.29)				−139.6 (93.2)		−145.1 (93.0)
HadCattle × rd 4	0.084 (0.28)				755.2 (71.0)		750.7 (71.1)
FloodInRd1	0.414 (0.49)			−1431.0 (6.8)	−1619.4 (7.5)	−1760.5 (3.9)	−1593.0 (8.1)
Head literate0	0.149 (0.36)			238.5 (70.7)	−86.1 (90.2)	173.1 (78.5)	−60.5 (93.1)
NetNLAssetValue0	2657.829 (2852.68)	0.1 (0.6)	0.1 (0.5)	0.2 (3.3)	0.2 (6.1)	0.2 (3.5)
HHsize0	4.538 (1.35)			72.4 (75.8)	193.7 (50.4)	110.0 (69.5)	213.2 (47.6)
HadCattle × Large	0.024 (0.25)				1997.7 (53.3)		1829.3 (56.8)
HadCattle × Large × rd 3	0.008 (0.15)				−985.6 (86.2)		−1044.7 (85.4)
HadCattle × Large × rd 4	0.009 (0.14)				−2305.6 (70.5)		−2302.4 (70.7)
HadCattle × LargeGrace	0.009 (0.23)				7155.8 (6.3)		7131.0 (6.1)
HadCattle × LargeGrace × rd 3	0.003 (0.14)				−9430.7 (13.8)		−9443.9 (13.6)
HadCattle × LargeGrace × rd 4	0.004 (0.13)				−12161.7 (9.9)		−12158.1 (10.1)
HadCattle × Cattle	−0.012 (0.21)				5297.9 (4.8)		5087.8 (6.3)
HadCattle × Cattle × rd 3	−0.004 (0.12)				−3918.9 (47.0)		−3937.1 (46.7)
HadCattle × Cattle × rd 4	−0.005 (0.11)				−4393.5 (46.3)		−4451.1 (45.7)
NumCattle0	0.380 (0.73)					−371.4 (54.3)	−846.2 (44.4)
mean of dependent variable		−329	−329	−329	−329	−329	−329
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.144	0.118	0.118	0.115	0.114	0.115
N	1081	2017	1306	1306	1070	1176	1066

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TABLE 91: ANCOVA ESTIMATION OF NET NON-LIVESTOCK ASSETS BY ATTRIBUTES, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		−4269.3 (0.0)	−4926.9 (0.0)	−4702.4 (0.0)	−4359.5 (0.0)	−3959.8 (0.0)	−4456.4 (0.0)
Upfront	0.063 (0.39)	856.1 (44.1)	1987.3 (16.8)	2166.4 (13.2)	1551.3 (31.8)	1597.4 (29.7)	1559.5 (31.6)
WithGrace	0.014 (0.50)	−2631.0 (5.4)	−3320.0 (7.4)	−3639.3 (4.5)	−4310.1 (2.5)	−3788.5 (3.7)	−4318.5 (2.5)
InKind	0.009 (0.44)	576.4 (60.4)	931.6 (54.8)	1125.0 (45.8)	1348.1 (38.0)	1026.4 (49.7)	1313.8 (39.1)
Upfront × UltraPoor	0.072 (0.27)	−335.0 (87.7)	258.3 (93.5)	−394.1 (90.7)	−1489.6 (71.6)	−442.7 (90.7)	−1432.9 (72.8)
WithGrace × UltraPoor	0.027 (0.39)	3888.5 (11.4)	4487.4 (18.9)	4783.8 (17.7)	5876.0 (14.8)	4919.2 (17.0)	5990.0 (14.3)
InKind × UltraPoor	0.001 (0.34)	−2599.9 (13.7)	−2373.6 (31.0)	−2447.3 (29.9)	−3436.6 (20.1)	−2644.9 (26.9)	−3533.1 (19.1)
rd 3	0.342 (0.47)	4623.9 (0.0)	5117.7 (0.0)	5137.5 (0.0)	5467.5 (0.0)	5145.4 (0.0)	5487.8 (0.0)
Upfront × rd 3	0.276 (0.45)	3134.7 (0.7)	1894.7 (30.2)	1876.9 (31.0)	1779.4 (42.1)	2194.1 (30.4)	1848.9 (40.5)
WithGrace × rd 3	0.172 (0.38)	4587.8 (0.2)	5731.6 (0.5)	5746.5 (0.5)	6899.2 (0.1)	5644.4 (0.5)	6827.3 (0.1)
InKind × rd 3	0.087 (0.28)	−2652.7 (6.2)	−3782.6 (5.2)	−3721.5 (5.8)	−4565.6 (2.5)	−3849.9 (4.6)	−4566.1 (2.5)
Upfront × UltraPoor × rd 3	0.024 (0.16)	2356.7 (21.4)	123.1 (96.9)	51.4 (98.7)	584.9 (86.0)	−12.6 (99.7)	563.9 (86.5)
WithGrace × UltraPoor × rd 3	0.010 (0.23)	−2398.2 (33.9)	−1942.1 (59.5)	−1978.1 (58.9)	−3215.6 (44.9)	−1866.0 (61.2)	−3171.4 (45.5)
InKind × UltraPoor × rd 3	−0.000 (0.19)	3200.3 (18.4)	3564.2 (29.8)	3631.4 (29.0)	5151.5 (20.3)	3588.5 (30.1)	5134.1 (20.5)
rd 4	0.315 (0.46)	7843.4 (0.0)	8170.5 (0.0)	8194.5 (0.0)	8121.7 (0.0)	7903.8 (0.0)	8132.3 (0.0)
Upfront × rd 4	0.260 (0.44)	2813.0 (6.3)	1633.1 (44.5)	1574.5 (46.2)	2476.9 (26.7)	2465.0 (28.4)	2520.2 (26.0)
WithGrace × rd 4	0.158 (0.37)	4624.9 (1.4)	5670.2 (2.9)	5686.3 (2.8)	6885.8 (0.9)	5457.6 (3.5)	6852.0 (1.0)
InKind × rd 4	0.079 (0.27)	−1029.4 (56.1)	−2285.2 (35.9)	−2229.8 (37.2)	−3233.5 (21.1)	−2595.1 (30.0)	−3246.9 (21.1)
Upfront × UltraPoor × rd 4	0.024 (0.16)	332.6 (90.1)	−2763.4 (44.1)	−2815.0 (43.5)	−493.9 (89.1)	−2351.1 (53.8)	−445.1 (90.2)
WithGrace × UltraPoor × rd 4	0.008 (0.22)	−5573.9 (9.6)	−4919.7 (25.4)	−4906.7 (25.0)	−6211.4 (20.8)	−4906.9 (25.3)	−6261.6 (20.5)
InKind × UltraPoor × rd 4	−0.001 (0.19)	6252.8 (2.7)	6884.7 (8.6)	6854.8 (8.8)	6948.2 (13.9)	6112.7 (12.7)	6974.7 (13.8)
HadCattle	0.265 (0.44)				−472.7 (67.2)		731.2 (70.4)
HadCattle × rd 3	0.092 (0.29)				−139.6 (93.2)		−145.1 (93.0)
HadCattle × rd 4	0.084 (0.28)				755.2 (71.0)		750.7 (71.1)
FloodInRd1	0.414 (0.49)			−1431.0 (6.8)	−1619.4 (7.5)	−1760.5 (3.9)	−1593.0 (8.1)
Head literate0	0.149 (0.36)			238.5 (70.7)	−86.1 (90.2)	173.1 (78.5)	−60.5 (93.1)
NetNLAssetValue0	2657.829 (2852.68)		0.1 (0.6)	0.1 (0.5)	0.2 (3.3)	0.2 (6.1)	0.2 (3.5)
HHsize0	4.538 (1.35)			72.4 (75.8)	193.7 (50.4)	110.0 (69.5)	213.2 (47.6)
HadCattle × Upfront	0.021 (0.20)				1997.7 (53.3)		1829.3 (56.8)
HadCattle × Upfront × rd 3	0.006 (0.12)				−985.6 (86.2)		−1044.7 (85.4)
HadCattle × Upfront × rd 4	0.007 (0.11)				−2305.6 (70.5)		−2302.4 (70.7)
HadCattle × WithGrace	−0.003 (0.26)				5158.1 (14.0)		5301.7 (12.4)
HadCattle × WithGrace × rd 3	−0.001 (0.15)				−8445.1 (2.1)		−8399.1 (2.1)
HadCattle × WithGrace × rd 4	−0.001 (0.14)				−9856.2 (7.2)		−9855.7 (7.2)
HadCattle × InKind	−0.012 (0.21)				−1857.8 (55.1)		−2043.2 (50.5)
HadCattle × InKind × rd 3	−0.004 (0.12)				5511.8 (10.6)		5506.8 (10.6)
HadCattle × InKind × rd 4	−0.005 (0.11)				7768.2 (14.9)		7707.0 (15.6)
NumCattle0	0.380 (0.73)					−371.4 (54.3)	−846.2 (44.4)
mean of dependent variable		−329	−329	−329	−329	−329	−329
T = 2		42	13	13	13	10	13
T = 3		134	81	81	38	40	36
T = 4		569	377	377	327	362	327
$\bar{R}^2$		0.144	0.118	0.118	0.115	0.114	0.115
N	1081	2017	1306	1306	1070	1176	1066

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Source: Estimated with GUK administrative and survey data.

III.5.10 Net assets, experienced vs. inexperienced

```
        LeaseInCattle
NumCows0   0   1 Sum
    0    539  94 633
    1    100   0 100
    2     30   0  30
    3      6   0   6
    4      2   0   2
    5      1   0   1
    Sum  678  94 772
```

```
                 LeaseInCattle
YearsSinceLastAdi   0   1 Sum
              1     3   0   3
              2    13   0  13
              3     8   0   8
           <NA>  654  94 748
            Sum  678  94 772
```

Even LeaseInCattle == 0 & OwnCattle == 0, some had Adi experiences.

```
                 OwnCattle
YearsSinceLastAdi   0   1 Sum
              1     1   2   3
              2    11   2  13
              3     6   2   8
           <NA>  483 171 654
            Sum  501 177 678
```

Recode to Adi if OwnCattle == 0 & !is.na(YearsSinceLastAdi). This means, LeaseInCattle == 1 if OwnCattle = 0 but has experience of Adi in last 3 years.

If we (and we will) assume that the NumCows0 (computed from "abu_livestockownershipupdated.dta) as the truth, there are 52 false positives in OwnCattle (falsely reporting cattle ownership at baseline).

```
       OwnCattle
NumCows0   0   1 Sum
    0    581  52 633
    1      0 100 100
    2      0  30  30
    3      0   6   6
    4      0   2   2
    5      0   1   1
    Sum  581 191 772
```

NumCows are computed in read_clean_data.rnw by:

```
xloL[, NumCows := as.integer(NA)]

xloL[grepl("ow", LVcode), NumCows := as.integer(number_owned)]

xloL[, NumCows := NumCows[grepl("ow", LVcode)], by = .(hhid, survey)]
```

xloL is the raw data file "abu_livestockownershipupdated.dta.

We will correct Table 8a baseline data such that it becomes consistent with "abu_livestockownershipupdated.d'

```
lvLv[NumCows0 == 0 & OwnCattle == 1L, OwnCattle := 0L]
lvLv[NumCows0 > 0 & is.na(OwnCattle), OwnCattle := 1L]
lvLv[, NumCows0 := NULL]
```

We will also correct LeaseInCattle from NA to 0, if NumCows0 > 0 (2 cases). Save it as lvLv, and use it in estimation.

```
                OwnCattle
YearsSinceLastAdi   0    1  Sum
              1     0    2    2
              2     0    2    2
              3     0    2    2
           <NA>   521  133  654
            Sum   521  139  660
```

```
              OwnCattle
LeaseInCattle   0    1  Sum
          0   521  139  660
          1   112    0  112
        Sum   633  139  772
```

```
                     AttritIn
Arm                  2    3    4    9  Sum
  traditional        6    4   20  144  174
  large              5    2    1  191  199
  large grace       22    3    3  170  198
  cattle             5    5   13  176  199
  Sum               38   14   37  681  770
                          AttritIn
BStatus                   2    3    4    9  Sum
  borrower                8    6    8  575  597
  pure saver              0    0    0    0    0
  individual rejection    9    4    1   75   89
  group rejection         9    4    0   55   68
  rejection by flood     12    0   28    0   40
  Sum                    38   14   37  705  794
           AttritIn
TradGroup   2    3    4    9  Sum
  planned   0    0    1   83   84
  twice     0    0    0   24   24
  double    0    0    0    0    0
  <NA>     38   14   36  598  686
  Sum      38   14   37  705  794
                  AttritIn
Arm               2    3    4    9  Sum
  traditional     6    4   20  168  198
  large           5    2    1  191  199
  large grace    22    3    3  170  198
  cattle          5    5   13  176  199
  Sum            38   14   37  705  794
                  AttritIn
Arm               2    3    4    9  Sum
  traditional     6    4   20  144  174
  large           5    2    1  191  199
  large grace    22    3    3  170  198
  cattle          5    5   13  176  199
  Sum            38   14   37  681  770
```

```
Number of obs based on assets
            tee
Arm              1    2    3    4  Sum
  traditional  174  166  162  133  635
  large        199  193  190  179  761
  large grace  198  176  173  155  702
  cattle       199  194  187  151  731
  Sum          770  729  712  618 2829
            AttritIn
Arm              2    3    4    9  Sum
  traditional    6    4   20  144  174
  large          5    2    1  191  199
  large grace   22    3    3  170  198
  cattle         5    5   13  176  199
  Sum           38   14   37  681  770


Number of obs based on roster
            AttritIn
Arm              2    3    4    9  Sum
  traditional    6    4   20  144  174
  large          5    2    1  191  199
  large grace   22    3    3  170  198
  cattle         5    5   13  176  199
  Sum           38   14   37  681  770


Number of nonattriting obs but with lacking 4 entries in assets
            ObPattern
Arm             0111 1111 <NA> Sum
  traditional      1    1    9   11
  large            3    0    9   12
  large grace      5    1    9   15
  cattle           4    1   20   25
  Sum             13    3   47   63
```

```
[1] excl
[[1]]
NetValue ~ dummyLarge + dummyLargeGrace + dummyCattle + dummyOwnCattle0 +
    dummyAdiCattle0

[[2]]
NetValue ~ dummyLarge + dummyLargeGrace + dummyCattle + NetValue0 +
    dummyOwnCattle0 + dummyAdiCattle0

[[3]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NetValue0 + dummyOwnCattle0 + dummyAdiCattle0

[[4]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NetValue0 + dummyOwnCattle0.Large +
    dummyOwnCattle0.LargeGrace + dummyOwnCattle0.Cattle + dummyOwnCattle0 +
    dummyAdiCattle0.Large + dummyAdiCattle0.LargeGrace + dummyAdiCattle0.Cattle +
    dummyAdiCattle0

[[5]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NetValue0 + dummyOwnCattle0.Large +
    dummyOwnCattle0.LargeGrace + dummyOwnCattle0.Cattle + dummyOwnCattle0 +
    dummyAdiCattle0.Large + dummyAdiCattle0.LargeGrace + dummyAdiCattle0.Cattle +
```

```
    dummyAdiCattle0

[1] exclP
[[1]]
NetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyOwnCattle0 + dummyAdiCattle0

[[2]]
NetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyOwnCattle0 + dummyAdiCattle0

[[3]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyOwnCattle0 +
    dummyAdiCattle0

[[4]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyOwnCattle0.LargeSize +
    dummyOwnCattle0.WithGrace + dummyOwnCattle0.InKind + dummyOwnCattle0 +
    dummyAdiCattle0.LargeSize + dummyAdiCattle0.WithGrace + dummyAdiCattle0.InKind +
    dummyAdiCattle0

[[5]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyOwnCattle0.LargeSize +
    dummyOwnCattle0.WithGrace + dummyOwnCattle0.InKind + dummyOwnCattle0 +
    dummyAdiCattle0.LargeSize + dummyAdiCattle0.WithGrace + dummyAdiCattle0.InKind +
    dummyAdiCattle0

[1] excla
[[1]]
NetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind + NetValue0

[[3]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NetValue0

[[5]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NetValue0

[1] exclT
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    dummyOwnCattle0 + dummyAdiCattle0
```

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```
[[2]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    NetValue0 + dummyOwnCattle0 + dummyAdiCattle0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyOwnCattle0 + dummyAdiCattle0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyOwnCattle0.Large + dummyOwnCattle0.Time3 + dummyOwnCattle0.Large.Time3 +
    dummyOwnCattle0.Time4 + dummyOwnCattle0.Large.Time4 + dummyOwnCattle0.LargeGrace +
    dummyOwnCattle0.LargeGrace.Time3 + dummyOwnCattle0.LargeGrace.Time4 +
    dummyOwnCattle0.Cattle + dummyOwnCattle0.Cattle.Time3 + dummyOwnCattle0.Cattle.Time4 +
    dummyOwnCattle0 + dummyAdiCattle0.Large + dummyAdiCattle0.Time3 +
    dummyAdiCattle0.Large.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 +
    dummyAdiCattle0.LargeGrace + dummyAdiCattle0.LargeGrace.Time3 +
    dummyAdiCattle0.LargeGrace.Time4 + dummyAdiCattle0.Cattle +
    dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4 +
    dummyAdiCattle0

[[5]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyOwnCattle0.Large + dummyOwnCattle0.Time3 + dummyOwnCattle0.Large.Time3 +
    dummyOwnCattle0.Time4 + dummyOwnCattle0.Large.Time4 + dummyOwnCattle0.LargeGrace +
    dummyOwnCattle0.LargeGrace.Time3 + dummyOwnCattle0.LargeGrace.Time4 +
    dummyOwnCattle0.Cattle + dummyOwnCattle0.Cattle.Time3 + dummyOwnCattle0.Cattle.Time4 +
    dummyOwnCattle0 + dummyAdiCattle0.Large + dummyAdiCattle0.Time3 +
    dummyAdiCattle0.Large.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 +
    dummyAdiCattle0.LargeGrace + dummyAdiCattle0.LargeGrace.Time3 +
    dummyAdiCattle0.LargeGrace.Time4 + dummyAdiCattle0.Cattle +
    dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4 +
    dummyAdiCattle0

[1] exclTa
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NetValue0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
```

```
        dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
        dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
        dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
        dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
        dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[[5]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
        dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
        dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
        dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[1] exclTP
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
        dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
        dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
        dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
        dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
        dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
        dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
        dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
        dummyOwnCattle0 + dummyAdiCattle0

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
        dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
        dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
        dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
        NetValue0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
        dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
        dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
        dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
        dummyOwnCattle0 + dummyAdiCattle0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
        dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
        dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
        dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
        HHsize0 + HeadLiteracy0 + NetValue0 + dummyLarge.UltraPoor +
        dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
        dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
        dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
        dummyCattle.UltraPoor.Time4 + dummyOwnCattle0 + dummyAdiCattle0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
        dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
        dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
        dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
        HHsize0 + HeadLiteracy0 + NetValue0 + dummyLarge.UltraPoor +
        dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
        dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
        dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
        dummyCattle.UltraPoor.Time4 + dummyOwnCattle0.Large + dummyOwnCattle0.Time3 +
        dummyOwnCattle0.Large.Time3 + dummyOwnCattle0.Time4 + dummyOwnCattle0.Large.Time4 +
        dummyOwnCattle0.LargeGrace + dummyOwnCattle0.LargeGrace.Time3 +
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        dummyOwnCattle0.LargeGrace.Time4 + dummyOwnCattle0.Cattle +
        dummyOwnCattle0.Cattle.Time3 + dummyOwnCattle0.Cattle.Time4 +
        dummyOwnCattle0 + dummyAdiCattle0.Large + dummyAdiCattle0.Time3 +
        dummyAdiCattle0.Large.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 +
        dummyAdiCattle0.LargeGrace + dummyAdiCattle0.LargeGrace.Time3 +
        dummyAdiCattle0.LargeGrace.Time4 + dummyAdiCattle0.Cattle +
        dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4 +
        dummyAdiCattle0

[[5]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + NetValue0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4 + dummyOwnCattle0.Large + dummyOwnCattle0.Time3 +
    dummyOwnCattle0.Large.Time3 + dummyOwnCattle0.Time4 + dummyOwnCattle0.Large.Time4 +
    dummyOwnCattle0.LargeGrace + dummyOwnCattle0.LargeGrace.Time3 +
    dummyOwnCattle0.LargeGrace.Time4 + dummyOwnCattle0.Cattle +
    dummyOwnCattle0.Cattle.Time3 + dummyOwnCattle0.Cattle.Time4 +
    dummyOwnCattle0 + dummyAdiCattle0.Large + dummyAdiCattle0.Time3 +
    dummyAdiCattle0.Large.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 +
    dummyAdiCattle0.LargeGrace + dummyAdiCattle0.LargeGrace.Time3 +
    dummyAdiCattle0.LargeGrace.Time4 + dummyAdiCattle0.Cattle +
    dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4 +
    dummyAdiCattle0

[1] exclTPa
[[1]]
NetValue ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4 +
    dummyOwnCattle0 + dummyAdiCattle0

[[2]]
NetValue ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    NetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + dummyOwnCattle0 + dummyAdiCattle0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
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        dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
        dummyInKind.UltraPoor.Time4 + dummyOwnCattle0 + dummyAdiCattle0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
        dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
        dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
        dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
        HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
        dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
        dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
        dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
        dummyInKind.UltraPoor.Time4 + dummyOwnCattle0.Time3 + dummyOwnCattle0.Time4 +
        dummyOwnCattle0.LargeSize + dummyOwnCattle0.LargeSize.Time3 +
        dummyOwnCattle0.LargeSize.Time4 + dummyOwnCattle0.WithGrace +
        dummyOwnCattle0.WithGrace.Time3 + dummyOwnCattle0.WithGrace.Time4 +
        dummyOwnCattle0.InKind + dummyOwnCattle0.InKind.Time3 + dummyOwnCattle0.InKind.Time4 +
        dummyOwnCattle0 + dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 +
        dummyAdiCattle0.LargeSize + dummyAdiCattle0.LargeSize.Time3 +
        dummyAdiCattle0.LargeSize.Time4 + dummyAdiCattle0.WithGrace +
        dummyAdiCattle0.WithGrace.Time3 + dummyAdiCattle0.WithGrace.Time4 +
        dummyAdiCattle0.InKind + dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4 +
        dummyAdiCattle0

[[5]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
        dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
        dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
        dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
        HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
        dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
        dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
        dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
        dummyInKind.UltraPoor.Time4 + dummyOwnCattle0.Time3 + dummyOwnCattle0.Time4 +
        dummyOwnCattle0.LargeSize + dummyOwnCattle0.LargeSize.Time3 +
        dummyOwnCattle0.LargeSize.Time4 + dummyOwnCattle0.WithGrace +
        dummyOwnCattle0.WithGrace.Time3 + dummyOwnCattle0.WithGrace.Time4 +
        dummyOwnCattle0.InKind + dummyOwnCattle0.InKind.Time3 + dummyOwnCattle0.InKind.Time4 +
        dummyOwnCattle0 + dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 +
        dummyAdiCattle0.LargeSize + dummyAdiCattle0.LargeSize.Time3 +
        dummyAdiCattle0.LargeSize.Time4 + dummyAdiCattle0.WithGrace +
        dummyAdiCattle0.WithGrace.Time3 + dummyAdiCattle0.WithGrace.Time4 +
        dummyAdiCattle0.InKind + dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4 +
        dummyAdiCattle0
```

```
[1] excl
[[1]]
NetValue ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
NetValue ~ dummyLarge + dummyLargeGrace + dummyCattle + NetValue0

[[3]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
        HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
        HHsize0 + HeadLiteracy0 + NetValue0

[1] exclP
```

```
[[1]]
NetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
NetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[3]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[4]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[1] excla
[[1]]
NetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind + NetValue0

[[3]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NetValue0

[1] exclT
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    NetValue0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[1] exclTa
[[1]]
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193

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NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NetValue0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[1] exclTP
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    NetValue0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4

[1] exclTPa
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
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    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[1] excl
[[1]]
NetValue ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
NetValue ~ dummyLarge + dummyLargeGrace + dummyCattle + NetValue0

[[3]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NetValue0

[1] exclP
[[1]]
NetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
NetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[3]]
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NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[4]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[1] excla
[[1]]
NetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind + NetValue0

[[3]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NetValue0

[1] exclT
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    NetValue0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[1] exclTa
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NetValue0
```

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[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[1] exclTP
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    NetValue0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4

[1] exclTPa
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
```

```
        dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
        dummyInKind.UltraPoor.Time4

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[1] excl
[[1]]
NetValue ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
NetValue ~ dummyLarge + dummyLargeGrace + dummyCattle + NetValue0

[[3]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NetValue0

[1] exclP
[[1]]
NetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
NetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[3]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[4]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[1] excla
[[1]]
```

```
NetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind + NetValue0

[[3]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NetValue0

[1] exclT
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    NetValue0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[1] exclTa
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NetValue0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0
```

```
[1] exclTP
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    NetValue0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4

[1] exclTPa
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
```

```
        dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4
```

TABLE 92: ANCOVA ESTIMATION OF NET ASSETS, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		15945.2 (0.0)	15189.6 (0.0)	7887.8 (4.2)	7999.5 (4.0)	7999.5 (4.0)
Large	0.290 (0.45)	10806.9 (0.0)	12050.8 (0.0)	11757.8 (0.2)	11064.0 (0.1)	11064.0 (0.1)
LargeGrace	0.241 (0.43)	5829.3 (2.2)	5762.7 (8.4)	5819.8 (7.3)	6286.5 (6.6)	6286.5 (6.6)
Cattle	0.261 (0.44)	4859.9 (1.4)	3927.5 (12.5)	3980.2 (12.1)	3871.8 (11.7)	3871.8 (11.7)
OwnCattle0	0.233 (0.42)	17177.8 (0.0)	10584.5 (4.4)	11131.4 (3.2)	9896.5 (5.7)	9896.5 (5.7)
AdiCattle0	0.134 (0.34)	7007.2 (0.0)	8757.2 (0.3)	8360.7 (0.5)	9312.1 (0.7)	9312.1 (0.7)
OwnCattle0 × Large	0.080 (0.27)				13483.8 (22.4)	13483.8 (22.4)
OwnCattle0 × LargeGrace	0.063 (0.24)				−1520.6 (80.2)	−1520.6 (80.2)
OwnCattle0 × Cattle	0.047 (0.21)				6802.2 (21.4)	6802.2 (21.4)
AdiCattle0 × Large	0.044 (0.20)				−12183.0 (6.3)	−12183.0 (6.3)
AdiCattle0 × LargeGrace	0.018 (0.13)				−6674.4 (59.1)	−6674.4 (59.1)
AdiCattle0 × Cattle	0.042 (0.20)				−6331.0 (34.4)	−6331.0 (34.4)
FloodInRd1	0.424 (0.49)			−48.8 (98.2)	−71.7 (97.4)	−71.7 (97.4)
Head literate0	0.146 (0.35)			−536.8 (84.1)	−303.0 (90.9)	−303.0 (90.9)
net asset value$_1$	9146.377 (14606.38)		0.3 (15.0)	0.2 (20.7)	0.3 (15.3)	0.3 (15.3)
HHsize0	4.455 (1.36)			1713.7 (3.9)	1694.6 (4.2)	1694.6 (4.2)
mean of dependent variable		25247	25247	25247	25247	25247
$T = 2$		42	13	13	13	13
$T = 3$		130	79	79	79	79
$T = 4$		550	362	362	362	362
$\bar{R}^2$		0.108	0.125	0.131	0.143	0.143
N	1277	1952	1257	1257	1257	1257

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

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TABLE 93: ANCOVA ESTIMATION OF NET ASSETS BY ATTRIBUTES, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		17653.9 (0.0)	14247.1 (0.0)	7551.4 (5.4)	7551.4 (5.4)	7551.4 (5.4)
Upfront	0.762 (0.43)	14155.3 (0.0)	14862.3 (0.0)	14638.1 (0.0)	14638.1 (0.0)	14638.1 (0.0)
WithGrace	0.483 (0.50)	−5784.8 (11.4)	−7054.8 (8.9)	−6640.5 (12.1)	−6640.5 (12.1)	−6640.5 (12.1)
InKind	0.251 (0.43)	−1138.1 (66.1)	−1220.1 (69.4)	−1321.0 (65.9)	−1321.0 (65.9)	−1321.0 (65.9)
FloodInRd1	0.422 (0.49)			369.4 (86.0)	369.4 (86.0)	369.4 (86.0)
Head literate0	0.143 (0.35)			−236.1 (93.0)	−236.1 (93.0)	−236.1 (93.0)
net asset value$_1$	8901.382 (14389.93)		0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)
HHsize0	4.467 (1.38)			1493.1 (5.5)	1493.1 (5.5)	1493.1 (5.5)
mean of dependent variable		25247	25247	25247	25247	25247
$T = 2$		42	13	13	13	13
$T = 3$		134	81	81	81	81
$T = 4$		569	377	377	377	377
$\bar{R}^2$		0.044	0.124	0.129	0.129	0.129
N	1326	2017	1306	1306	1306	1306

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 94: ANCOVA ESTIMATION OF NET ASSETS BY PERIOD, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		13811.5 (0.0)	13666.6 (0.0)	6155.1 (14.5)	5803.3 (16.8)	5803.3 (16.8)
Large	0.290 (0.45)	11400.3 (0.0)	12307.8 (0.1)	12019.5 (0.2)	11380.8 (0.1)	11380.8 (0.1)
LargeGrace	0.241 (0.43)	5802.5 (1.8)	5295.3 (10.8)	5330.4 (9.8)	5378.8 (11.5)	5378.8 (11.5)
Cattle	0.261 (0.44)	5080.6 (0.8)	3885.3 (14.6)	3913.1 (14.3)	3751.8 (14.4)	3751.8 (14.4)
OwnCattle0	0.233 (0.42)	17232.3 (0.0)	10573.5 (4.5)	11129.1 (3.3)	10292.6 (5.1)	10292.6 (5.1)
AdiCattle0	0.134 (0.34)	7009.5 (0.0)	8752.3 (0.4)	8352.6 (0.5)	10232.8 (0.3)	10232.8 (0.3)
OwnCattle0 × Large	0.080 (0.27)				12886.0 (24.7)	12886.0 (24.7)
OwnCattle0 × LargeGrace	0.063 (0.24)				2307.6 (73.5)	2307.6 (73.5)
OwnCattle0 × Cattle	0.047 (0.21)				7184.4 (23.6)	7184.4 (23.6)
AdiCattle0 × Large	0.044 (0.20)				−12744.8 (6.7)	−12744.8 (6.7)
AdiCattle0 × LargeGrace	0.018 (0.13)				−9920.3 (41.2)	−9920.3 (41.2)
AdiCattle0 × Cattle	0.042 (0.20)				−7163.2 (27.6)	−7163.2 (27.6)
rd 3	0.350 (0.48)	2311.0 (3.3)	1891.0 (17.9)	1976.6 (16.5)	2338.6 (7.4)	2338.6 (7.4)
Large × rd 3	0.099 (0.30)	−3772.7 (24.4)	−1867.0 (65.5)	−1860.3 (65.7)	−1975.7 (61.1)	−1975.7 (61.1)
LargeGrace × rd 3	0.083 (0.28)	−606.9 (84.4)	1369.2 (73.9)	1465.7 (72.3)	2858.2 (43.9)	2858.2 (43.9)
Cattle × rd 3	0.093 (0.29)	−2880.1 (31.2)	−1218.4 (72.9)	−1160.5 (73.9)	−974.8 (77.2)	−974.8 (77.2)
OwnCattle0 × rd 3	0.080 (0.27)				−3147.6 (28.3)	−3147.6 (28.3)
OwnCattle0 × Large × rd 3	0.027 (0.16)				3645.4 (69.0)	3645.4 (69.0)
OwnCattle0 × LargeGrace × rd 3	0.021 (0.14)				−19197.0 (5.6)	−19197.0 (5.6)
OwnCattle0 × Cattle × rd 3	0.016 (0.13)				17.0 (99.8)	17.0 (99.8)
AdiCattle0 × rd 3	0.046 (0.21)				−6709.3 (5.6)	−6709.3 (5.6)
AdiCattle0 × Large × rd 3	0.015 (0.12)				45.7 (99.7)	45.7 (99.7)
AdiCattle0 × LargeGrace × rd 3	0.006 (0.08)				9538.2 (24.5)	9538.2 (24.5)
AdiCattle0 × Cattle × rd 3	0.015 (0.12)				6007.4 (27.8)	6007.4 (27.8)
rd 4	0.333 (0.47)	3171.6 (1.2)	2625.0 (7.6)	2765.5 (6.6)	3201.7 (2.2)	3201.7 (2.2)
Large × rd 4	0.099 (0.30)	−2027.7 (60.1)	−716.9 (86.8)	−795.0 (85.4)	−1101.2 (77.5)	−1101.2 (77.5)
LargeGrace × rd 4	0.082 (0.27)	855.2 (78.4)	3074.0 (46.8)	3144.8 (46.2)	5032.0 (21.8)	5032.0 (21.8)
Cattle × rd 4	0.087 (0.28)	584.7 (83.1)	1820.5 (59.5)	1957.9 (56.4)	2356.8 (46.2)	2356.8 (46.2)
OwnCattle0 × rd 4	0.076 (0.27)				−1506.4 (67.4)	−1506.4 (67.4)
OwnCattle0 × Large × rd 4	0.027 (0.16)				3209.8 (77.1)	3209.8 (77.1)
OwnCattle0 × LargeGrace × rd 4	0.021 (0.14)				−19995.3 (10.2)	−19995.3 (10.2)
OwnCattle0 × Cattle × rd 4	0.014 (0.12)				−451.6 (96.4)	−451.6 (96.4)
AdiCattle0 × rd 4	0.045 (0.21)				−3682.3 (49.2)	−3682.3 (49.2)
AdiCattle0 × Large × rd 4	0.015 (0.12)				4803.1 (68.3)	4803.1 (68.3)
AdiCattle0 × LargeGrace × rd 4	0.006 (0.08)				19044.6 (28.6)	19044.6 (28.6)
AdiCattle0 × Cattle × rd 4	0.014 (0.12)				2172.2 (74.8)	2172.2 (74.8)
FloodInRd1	0.424 (0.49)			−68.4 (97.4)	−106.0 (96.1)	−106.0 (96.1)
Head literate0	0.146 (0.35)			−393.3 (88.3)	−145.0 (95.7)	−145.0 (95.7)
net asset value_1	9146.377 (14606.38)		0.3 (14.7)	0.2 (20.4)	0.3 (15.2)	0.3 (15.2)
HHsize0	4.455 (1.36)			1743.4 (3.7)	1736.2 (4.0)	1736.2 (4.0)
mean of dependent variable		25247	25247	25247	25247	25247
$T=2$		42	13	13	13	13
$T=3$		130	79	79	79	79
$T=4$		550	362	362	362	362
$\bar{R}^2$		0.109	0.122	0.128	0.138	0.138
N	1277	1952	1257	1257	1257	1257

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment men rearal concave or regular categorical variables

TABLE 95: ANCOVA ESTIMATION OF NET ASSETS BY ATTRIBUTES AND PERIOD, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		15755.5 (0.0)	12807.0 (0.0)	5922.6 (16.1)	5922.6 (16.1)	5922.6 (16.1)
Unfront	0.762 (0.43)	14738.6 (0.0)	15099.4 (0.0)	14879.0 (0.0)	14879.0 (0.0)	14879.0 (0.0)
WithGrace	0.483 (0.50)	−6436.8 (6.9)	−7825.3 (5.2)	−7436.3 (7.4)	−7436.3 (7.4)	−7436.3 (7.4)
InKind	0.251 (0.43)	−880.0 (71.7)	−697.8 (81.0)	−800.1 (77.6)	−800.1 (77.6)	−800.1 (77.6)
rd 3	0.350 (0.48)	2048.1 (5.5)	1779.2 (19.1)	1854.2 (17.8)	1854.2 (17.8)	1854.2 (17.8)
Unfront × rd 3	0.265 (0.44)	−3558.0 (25.0)	−1787.5 (64.9)	−1798.6 (64.8)	−1798.6 (64.8)	−1798.6 (64.8)
WithGrace × rd 3	0.170 (0.38)	3401.7 (29.6)	3492.1 (41.5)	3584.6 (40.7)	3584.6 (40.7)	3584.6 (40.7)
InKind × rd 3	0.090 (0.29)	−2221.7 (44.6)	−3132.6 (40.0)	−3182.4 (39.3)	−3182.4 (39.3)	−3182.4 (39.3)
rd 4	0.333 (0.47)	2850.3 (2.4)	2536.5 (7.8)	2653.9 (6.9)	2653.9 (6.9)	2653.9 (6.9)
Unfront × rd 4	0.258 (0.44)	−2144.5 (57.6)	−619.0 (88.0)	−663.3 (87.2)	−663.3 (87.2)	−663.3 (87.2)
WithGrace × rd 4	0.163 (0.37)	2980.9 (47.7)	4007.5 (39.6)	4151.8 (38.2)	4151.8 (38.2)	4151.8 (38.2)
InKind × rd 4	0.084 (0.28)	−441.7 (88.9)	−1680.7 (67.6)	−1624.0 (68.6)	−1624.0 (68.6)	−1624.0 (68.6)
FloodInRd1	0.422 (0.49)			354.2 (86.6)	354.2 (86.6)	354.2 (86.6)
Head literate0	0.143 (0.35)			−108.9 (96.8)	−108.9 (96.8)	−108.9 (96.8)
net asset value$_1$	8901.382 (14389.93)		0.5 (0.0)	0.5 (0.0)	0.5 (0.0)	0.5 (0.0)
HHsize0	4.467 (1.38)			1520.5 (5.2)	1520.5 (5.2)	1520.5 (5.2)
mean of dependent variable		25247	25247	25247	25247	25247
$T = 2$		42	13	13	13	13
$T = 3$		134	81	81	81	81
$T = 4$		569	377	377	377	377
$\bar{R}^2$		0.044	0.122	0.126	0.126	0.126
N	1326	2017	1306	1306	1306	1306

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 96: ANCOVA ESTIMATION OF NET ASSETS BY ARM, POVERTY STATUS, AND PERIOD, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		14992.3 (0.0)	14553.9 (0.0)	7023.0 (12.3)	6776.9 (13.8)	6776.9 (13.8)
Large	0.290 (0.45)	11635.0 (0.0)	12623.2 (0.2)	12394.0 (0.3)	11566.2 (0.1)	11566.2 (0.1)
LargeGrace	0.241 (0.43)	6025.5 (1.2)	5235.9 (14.4)	5303.1 (13.3)	5147.7 (15.8)	5147.7 (15.8)
Cattle	0.261 (0.44)	5501.6 (0.4)	4121.2 (17.8)	4227.1 (16.5)	3854.4 (18.4)	3854.4 (18.4)
OwnCattle0	0.233 (0.42)	17381.1 (0.0)	10891.0 (3.8)	11460.4 (2.8)	10532.5 (4.5)	10532.5 (4.5)
AdiCattle0	0.134 (0.34)	7197.7 (0.0)	8758.6 (0.4)	8371.7 (0.5)	10264.4 (0.4)	10264.4 (0.4)
UltraPoor	0.602 (0.49)	−2606.6 (8.6)	−2041.2 (33.0)	−2248.4 (28.1)	−2089.4 (32.1)	−2089.4 (32.1)
OwnCattle0 × Large	0.080 (0.27)				12571.6 (26.4)	12571.6 (26.4)
OwnCattle0 × LargeGrace	0.063 (0.24)				2896.6 (67.3)	2896.6 (67.3)
OwnCattle0 × Cattle	0.047 (0.21)				7285.0 (22.3)	7285.0 (22.3)
AdiCattle0 × Large	0.044 (0.20)				−12723.7 (8.8)	−12723.7 (8.8)
AdiCattle0 × LargeGrace	0.018 (0.13)				−9652.8 (43.3)	−9652.8 (43.3)
AdiCattle0 × Cattle	0.042 (0.20)				−7521.4 (26.3)	−7521.4 (26.3)
Large × UltraPoor	0.182 (0.39)	−4231.3 (36.8)	−6290.8 (32.2)	−6820.5 (30.7)	−7734.9 (27.6)	−7734.9 (27.6)
LargeGrace × UltraPoor	0.172 (0.38)	4469.0 (16.9)	4856.3 (34.5)	4847.8 (32.2)	3166.6 (51.2)	3166.6 (51.2)
Cattle × UltraPoor	0.163 (0.37)	490.8 (89.3)	−1506.7 (77.5)	−1370.6 (79.7)	−2381.7 (66.2)	−2381.7 (66.2)
rd 3	0.350 (0.48)	2381.8 (3.6)	1939.9 (21.4)	2026.5 (19.9)	2498.5 (7.9)	2498.5 (7.9)
Large × rd 3	0.099 (0.30)	−3443.3 (30.4)	−1485.4 (75.1)	−1507.4 (74.8)	−1674.4 (68.8)	−1674.4 (68.8)
LargeGrace × rd 3	0.083 (0.28)	−12.2 (99.7)	2345.4 (64.1)	2391.4 (63.6)	4252.3 (34.0)	4252.3 (34.0)
Cattle × rd 3	0.093 (0.29)	−2777.0 (35.6)	−662.3 (87.2)	−644.2 (87.5)	−501.8 (89.3)	−501.8 (89.3)
UltraPoor × rd 3	0.209 (0.41)	−517.1 (80.3)	−106.1 (97.1)	14.2 (99.6)	−1029.3 (72.9)	−1029.3 (72.9)
Large × UltraPoor × rd 3	0.062 (0.24)	2436.7 (68.3)	7230.5 (36.2)	7216.4 (36.4)	7059.1 (32.5)	7059.1 (32.5)
LargeGrace × UltraPoor × rd 3	0.060 (0.24)	−4697.9 (44.8)	−4169.5 (65.7)	−4101.1 (66.5)	−8355.5 (38.9)	−8355.5 (38.9)
Cattle × UltraPoor × rd 3	0.058 (0.23)	3724.3 (39.7)	3677.1 (56.1)	3652.1 (56.6)	3119.3 (56.4)	3119.3 (56.4)
OwnCattle0 × rd 3	0.080 (0.27)				−3514.6 (23.1)	−3514.6 (23.1)
OwnCattle0 × Large × rd 3	0.027 (0.16)				3405.7 (68.6)	3405.7 (68.6)
OwnCattle0 × LargeGrace × rd 3	0.021 (0.14)				−21929.3 (3.1)	−21929.3 (3.1)
OwnCattle0 × Cattle × rd 3	0.016 (0.13)				−689.1 (93.1)	−689.1 (93.1)
AdiCattle0 × rd 3	0.046 (0.21)				−6814.4 (6.5)	−6814.4 (6.5)
AdiCattle0 × Large × rd 3	0.015 (0.12)				−367.0 (97.5)	−367.0 (97.5)
AdiCattle0 × LargeGrace × rd 3	0.006 (0.08)				8409.5 (33.4)	8409.5 (33.4)
AdiCattle0 × Cattle × rd 3	0.015 (0.12)				5877.2 (28.3)	5877.2 (28.3)
rd 4	0.333 (0.47)	3249.8 (1.0)	2807.4 (8.1)	2939.5 (7.1)	3464.9 (1.9)	3464.9 (1.9)
Large × rd 4	0.099 (0.30)	−1742.6 (64.7)	−1243.2 (79.3)	−1329.5 (77.9)	−1672.1 (67.8)	−1672.1 (67.8)
LargeGrace × rd 4	0.082 (0.27)	1175.4 (72.6)	2731.5 (58.8)	2766.2 (58.6)	5051.6 (27.8)	5051.6 (27.8)
Cattle × rd 4	0.087 (0.28)	622.7 (82.8)	1472.5 (72.0)	1574.3 (69.9)	1963.5 (58.2)	1963.5 (58.2)
UltraPoor × rd 4	0.205 (0.40)	1095.4 (63.9)	3089.4 (28.3)	3121.7 (27.9)	1973.0 (49.9)	1973.0 (49.9)
Large × UltraPoor × rd 4	0.062 (0.24)	7910.9 (26.3)	5604.6 (48.8)	5857.7 (46.8)	5803.8 (44.1)	5803.8 (44.1)
LargeGrace × UltraPoor × rd 4	0.059 (0.24)	−1568.5 (79.7)	−3878.4 (63.9)	−3541.6 (67.3)	−7459.2 (38.3)	−7459.2 (38.3)
Cattle × UltraPoor × rd 4	0.056 (0.23)	4323.3 (37.4)	1046.7 (86.6)	987.7 (87.5)	−197.1 (97.3)	−197.1 (97.3)
OwnCattle0 × rd 4	0.076 (0.27)				−1918.6 (60.0)	−1918.6 (60.0)
OwnCattle0 × Large × rd 4	0.027 (0.16)				4267.2 (69.6)	4267.2 (69.6)
OwnCattle0 × LargeGrace × rd 4	0.021 (0.14)				−20408.5 (10.7)	−20408.5 (10.7)
OwnCattle0 × Cattle × rd 4	0.014 (0.12)				243.6 (98.1)	243.6 (98.1)

TABLE 97: ANCOVA ESTIMATION OF NET ASSETS BY ATTRIBUTES, POVERTY STATUS, AND PERIOD, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		14992.3 (0.0)	14553.9 (0.0)	7023.0 (12.3)	6776.9 (13.8)	6776.9 (13.8)
Upfront	0.792 (0.41)	11635.0 (0.0)	12623.2 (0.2)	12394.0 (0.3)	11566.2 (0.1)	11566.2 (0.1)
WithGrace	0.502 (0.50)	−5609.5 (4.7)	−7387.4 (6.4)	−7090.9 (8.6)	−6418.5 (8.3)	−6418.5 (8.3)
InKind	0.261 (0.44)	−523.8 (81.7)	−1114.7 (70.5)	−1076.0 (70.6)	−1293.3 (67.4)	−1293.3 (67.4)
OwnCattle0	0.233 (0.42)	17381.1 (0.0)	10891.0 (3.8)	11460.4 (2.8)	10532.5 (4.5)	10532.5 (4.5)
AdiCattle0	0.134 (0.34)	7197.7 (0.0)	8758.6 (0.4)	8371.7 (0.5)	10264.4 (0.4)	10264.4 (0.4)
UltraPoor	0.602 (0.49)	−2606.6 (8.6)	−2041.2 (33.0)	−2248.4 (28.1)	−2089.4 (32.1)	−2089.4 (32.1)
OwnCattle0 × Unfront	0.190 (0.39)				12571.6 (26.4)	12571.6 (26.4)
OwnCattle0 × WithGrace	0.110 (0.31)				−9675.0 (38.4)	−9675.0 (38.4)
OwnCattle0 × InKind	0.047 (0.21)				4388.4 (44.9)	4388.4 (44.9)
AdiCattle0 × Upfront	0.104 (0.31)				−12723.7 (8.8)	−12723.7 (8.8)
AdiCattle0 × WithGrace	0.060 (0.24)				3070.8 (80.7)	3070.8 (80.7)
AdiCattle0 × InKind	0.042 (0.20)				2131.4 (86.2)	2131.4 (86.2)
Upfront × UltraPoor	0.517 (0.50)	−4231.3 (36.8)	−6290.8 (32.2)	−6820.5 (30.7)	−7734.9 (27.6)	−7734.9 (27.6)
WithGrace × UltraPoor	0.335 (0.47)	8700.4 (6.9)	11147.1 (9.0)	11668.4 (8.7)	10901.5 (10.5)	10901.5 (10.5)
InKind × UltraPoor	0.163 (0.37)	−3978.2 (25.8)	−6362.9 (20.7)	−6218.4 (21.8)	−5548.3 (27.2)	−5548.3 (27.2)
rd 3	0.350 (0.48)	2381.8 (3.6)	1939.9 (21.4)	2026.5 (19.9)	2498.5 (7.9)	2498.5 (7.9)
UltraPoor × rd 3	0.209 (0.41)	−517.1 (80.3)	−106.1 (97.1)	14.2 (99.6)	−1029.3 (72.9)	−1029.3 (72.9)
Upfront × rd 3	0.275 (0.45)	−3443.3 (30.4)	−1485.4 (75.1)	−1507.4 (74.8)	−1674.4 (68.8)	−1674.4 (68.8)
WithGrace × rd 3	0.176 (0.38)	3431.0 (30.6)	3830.9 (40.6)	3898.7 (40.3)	5926.7 (16.0)	5926.7 (16.0)
InKind × rd 3	0.093 (0.29)	−2764.7 (36.2)	−3007.7 (45.6)	−3035.6 (45.5)	−4754.2 (20.8)	−4754.2 (20.8)
Upfront × UltraPoor × rd 3	0.179 (0.38)	2436.7 (68.3)	7230.5 (36.2)	7216.4 (36.4)	7059.1 (32.5)	7059.1 (32.5)
WithGrace × UltraPoor × rd 3	0.117 (0.32)	−7134.5 (30.9)	−11400.1 (25.1)	−11317.5 (25.7)	−15414.7 (14.9)	−15414.7 (14.9)
InKind × UltraPoor × rd 3	0.058 (0.23)	8422.2 (14.1)	7846.6 (36.6)	7753.1 (37.4)	11474.8 (22.9)	11474.8 (22.9)
OwnCattle0 × rd 3	0.080 (0.27)				−3514.6 (23.1)	−3514.6 (23.1)
OwnCattle0 × Unfront × rd 3	0.064 (0.25)				3405.7 (68.6)	3405.7 (68.6)
OwnCattle0 × WithGrace × rd 3	0.038 (0.19)				−25335.0 (0.4)	−25335.0 (0.4)
OwnCattle0 × InKind × rd 3	0.016 (0.13)				21240.2 (1.1)	21240.2 (1.1)
AdiCattle0 × rd 3	0.046 (0.21)				−6814.4 (6.5)	−6814.4 (6.5)
AdiCattle0 × Unfront × rd 3	0.036 (0.19)				−367.0 (97.5)	−367.0 (97.5)
AdiCattle0 × WithGrace × rd 3	0.021 (0.14)				8776.5 (51.7)	8776.5 (51.7)
AdiCattle0 × InKind × rd 3	0.015 (0.12)				−2532.3 (76.9)	−2532.3 (76.9)
rd 4	0.333 (0.47)	3249.8 (1.0)	2807.4 (8.1)	2939.5 (7.1)	3464.9 (1.9)	3464.9 (1.9)
UltraPoor × rd 4	0.205 (0.40)	1095.4 (63.9)	3089.4 (28.3)	3121.7 (27.9)	1973.0 (49.9)	1973.0 (49.9)
Upfront × rd 4	0.268 (0.44)	−1742.6 (64.7)	−1243.2 (79.3)	−1329.5 (77.9)	−1672.1 (67.8)	−1672.1 (67.8)
WithGrace × rd 4	0.169 (0.38)	2918.0 (47.5)	3974.7 (41.4)	4095.8 (40.4)	6723.7 (14.9)	6723.7 (14.9)
InKind × rd 4	0.087 (0.28)	−552.7 (86.5)	−1258.9 (76.7)	−1191.9 (78.0)	−3088.1 (47.3)	−3088.1 (47.3)
Upfront × UltraPoor × rd 4	0.177 (0.38)	7910.9 (26.3)	5604.6 (48.8)	5857.7 (46.8)	5803.8 (44.1)	5803.8 (44.1)
WithGrace × UltraPoor × rd 4	0.115 (0.32)	−9479.4 (22.8)	−9483.0 (32.5)	−9399.3 (33.1)	−13263.0 (19.4)	−13263.0 (19.4)
InKind × UltraPoor × rd 4	0.056 (0.23)	5891.9 (32.2)	4925.1 (54.3)	4529.3 (58.1)	7262.1 (41.7)	7262.1 (41.7)
OwnCattle0 × rd 4	0.076 (0.27)				−1918.6 (60.0)	−1918.6 (60.0)
OwnCattle0 × Unfront × rd 4	0.062 (0.24)				4267.2 (69.6)	4267.2 (69.6)
OwnCattle0 × WithGrace × rd 4	0.035 (0.18)				−24675.7 (2.1)	−24675.7 (2.1)
OwnCattle0 × InKind × rd 4	0.014 (0.12)				20652.2 (3.6)	20652.2 (3.6)
AdiCattle0 × rd 4	0.045 (0.21)				−3890.5 (48.6)	−3890.5 (48.6)

TABLE 98: ANCOVA ESTIMATION OF NET ASSETS, CATTLE REARING EXPERIENCES

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				27111.8 (0.0)	27949.6 (0.0)	16216.8 (0.0)
Large	0.327 (0.47)	0.343 (0.48)	0.262 (0.44)	1938.1 (70.5)	22056.6 (0.9)	9413.4 (0.0)
LargeGrace	0.135 (0.34)	0.269 (0.44)	0.253 (0.44)	2293.8 (72.6)	9111.1 (6.9)	6001.6 (2.6)
Cattle	0.316 (0.47)	0.202 (0.40)	0.271 (0.44)	1543.5 (74.1)	7360.3 (8.3)	5043.7 (3.3)
FloodInRd1	0.526 (0.50)	0.444 (0.50)	0.396 (0.49)			
Head literate0	0.135 (0.34)	0.165 (0.37)	0.142 (0.35)			
net asset value$_1$	1344.942 (6621.59)	31070.976 (15261.17)	2746.425 (3434.12)			
HHsize0	4.573 (1.24)	4.586 (1.41)	4.382 (1.37)			
mean of dependent variable				28555	39322	21496
$T = 2$				9	6	27
$T = 3$				18	15	97
$T = 4$				83	113	354
$\bar{R}^2$				−0.009	0.068	0.024
N	171	297	809	294	375	1283

TABLE 98: ANCOVA ESTIMATION OF NET ASSETS, CATTLE REARING EXPERIENCES (CONTINUED)

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	30183.2 (0.0)	22214.2 (0.7)	14968.2 (0.0)	3226.9 (76.5)	23580.6 (8.6)	6986.4 (3.5)
Large	−1135.2 (85.7)	23231.1 (3.4)	10456.1 (0.0)	−3301.9 (59.6)	23487.4 (3.4)	9870.7 (0.1)
LargeGrace	3029.4 (82.9)	4455.2 (40.7)	7814.4 (1.5)	2388.3 (82.5)	5185.1 (37.7)	7385.4 (2.0)
Cattle	−2378.2 (71.6)	8513.2 (9.6)	3743.9 (19.4)	−2474.3 (72.2)	8933.3 (9.2)	3231.7 (25.2)
FloodInRd1				−10782.3 (1.7)	1328.5 (81.5)	1193.6 (58.9)
Head literate0				6365.0 (38.0)	−3549.5 (52.8)	476.4 (86.9)
net asset value$_1$	0.7 (0.7)	0.2 (25.1)	0.3 (31.3)	0.6 (0.0)	0.2 (28.6)	0.3 (36.7)
HHsize0				7067.6 (0.3)	−411.5 (86.9)	1827.6 (1.1)
mean of dependent variable	28555	39322	21496	28555	39322	21496
$T = 2$	2	1	10	2	1	10
$T = 3$	10	9	60	10	9	60
$T = 4$	48	92	222	48	92	222
$\bar{R}^2$	0.005	0.086	0.032	0.122	0.079	0.042
N	166	295	796	166	295	796

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 99: ANCOVA ESTIMATION OF NET ASSETS BY ATTRIBUTES, CATTLE REARING EXPERIENCES

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				27111.8 (0.0)	27949.6 (0.0)	16216.8 (0.0)
Upfront	0.778 (0.42)	0.815 (0.39)	0.786 (0.41)	1938.1 (70.5)	22056.6 (0.9)	9413.4 (0.0)
WithGrace	0.450 (0.50)	0.471 (0.50)	0.524 (0.50)	355.6 (95.7)	−12945.6 (12.8)	−3411.8 (16.8)
InKind	0.316 (0.47)	0.202 (0.40)	0.271 (0.44)	−750.3 (90.5)	−1750.8 (69.8)	−957.9 (70.6)
FloodInRd1	0.526 (0.50)	0.444 (0.50)	0.396 (0.49)			
Head literate0	0.135 (0.34)	0.165 (0.37)	0.142 (0.35)			
net asset value$_1$	1344.942 (6621.59)	31070.976 (15261.17)	2746.425 (3434.12)			
HHsize0	4.573 (1.24)	4.586 (1.41)	4.382 (1.37)			
mean of dependent variable				28555	39322	21496
$T = 2$				9	6	27
$T = 3$				18	15	97
$T = 4$				83	113	354
$\bar{R}^2$				−0.009	0.068	0.024
N	171	297	809	294	375	1283

TABLE 99: ANCOVA ESTIMATION OF NET ASSETS BY ATTRIBUTES, CATTLE REARING EXPERIENCES (CONTINUED)

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	30183.2 (0.0)	22214.2 (0.7)	14968.2 (0.0)	3226.9 (76.5)	23580.6 (8.6)	6986.4 (3.5)
Upfront	−1135.2 (85.7)	23231.1 (3.4)	10456.1 (0.0)	−3301.9 (59.6)	23487.4 (3.4)	9870.7 (0.1)
WithGrace	4164.6 (76.3)	−18775.9 (8.2)	−2641.8 (37.4)	5690.2 (57.2)	−18302.3 (11.5)	−2485.3 (40.4)
InKind	−5407.6 (69.7)	4058.0 (40.9)	−4070.4 (18.5)	−4862.6 (64.4)	3748.1 (45.5)	−4153.7 (16.2)
FloodInRd1				−10782.3 (1.7)	1328.5 (81.5)	1193.6 (58.9)
Head literate0				6365.0 (38.0)	−3549.5 (52.8)	476.4 (86.9)
net asset value$_1$	0.7 (0.7)	0.2 (25.1)	0.3 (31.3)	0.6 (0.0)	0.2 (28.6)	0.3 (36.7)
HHsize0				7067.6 (0.3)	−411.5 (86.9)	1827.6 (1.1)
mean of dependent variable	28555	39322	21496	28555	39322	21496
$T = 2$	2	1	10	2	1	10
$T = 3$	10	9	60	10	9	60
$T = 4$	48	92	222	48	92	222
$\bar{R}^2$	0.005	0.086	0.032	0.122	0.079	0.042
N	166	295	796	166	295	796

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 100: ANCOVA ESTIMATION OF NET ASSETS BY PERIOD, CATTLE REARING EXPERIENCES

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				26892.0 (0.0)	27292.3 (0.0)	13260.5 (0.0)
Large	0.327 (0.47)	0.343 (0.48)	0.262 (0.44)	2749.7 (59.1)	21764.1 (1.0)	10201.1 (0.0)
LargeGrace	0.135 (0.34)	0.269 (0.44)	0.253 (0.44)	1949.7 (75.5)	11084.6 (3.9)	5386.3 (3.6)
Cattle	0.316 (0.47)	0.202 (0.40)	0.271 (0.44)	1985.9 (66.0)	7598.3 (12.1)	5126.8 (2.7)
rd 3	0.345 (0.48)	0.343 (0.48)	0.354 (0.48)	−977.4 (71.3)	253.4 (92.2)	3679.8 (0.0)
Large × rd 3	0.111 (0.32)	0.114 (0.32)	0.090 (0.29)	−8254.5 (36.9)	267.1 (97.5)	−3863.7 (17.0)
LargeGrace × rd 3	0.047 (0.21)	0.091 (0.29)	0.088 (0.28)	−1387.6 (82.5)	−11280.8 (21.2)	2699.0 (29.1)
Cattle × rd 3	0.111 (0.32)	0.071 (0.26)	0.098 (0.30)	−3657.0 (50.7)	−3022.4 (69.3)	−2475.6 (39.5)
rd 4	0.333 (0.47)	0.327 (0.47)	0.335 (0.47)	921.9 (79.6)	391.9 (90.1)	4520.5 (0.0)
Large × rd 4	0.111 (0.32)	0.114 (0.32)	0.090 (0.29)	−601.7 (95.4)	4020.2 (68.6)	−3983.4 (21.3)
LargeGrace × rd 4	0.047 (0.21)	0.091 (0.29)	0.087 (0.28)	5087.7 (62.0)	−8832.8 (36.0)	2886.7 (31.8)
Cattle × rd 4	0.105 (0.31)	0.061 (0.24)	0.093 (0.29)	−767.4 (90.9)	1293.0 (87.5)	791.6 (78.1)
FloodInRd1	0.526 (0.50)	0.444 (0.50)	0.396 (0.49)			
Head literate0	0.135 (0.34)	0.165 (0.37)	0.142 (0.35)			
net asset value$_1$	1344.942 (6621.59)	31070.976 (15261.17)	2746.425 (3434.12)			
HHsize0	4.573 (1.24)	4.586 (1.41)	4.382 (1.37)			
mean of dependent variable				28555	39322	21496
$T = 2$				9	6	27
$T = 3$				18	15	97
$T = 4$				83	113	354
$\bar{R}^2$				−0.031	0.053	0.031
N	171	297	809	294	375	1283

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	31829.0 (0.0)	20501.0 (3.0)	12537.5 (0.0)	3882.8 (74.2)	21758.4 (12.5)	4176.1 (26.4)
Large	−1183.5 (85.9)	23139.3 (3.7)	10945.5 (0.0)	−3319.5 (60.3)	23397.4 (3.7)	10379.3 (0.1)
LargeGrace	−1798.0 (89.5)	7103.4 (26.3)	6652.8 (2.9)	−2794.4 (78.9)	7870.4 (23.0)	6186.8 (4.3)
Cattle	−3240.6 (61.8)	8833.1 (13.4)	3695.7 (19.4)	−3402.0 (63.7)	9309.2 (11.6)	3145.2 (26.0)
rd 3	−2205.1 (53.4)	706.1 (80.1)	3679.9 (0.8)	−1217.6 (72.3)	729.8 (79.5)	3846.2 (0.7)
Large × rd 3	−2352.8 (83.8)	891.3 (92.2)	−2643.4 (46.5)	−2595.9 (82.1)	899.9 (92.3)	−2637.7 (46.9)
LargeGrace × rd 3	18024.1 (2.6)	−14131.6 (16.1)	5097.1 (19.8)	19783.2 (0.2)	−14244.5 (16.7)	5230.4 (19.1)
Cattle × rd 3	4495.1 (40.5)	−1870.6 (82.5)	−1924.8 (59.7)	3908.1 (44.4)	−1935.2 (82.1)	−1778.2 (62.3)
rd 4	881.3 (87.3)	2302.6 (49.8)	3812.7 (0.9)	2324.8 (68.1)	2220.8 (51.5)	3994.3 (0.7)
Large × rd 4	2635.2 (82.9)	950.8 (93.0)	−2233.2 (49.0)	2269.7 (85.4)	1053.4 (92.4)	−2250.4 (48.8)
LargeGrace × rd 4	28494.3 (12.5)	−13701.6 (24.4)	6145.4 (15.8)	30131.0 (10.3)	−13720.6 (25.2)	6359.5 (14.5)
Cattle × rd 4	4039.4 (51.4)	1151.2 (90.5)	2075.6 (54.9)	5068.8 (41.3)	845.8 (93.2)	2256.1 (51.2)
FloodInRd1				−10818.3 (2.3)	1288.0 (82.4)	1142.1 (60.8)
Head literate0				6543.4 (37.6)	−3614.3 (53.2)	746.4 (79.6)
net asset value$_1$	0.7 (0.8)	0.2 (25.6)	0.3 (32.7)	0.7 (0.1)	0.2 (29.1)	0.3 (38.7)
HHsize0				7114.2 (0.5)	−380.9 (88.0)	1887.2 (0.9)
mean of dependent variable	28555	39322	21496	28555	39322	21496
$T = 2$	2	1	10	2	1	10
$T = 3$	10	9	60	10	9	60
$T = 4$	48	92	222	48	92	222
$\bar{R}^2$	−0.018	0.07	0.034	0.105	0.062	0.045
N	166	295	796	166	295	796

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 100 and TABLE 100 (CONTINUED) show estimation after dividing into three subsamples: Individuals who had a cattle lease contract (Adi, $n = 92$) at the baseline, individuals who owned cattle at the baseline (Own, $n = 137$), and individuals who had neither (None, $n = 505$). The total of 734 is fewer than baseline sample size of 774 as we lost 40 observations by round 2. The number of individuals with Adi is small that makes the estimates inprecise. Specifications (2) - (4) show that the individuals of Own responded well to the non-Traditional lending by round 2, particularly so under Large and Large grace arms. Individuals of None have the smallest net asset holding under Traditional as indicated by the intercept terms. They have excess positive returns under all non-Traditional arms relative to the Traditional arm. Among the individuals of None, or who had no prior cattle rearing experience at the baseline, the Cattle arm gives the higher mean returns than the Large grace arm. As argued in the main text, it strongly suggests that the effective difference of the two arms, the managerial support program, resulted in a higher return for the None group.

The household size is positively correlated with the net asset values in Adi and None groups while not in Own group. This implies that there may be selection into cattle ownership at the baseline that requires a certain household size, either labour and/or a barn, and Own group may already have a way to acquire them as they become necessary. Returns to baseline net asset holding is meaningful only among the Own group, and estimates on other groups are less precise. Adi group has a large

point estimate, although the p value is greater than .1, which is consistent with a conjecture that the skills acquired through Adi have high returns but they are cash constrained.

TABLE 101: ANCOVA ESTIMATION OF NARROW NET ASSETS BY ATTRIBUTES AND PERIOD, CATTLE REARING EXPERIENCES

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				26892.0 (0.0)	27292.3 (0.0)	13260.5 (0.0)
Upfront	0.778 (0.42)	0.815 (0.39)	0.786 (0.41)	2749.7 (59.1)	21764.1 (1.0)	10201.1 (0.0)
WithGrace	0.450 (0.50)	0.471 (0.50)	0.524 (0.50)	−800.0 (90.4)	−10679.5 (18.3)	−4814.8 (4.0)
InKind	0.316 (0.47)	0.202 (0.40)	0.271 (0.44)	36.2 (99.5)	−3486.3 (39.1)	−259.5 (90.8)
rd 3	0.345 (0.48)	0.343 (0.48)	0.354 (0.48)	−977.4 (71.3)	253.4 (92.2)	3679.8 (0.0)
Upfront × rd 3	0.269 (0.44)	0.276 (0.45)	0.276 (0.45)	−8254.5 (36.9)	267.1 (97.5)	−3863.7 (17.0)
WithGrace × rd 3	0.158 (0.37)	0.162 (0.37)	0.185 (0.39)	6866.9 (43.6)	−11547.9 (10.2)	6562.7 (2.9)
InKind × rd 3	0.111 (0.32)	0.071 (0.26)	0.098 (0.30)	−2269.4 (64.1)	8258.4 (18.1)	−5174.5 (9.5)
rd 4	0.333 (0.47)	0.327 (0.47)	0.335 (0.47)	921.9 (79.6)	391.9 (90.1)	4520.5 (0.0)
Upfront × rd 4	0.263 (0.44)	0.266 (0.44)	0.269 (0.44)	−601.7 (95.4)	4020.2 (68.6)	−3983.4 (21.3)
WithGrace × rd 4	0.152 (0.36)	0.152 (0.36)	0.179 (0.38)	5689.4 (65.0)	−12853.0 (17.6)	6870.1 (5.7)
InKind × rd 4	0.105 (0.31)	0.061 (0.24)	0.093 (0.29)	−5855.1 (54.8)	10125.8 (18.8)	−2095.1 (52.5)
FloodInRd1	0.526 (0.50)	0.444 (0.50)	0.396 (0.49)			
Head literate0	0.135 (0.34)	0.165 (0.37)	0.142 (0.35)			
net asset value$_1$	1344.942 (6621.59)	31070.976 (15261.17)	2746.425 (3434.12)			
HHsize0	4.573 (1.24)	4.586 (1.41)	4.382 (1.37)			
mean of dependent variable				28555	39322	21496
$T = 2$				9	6	27
$T = 3$				18	15	97
$T = 4$				83	113	354
$\bar{R}^2$				−0.031	0.053	0.031
N	171	297	809	294	375	1283

TABLE 101: ANCOVA ESTIMATION OF NET ASSETS BY ATTRIBUTES AND PERIOD, CATTLE REARING EXPERIENCES (CONTINUED)

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	31829.0 (0.0)	20501.0 (3.0)	12537.5 (0.0)	3882.8 (74.2)	21758.4 (12.5)	4176.1 (26.4)
Upfront	−1183.5 (85.9)	23139.3 (3.7)	10945.5 (0.0)	−3319.5 (60.3)	23397.4 (3.7)	10379.3 (0.1)
WithGrace	−614.5 (96.5)	−16035.9 (13.3)	−4292.7 (13.2)	525.1 (95.8)	−15527.0 (17.3)	−4192.5 (14.9)
InKind	−1442.6 (91.6)	1729.8 (73.4)	−2957.1 (28.3)	−607.6 (95.4)	1438.8 (78.3)	−3041.6 (26.0)
rd 3	−2205.1 (53.4)	706.1 (80.1)	3679.9 (0.8)	−1217.6 (72.3)	729.8 (79.5)	3846.2 (0.7)
Upfront × rd 3	−2352.8 (83.8)	891.3 (92.2)	−2643.4 (46.5)	−2595.9 (82.1)	899.9 (92.3)	−2637.7 (46.9)
WithGrace × rd 3	20376.9 (11.2)	−15022.8 (4.0)	7740.5 (7.2)	22379.1 (6.4)	−15144.3 (4.5)	7868.1 (7.2)
InKind × rd 3	−13529.0 (8.3)	12261.0 (5.8)	−7021.9 (10.1)	−15875.1 (1.4)	12309.3 (6.1)	−7008.6 (10.8)
rd 4	881.3 (87.3)	2302.6 (49.8)	3812.7 (0.9)	2324.8 (68.1)	2220.8 (51.5)	3994.3 (0.7)
Upfront × rd 4	2635.2 (82.9)	950.8 (93.0)	−2233.2 (49.0)	2269.7 (85.4)	1053.4 (92.4)	−2250.4 (48.8)
WithGrace × rd 4	25859.0 (22.6)	−14652.4 (12.4)	8378.7 (7.9)	27861.3 (19.3)	−14774.0 (12.9)	8609.9 (7.3)
InKind × rd 4	−24454.8 (18.8)	14852.8 (6.7)	−4069.8 (40.6)	−25062.3 (17.8)	14566.4 (6.7)	−4103.5 (40.9)
FloodInRd1				−10818.3 (2.3)	1288.0 (82.4)	1142.1 (60.8)
Head literate0				6543.4 (37.6)	−3614.3 (53.2)	746.4 (79.6)
net asset value$_1$	0.7 (0.8)	0.2 (25.6)	0.3 (32.7)	0.7 (0.1)	0.2 (29.1)	0.3 (38.7)
HHsize0				7114.2 (0.5)	−380.9 (88.0)	1887.2 (0.9)
mean of dependent variable	28555	39322	21496	28555	39322	21496
$T = 2$	2	1	10	2	1	10
$T = 3$	10	9	60	10	9	60
$T = 4$	48	92	222	48	92	222
$\bar{R}^2$	−0.018	0.07	0.034	0.105	0.062	0.045
N	166	295	796	166	295	796

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 102: ANCOVA ESTIMATION OF NET ASSETS BY ARM, POVERTY STATUS, AND PERIOD, CATTLE REARING EXPERIENCES

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				28159.5 (0.0)	31721.3 (0.0)	15972.9 (0.0)
Large	0.327 (0.47)	0.343 (0.48)	0.262 (0.44)	2259.6 (64.2)	16813.3 (3.2)	7281.2 (0.0)
LargeGrace	0.135 (0.34)	0.269 (0.44)	0.253 (0.44)	799.2 (89.3)	6932.7 (6.2)	2738.0 (20.9)
Large × UltraPoor	0.205 (0.40)	0.212 (0.41)	0.166 (0.37)	−9355.0 (31.9)	−533.3 (95.4)	−5309.2 (35.7)
LargeGrace × UltraPoor	0.094 (0.29)	0.152 (0.36)	0.197 (0.40)	3786.8 (70.4)	26872.2 (0.0)	−4192.6 (30.9)
rd 3	0.345 (0.48)	0.343 (0.48)	0.354 (0.48)	−1164.0 (66.2)	316.3 (89.8)	3923.6 (0.1)
Large × rd 3	0.111 (0.32)	0.114 (0.32)	0.090 (0.29)	−6610.5 (44.3)	2590.2 (62.0)	−2804.2 (29.3)
LargeGrace × rd 3	0.047 (0.21)	0.091 (0.29)	0.088 (0.28)	303.1 (94.9)	−9883.2 (13.7)	4308.9 (12.8)
Large × UltraPoor × rd 3	0.070 (0.26)	0.071 (0.26)	0.057 (0.23)	1963.4 (91.5)	16263.2 (14.5)	−3236.3 (61.9)
LargeGrace × UltraPoor × rd 3	0.035 (0.18)	0.051 (0.22)	0.068 (0.25)	−8639.8 (51.8)	−403.1 (97.6)	−8434.5 (27.3)
rd 4	0.333 (0.47)	0.327 (0.47)	0.335 (0.47)	1074.9 (76.0)	930.3 (75.9)	4775.3 (0.0)
Large × rd 4	0.111 (0.32)	0.114 (0.32)	0.090 (0.29)	382.7 (96.8)	3622.6 (60.4)	−4508.5 (12.2)
LargeGrace × rd 4	0.047 (0.21)	0.091 (0.29)	0.087 (0.28)	5069.6 (58.9)	−10542.3 (16.6)	2755.4 (36.3)
Large × UltraPoor × rd 4	0.070 (0.26)	0.071 (0.26)	0.057 (0.23)	−5066.7 (77.0)	28136.9 (7.7)	894.0 (89.3)
LargeGrace × UltraPoor × rd 4	0.035 (0.18)	0.051 (0.22)	0.067 (0.25)	−409.3 (98.1)	−4978.1 (77.2)	−5254.2 (48.6)
FloodInRd1	0.526 (0.50)	0.444 (0.50)	0.396 (0.49)			
Head literate0	0.135 (0.34)	0.165 (0.37)	0.142 (0.35)			
net asset value₁	1344.942 (6621.59)	31070.976 (15261.17)	2746.425 (3434.12)			
HHsize0	4.573 (1.24)	4.586 (1.41)	4.382 (1.37)			
mean of dependent variable				28555	39322	21496
T = 2				9	6	27
T = 3				18	15	97
T = 4				83	113	354
$\bar{R}^2$				−0.031	0.081	0.027
N	171	297	809	294	375	1283

TABLE 102: ANCOVA ESTIMATION OF NET ASSETS BY ARM, POVERTY STATUS, AND PERIOD, CATTLE REARING EXPERIENCES (CONTINUED)

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	30010.9 (0.0)	27352.3 (0.0)	14605.2 (0.0)	3463.0 (76.9)	31530.2 (0.9)	5689.6 (11.1)
Large	661.5 (91.4)	18077.1 (8.0)	8693.5 (0.0)	−1214.3 (81.9)	18322.4 (8.2)	8426.7 (0.1)
LargeGrace	−583.4 (96.6)	3456.5 (50.2)	4471.3 (9.5)	−1711.0 (86.7)	3383.6 (50.1)	4216.0 (12.0)
Large × UltraPoor	−9583.7 (42.6)	−6630.6 (54.9)	−4899.0 (53.9)	−8409.9 (40.6)	−6357.4 (57.6)	−5446.3 (52.1)
LargeGrace × UltraPoor	4425.4 (78.3)	20723.7 (3.3)	−2908.3 (60.8)	4984.7 (73.8)	21290.0 (3.6)	−2542.4 (64.4)
rd 3	−2071.7 (57.1)	569.3 (82.8)	4171.3 (1.8)	−746.6 (83.0)	616.9 (81.5)	4343.2 (1.5)
Large × rd 3	−4925.2 (66.2)	2486.2 (64.7)	−2033.1 (53.9)	−5296.3 (64.2)	2353.2 (67.4)	−2099.1 (52.9)
LargeGrace × rd 3	15522.2 (3.3)	−13229.4 (7.4)	7292.4 (10.0)	17584.9 (0.5)	−13356.4 (7.7)	7391.9 (10.2)
Large × UltraPoor × rd 3	429.4 (98.5)	19542.1 (18.6)	1535.6 (83.0)	−1999.2 (93.2)	19657.6 (19.1)	1715.8 (81.1)
LargeGrace × UltraPoor × rd 3	5335.3 (84.3)	−1618.1 (91.8)	−12828.7 (32.0)	−4649.8 (83.7)	−1842.6 (90.8)	−12974.8 (31.3)
rd 4	522.7 (91.3)	2278.8 (49.3)	4376.2 (1.2)	2347.9 (63.9)	2192.6 (51.1)	4561.1 (1.0)
Large × rd 4	487.2 (96.5)	723.5 (91.9)	−3810.9 (23.1)	−905.2 (93.5)	848.5 (90.7)	−3906.1 (22.2)
LargeGrace × rd 4	24304.2 (15.1)	−15000.2 (9.9)	5927.3 (21.1)	25321.1 (15.0)	−14887.6 (10.2)	6104.7 (20.5)
Large × UltraPoor × rd 4	−13211.0 (55.2)	28306.6 (13.5)	874.7 (88.9)	−15432.2 (49.1)	27878.4 (13.8)	997.5 (87.5)
LargeGrace × UltraPoor × rd 4	21353.0 (45.1)	−5217.5 (79.5)	−11033.3 (33.3)	11700.7 (63.6)	−6016.2 (76.9)	−11242.8 (32.3)
FloodInRd1				−11755.6 (0.7)	1208.2 (83.8)	1022.2 (67.0)
Head literate0				5142.4 (44.0)	−204.6 (97.2)	481.0 (87.4)
net asset value$_1$	0.8 (2.3)	0.2 (43.3)	0.3 (37.3)	0.8 (0.6)	0.2 (44.1)	0.2 (43.8)
HHsize0				6893.7 (0.5)	−1114.1 (65.0)	1967.1 (0.8)
mean of dependent variable	28555	39322	21496	28555	39322	21496
T = 2	2	1	10	2	1	10
T = 3	10	9	60	10	9	60
T = 4	48	92	222	48	92	222
$\bar{R}^2$	−0.015	0.083	0.031	0.105	0.076	0.044
N	166	295	796	166	295	796

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 103: ANCOVA ESTIMATION OF NET ASSETS BY ATTRIBUTES, POVERTY STATUS, AND PERIOD, CATTLE REARING EXPERIENCES

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				26973.4 (0.0)	28073.3 (0.0)	13809.6 (0.0)
Upfront	0.778 (0.42)	0.815 (0.39)	0.786 (0.41)	3584.9 (48.2)	20470.0 (1.8)	9512.0 (0.0)
WithGrace	0.450 (0.50)	0.471 (0.50)	0.524 (0.50)	−1437.9 (83.3)	−9883.2 (20.8)	−4621.4 (4.6)
InKind	0.316 (0.47)	0.202 (0.40)	0.271 (0.44)	−45.1 (99.4)	−3735.1 (31.4)	−397.3 (86.2)
Upfront × UltraPoor	0.444 (0.50)	0.505 (0.50)	0.536 (0.50)	−7440.8 (47.0)	4700.1 (66.1)	−6008.9 (36.5)
WithGrace × UltraPoor	0.240 (0.43)	0.293 (0.46)	0.371 (0.48)	13186.7 (29.3)	27450.9 (0.3)	1205.5 (85.3)
InKind × UltraPoor	0.146 (0.35)	0.141 (0.35)	0.174 (0.38)	−2799.1 (80.4)	−22296.2 (1.6)	1394.2 (75.2)
rd 3	0.345 (0.48)	0.343 (0.48)	0.354 (0.48)	−1374.7 (60.6)	339.2 (89.5)	3876.8 (0.1)
Upfront × rd 3	0.269 (0.44)	0.276 (0.45)	0.276 (0.45)	−7524.9 (41.1)	1282.5 (87.3)	−4185.5 (14.2)
WithGrace × rd 3	0.158 (0.37)	0.162 (0.37)	0.185 (0.39)	6907.5 (45.8)	−12470.5 (7.5)	7180.2 (3.5)
InKind × rd 3	0.111 (0.32)	0.071 (0.26)	0.098 (0.30)	−2083.3 (67.0)	8650.4 (16.3)	−5999.7 (8.4)
Upfront × UltraPoor × rd 3	0.158 (0.37)	0.168 (0.37)	0.188 (0.39)	9001.9 (65.6)	12800.0 (37.3)	−2206.3 (75.0)
WithGrace × UltraPoor × rd 3	0.088 (0.28)	0.098 (0.30)	0.131 (0.34)	−10598.7 (62.7)	−16702.2 (23.9)	−5290.9 (57.6)
InKind × UltraPoor × rd 3	0.053 (0.22)	0.047 (0.21)	0.063 (0.24)	15785.0 (23.2)	−2829.8 (83.8)	10915.6 (18.8)
rd 4	0.333 (0.47)	0.327 (0.47)	0.335 (0.47)	621.0 (85.8)	899.5 (77.2)	4599.3 (0.0)
Upfront × rd 4	0.263 (0.44)	0.266 (0.44)	0.269 (0.44)	1791.8 (86.2)	4835.5 (59.8)	−3723.3 (23.9)
WithGrace × rd 4	0.152 (0.36)	0.152 (0.36)	0.179 (0.38)	4743.1 (70.2)	−14162.9 (11.3)	7292.9 (5.5)
InKind × rd 4	0.105 (0.31)	0.061 (0.24)	0.093 (0.29)	−5317.9 (58.1)	11671.1 (14.0)	−2679.5 (45.7)
Upfront × UltraPoor × rd 4	0.152 (0.36)	0.168 (0.37)	0.185 (0.39)	5979.5 (75.4)	24624.8 (18.5)	1625.8 (82.1)
WithGrace × UltraPoor × rd 4	0.082 (0.27)	0.098 (0.30)	0.129 (0.33)	4797.8 (83.1)	−33128.4 (8.2)	−6208.8 (50.6)
InKind × UltraPoor × rd 4	0.047 (0.21)	0.047 (0.21)	0.062 (0.24)	9323.6 (59.4)	1168.3 (95.3)	6333.9 (45.3)
FloodInRd1	0.526 (0.50)	0.444 (0.50)	0.396 (0.49)			
Head literate0	0.135 (0.34)	0.165 (0.37)	0.142 (0.35)			
net asset value₁	1344.942 (6621.59)	31070.976 (15261.17)	2746.425 (3434.12)			
HHsize0	4.573 (1.24)	4.586 (1.41)	4.382 (1.37)			
mean of dependent variable				28555	39322	21496
$T = 2$				9	6	27
$T = 3$				18	15	97
$T = 4$				83	113	354
$\bar{R}^2$				−0.045	0.074	0.029
N	171	297	809	294	375	1283

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	31177.1 (0.0)	22237.9 (2.6)	14489.7 (0.0)	4835.9 (68.5)	23909.4 (8.9)	6362.6 (17.9)
Upfront	−349.2 (95.7)	22642.8 (4.6)	8891.3 (1.5)	−2742.2 (67.5)	22738.0 (4.9)	8286.5 (3.2)
WithGrace	−1312.6 (92.7)	−14633.9 (18.1)	−4242.9 (15.6)	−267.4 (98.0)	−14286.8 (22.4)	−4295.8 (16.3)
InKind	21.6 (99.9)	613.8 (90.7)	−3090.5 (28.2)	528.5 (96.2)	275.8 (96.0)	−3035.2 (28.7)
Upfront × UltraPoor	−4088.1 (77.1)	−1952.6 (87.6)	−9574.4 (32.9)	−5898.1 (65.7)	−1959.5 (87.2)	−10802.1 (31.8)
WithGrace × UltraPoor	14586.3 (42.0)	27276.9 (2.0)	2042.4 (82.6)	13126.3 (40.1)	27050.3 (2.2)	3273.1 (74.0)
InKind × UltraPoor	−1205.6 (94.4)	−17168.5 (16.3)	−2382.1 (67.9)	−3427.0 (83.6)	−17523.0 (16.8)	−2695.7 (64.8)
rd 3	−2360.9 (52.2)	773.5 (78.3)	4019.3 (2.9)	−997.0 (77.8)	801.7 (77.7)	4160.5 (2.5)
Upfront × rd 3	−2097.2 (85.9)	1333.6 (88.0)	−2507.9 (53.6)	−3138.1 (79.4)	1238.4 (89.2)	−2442.8 (54.7)
WithGrace × rd 3	20427.2 (11.9)	−15717.2 (3.7)	9361.3 (7.6)	22846.8 (6.7)	−15747.8 (4.2)	9517.5 (7.5)
InKind × rd 3	−13769.3 (7.7)	12963.0 (5.5)	−8483.5 (10.3)	−16281.8 (1.8)	12968.8 (5.8)	−8506.1 (10.7)
Upfront × UltraPoor × rd 3	1017.6 (96.9)	15373.1 (40.1)	4546.9 (58.8)	−3442.0 (89.4)	15738.9 (39.7)	4942.3 (55.7)
WithGrace × UltraPoor × rd 3	4936.4 (89.9)	−21204.1 (23.2)	−14426.4 (29.9)	−2460.0 (94.6)	−21384.3 (24.0)	−14717.7 (28.9)
InKind × UltraPoor × rd 3	−4734.4 (86.0)	−1421.7 (93.0)	16812.0 (20.7)	3530.4 (87.7)	−1208.2 (94.2)	17117.5 (19.8)
rd 4	125.9 (97.9)	2630.5 (45.4)	4060.4 (2.3)	1958.9 (69.4)	2558.1 (46.7)	4205.8 (2.0)
Upfront × rd 4	4340.2 (70.1)	1464.5 (89.1)	−1913.3 (62.0)	2767.8 (81.2)	1512.0 (88.9)	−1865.4 (62.8)
WithGrace × rd 4	23660.7 (21.5)	−15692.2 (10.1)	9690.0 (7.0)	26087.2 (18.7)	−15735.8 (10.8)	9941.9 (6.6)
InKind × rd 4	−21651.4 (21.3)	17208.6 (5.5)	−5152.4 (34.6)	−22807.0 (21.1)	16980.0 (5.4)	−5257.7 (34.4)
Upfront × UltraPoor × rd 4	−6766.1 (77.8)	19255.1 (37.1)	3398.2 (65.6)	−12079.6 (62.1)	19424.1 (37.4)	3923.0 (60.9)
WithGrace × UltraPoor × rd 4	35291.5 (35.9)	−33513.1 (13.8)	−11845.8 (32.5)	27859.7 (44.2)	−33714.9 (14.3)	−12135.1 (31.3)
InKind × UltraPoor × rd 4	−17761.3 (53.9)	−4888.0 (83.8)	12268.1 (31.6)	−10220.5 (69.1)	−4072.4 (86.7)	12671.9 (30.1)
FloodInRd1				−11106.9 (1.8)	1672.5 (78.5)	560.8 (81.4)
Head literate0				5909.8 (42.6)	−1672.1 (77.1)	−162.5 (96.1)
net asset value₁	0.8 (2.5)	0.2 (41.4)	0.3 (35.7)	0.8 (0.7)	0.2 (44.5)	0.3 (41.7)
HHsize0				6856.8 (0.6)	−524.9 (83.2)	1940.7 (0.9)
mean of dependent variable	28555	39322	21496	28555	39322	21496
T = 2	2	1	10	2	1	10
T = 3	10	9	60	10	9	60
T = 4	48	92	222	48	92	222
$\bar{R}^2$	−0.048	0.074	0.032	0.071	0.065	0.044
N	166	295	796	166	295	796

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

III.5.11 Livestock, experienced vs. inexperienced

```
            AttritIn
Arm            2    3    4    9  Sum
  traditional  7    4   20  144  175
```

```
  large           5    2    1 191 199
  large grace    12    3    3 170 188
  cattle          5    5   13 176 199
  Sum            29   14   37 681 761
     NumCows
tee    0    1    2    3    4    5    6    7    8    9 <NA>  Sum
  2   15  308  153   40   11    1    2    0    1    1  196  728
  3    5  337  175   40   15    1    2    2    1    0  110  688
  4    4  218  201   54   11    4    2    0    1    1   86  582
  Sum  24  863  529  134   37    6    6    2    3    2  392 1998
```

```
[1]
 ~  + dummyLarge + dummyLargeGrace + dummyCattle

 + TotalImputedValue0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA

dummyAdiCattle0.Large + dummyAdiCattle0.LargeGrace + dummyAdiCattle0.Cattle + NA




[2]
 ~  + dummyUltraPoor + dummyLargeSize + dummyWithGrace
 + dummyWithGrace + dummyInKind + UDdummyUltraPoor
 + dummyLargeSize.UltraPoor + UDdummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor
 + UDdummyWithGrace.UltraPoor + dummyInKind.UltraPoor + UDdummyInKind.UltraPoor
 +

 + TotalImputedValue0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA

dummyAdiCattle0.LargeSize + dummyAdiCattle0.WithGrace + dummyAdiCattle0.InKind + NA




[3]
 ~  + dummyLargeSize + dummyWithGrace + dummyInKind

 + TotalImputedValue0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA

dummyAdiCattle0.LargeSize + dummyAdiCattle0.WithGrace + dummyAdiCattle0.InKind + NA




[4]
 ~  + Time.3 + Time.4 + dummyLarge
 + dummyLarge + dummyLargeGrace + dummyCattle
 + dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3
 + dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4
 +

 + TotalImputedValue0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA
```

```
dummyAdiCattle0.Large + dummyAdiCattle0.Time3 + dummyAdiCattle0.Large.Time3 + dummyAdiCatt
 + dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 + dummyAdiCattle0.LargeGrace
 + dummyAdiCattle0.LargeGrace.Time3 + dummyAdiCattle0.LargeGrace.Time4 + dummyAdiCattle0.C
 + dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4




[5]
~   + Time.3 + Time.4 + dummyLargeSize
 + dummyLargeSize + dummyWithGrace + dummyInKind
 + dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3
 + dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4
 +

 + TotalImputedValue0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA

dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.LargeSize + dummyAdiCattle
 + dummyAdiCattle0.LargeSize.Time3 + dummyAdiCattle0.LargeSize.Time4 + dummyAdiCattle0.Wit
 + dummyAdiCattle0.WithGrace.Time3 + dummyAdiCattle0.WithGrace.Time4 + dummyAdiCattle0.InK
 + dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4




[6]
~   + Time.3 + Time.4 + dummyLarge
 + dummyLarge + dummyLargeGrace + dummyCattle
 + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3
 + dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4
 + dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4
 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor
 + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Tim
 + dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.T
 +

 + TotalImputedValue0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA

dummyAdiCattle0.Large + dummyAdiCattle0.Time3 + dummyAdiCattle0.Large.Time3 + dummyAdiCatt
 + dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 + dummyAdiCattle0.LargeGrace
 + dummyAdiCattle0.LargeGrace.Time3 + dummyAdiCattle0.LargeGrace.Time4 + dummyAdiCattle0.C
 + dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4




[7]
~   + Time.3 + Time.4 + dummyUltraPoor
 + dummyUltraPoor + dummyLargeSize + dummyWithGrace
 + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3
 + dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4
 + dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4
 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor
 + dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraP
 + dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Ti
 +

 + TotalImputedValue0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA
```

```
dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.LargeSize + dummyAdiCattle
 + dummyAdiCattle0.LargeSize.Time3 + dummyAdiCattle0.LargeSize.Time4 + dummyAdiCattle0.Wit
 + dummyAdiCattle0.WithGrace.Time3 + dummyAdiCattle0.WithGrace.Time4 + dummyAdiCattle0.InK
 + dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4
```

```
[1] excl
[[1]]
TotalImputedValue ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
TotalImputedValue ~ dummyLarge + dummyLargeGrace + dummyCattle +
    TotalImputedValue0

[[3]]
TotalImputedValue ~ dummyLarge + dummyLargeGrace + dummyCattle +
    TotalImputedValue0 + dummyAdiCattle0

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyAdiCattle0

[[5]]
TotalImputedValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyAdiCattle0.Large + dummyAdiCattle0.LargeGrace + dummyAdiCattle0.Cattle +
    dummyAdiCattle0

[[6]]
TotalImputedValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyAdiCattle0.Large + dummyAdiCattle0.LargeGrace + dummyAdiCattle0.Cattle +
    dummyAdiCattle0

[1] exclP
[[1]]
TotalImputedValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
TotalImputedValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + TotalImputedValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
TotalImputedValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + TotalImputedValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyAdiCattle0

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyAdiCattle0

[[5]]
TotalImputedValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
```

```
    dummyInKind.UltraPoor + dummyAdiCattle0.LargeSize + dummyAdiCattle0.WithGrace +
    dummyAdiCattle0.InKind + dummyAdiCattle0

[[6]]
TotalImputedValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyAdiCattle0.LargeSize + dummyAdiCattle0.WithGrace +
    dummyAdiCattle0.InKind + dummyAdiCattle0

[1] excla
[[1]]
TotalImputedValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
TotalImputedValue ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    TotalImputedValue0

[[3]]
TotalImputedValue ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    TotalImputedValue0 + dummyAdiCattle0

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyAdiCattle0

[[5]]
TotalImputedValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyAdiCattle0.LargeSize + dummyAdiCattle0.WithGrace + dummyAdiCattle0.InKind +
    dummyAdiCattle0

[[6]]
TotalImputedValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyAdiCattle0.LargeSize + dummyAdiCattle0.WithGrace + dummyAdiCattle0.InKind +
    dummyAdiCattle0

[1] exclT
[[1]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + TotalImputedValue0

[[3]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + TotalImputedValue0 + dummyAdiCattle0

[[4]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
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    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyAdiCattle0

[[5]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyAdiCattle0.Large + dummyAdiCattle0.Time3 + dummyAdiCattle0.Large.Time3 +
    dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 + dummyAdiCattle0.LargeGrace +
    dummyAdiCattle0.LargeGrace.Time3 + dummyAdiCattle0.LargeGrace.Time4 +
    dummyAdiCattle0.Cattle + dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4 +
    dummyAdiCattle0

[[6]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyAdiCattle0.Large + dummyAdiCattle0.Time3 + dummyAdiCattle0.Large.Time3 +
    dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 + dummyAdiCattle0.LargeGrace +
    dummyAdiCattle0.LargeGrace.Time3 + dummyAdiCattle0.LargeGrace.Time4 +
    dummyAdiCattle0.Cattle + dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4 +
    dummyAdiCattle0

[1] exclTa
[[1]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + TotalImputedValue0

[[3]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + TotalImputedValue0 + dummyAdiCattle0

[[4]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyAdiCattle0

[[5]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.LargeSize +
    dummyAdiCattle0.LargeSize.Time3 + dummyAdiCattle0.LargeSize.Time4 +
    dummyAdiCattle0.WithGrace + dummyAdiCattle0.WithGrace.Time3 +
    dummyAdiCattle0.WithGrace.Time4 + dummyAdiCattle0.InKind +
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        dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4 +
        dummyAdiCattle0

[[6]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.LargeSize +
    dummyAdiCattle0.LargeSize.Time3 + dummyAdiCattle0.LargeSize.Time4 +
    dummyAdiCattle0.WithGrace + dummyAdiCattle0.WithGrace.Time3 +
    dummyAdiCattle0.WithGrace.Time4 + dummyAdiCattle0.InKind +
    dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4 +
    dummyAdiCattle0

[1] exclTP
[[1]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[2]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    TotalImputedValue0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[3]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    TotalImputedValue0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    dummyAdiCattle0

[[4]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyUltraPoor + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyCattle.Time3 + dummyUltraPoor.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    dummyUltraPoor.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    dummyAdiCattle0

[[5]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
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    dummyLargeGrace + dummyCattle + dummyUltraPoor + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyCattle.Time3 + dummyUltraPoor.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    dummyUltraPoor.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    dummyAdiCattle0.Large + dummyAdiCattle0.Time3 + dummyAdiCattle0.Large.Time3 +
    dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 + dummyAdiCattle0.LargeGrace +
    dummyAdiCattle0.LargeGrace.Time3 + dummyAdiCattle0.LargeGrace.Time4 +
    dummyAdiCattle0.Cattle + dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4 +
    dummyAdiCattle0

[[6]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyUltraPoor + dummyLarge.Time3 +
    dummyLargeGrace.Time3 + dummyCattle.Time3 + dummyUltraPoor.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    dummyUltraPoor.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    dummyAdiCattle0.Large + dummyAdiCattle0.Time3 + dummyAdiCattle0.Large.Time3 +
    dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 + dummyAdiCattle0.LargeGrace +
    dummyAdiCattle0.LargeGrace.Time3 + dummyAdiCattle0.LargeGrace.Time4 +
    dummyAdiCattle0.Cattle + dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4 +
    dummyAdiCattle0

[1] exclTPa
[[1]]
TotalImputedValue ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[2]]
TotalImputedValue ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    TotalImputedValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[3]]
TotalImputedValue ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    TotalImputedValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
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    dummyInKind.UltraPoor.Time4 + dummyAdiCattle0

[[4]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4 +
    dummyAdiCattle0

[[5]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4 +
    dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.LargeSize +
    dummyAdiCattle0.LargeSize.Time3 + dummyAdiCattle0.LargeSize.Time4 +
    dummyAdiCattle0.WithGrace + dummyAdiCattle0.WithGrace.Time3 +
    dummyAdiCattle0.WithGrace.Time4 + dummyAdiCattle0.InKind +
    dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4 +
    dummyAdiCattle0

[[6]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4 +
    dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.LargeSize +
    dummyAdiCattle0.LargeSize.Time3 + dummyAdiCattle0.LargeSize.Time4 +
    dummyAdiCattle0.WithGrace + dummyAdiCattle0.WithGrace.Time3 +
    dummyAdiCattle0.WithGrace.Time4 + dummyAdiCattle0.InKind +
    dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4 +
    dummyAdiCattle0
```

```
[1] excl
[[1]]
TotalImputedValue ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
TotalImputedValue ~ dummyLarge + dummyLargeGrace + dummyCattle +
    TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
```

```
TotalImputedValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[1] exclP
[[1]]
TotalImputedValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
TotalImputedValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + TotalImputedValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
TotalImputedValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[1] excla
[[1]]
TotalImputedValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
TotalImputedValue ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[1] exclT
[[1]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0
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[[4]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[1] exclTa
[[1]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[1] excl
[[1]]
TotalImputedValue ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
TotalImputedValue ~ dummyLarge + dummyLargeGrace + dummyCattle +
    TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[1] exclP
[[1]]
TotalImputedValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
TotalImputedValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + TotalImputedValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
TotalImputedValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
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    TotalImputedValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[1] excla
[[1]]
TotalImputedValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
TotalImputedValue ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[1] exclT
[[1]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[1] exclTa
[[1]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
```

```
    dummyInKind.Time4 + TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[1] excl
[[1]]
TotalImputedValue ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
TotalImputedValue ~ dummyLarge + dummyLargeGrace + dummyCattle +
    TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[1] exclP
[[1]]
TotalImputedValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
TotalImputedValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + TotalImputedValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
TotalImputedValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    TotalImputedValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[1] excla
[[1]]
TotalImputedValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
TotalImputedValue ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    TotalImputedValue0
```

```
[[3]]
TotalImputedValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[1] exclT
[[1]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4

[[2]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[1] exclTa
[[1]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
TotalImputedValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + TotalImputedValue0

[[3]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0

[[4]]
TotalImputedValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + TotalImputedValue0
```

TABLE 104: ANCOVA ESTIMATION OF LIVESTOCK VALUES, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		20988.8 (0.0)	19118.6 (0.0)	18323.5 (0.0)	13156.3 (0.0)	12960.5 (0.0)
Large	0.273 (0.45)	9623.6 (0.3)	8925.8 (0.1)	8894.7 (0.1)	8594.1 (0.2)	8817.1 (0.2)
LargeGrace	0.248 (0.43)	4808.8 (5.2)	4523.2 (5.2)	4726.8 (4.0)	4770.8 (3.3)	5000.6 (2.3)
Cattle	0.264 (0.44)	4448.8 (1.0)	4681.4 (0.5)	4647.8 (0.5)	4641.7 (0.5)	4769.6 (0.4)
AdiCattle0	0.153 (0.36)			4223.3 (2.1)	3812.3 (4.0)	4274.4 (2.6)
AdiCattle0 × Large	0.044 (0.21)					−7693.9 (15.1)
AdiCattle0 × LargeGrace	0.028 (0.16)					4528.2 (39.9)
AdiCattle0 × Cattle	0.046 (0.21)					−4123.7 (39.6)
FloodInRd1	0.491 (0.50)				760.3 (64.4)	689.3 (68.3)
Head literate0	0.114 (0.32)				−637.2 (75.5)	−407.7 (83.9)
livestock value$_1$	5315.315 (12450.23)		0.4 (0.0)	0.4 (0.0)	0.4 (0.0)	0.4 (0.0)
HHsize0	4.219 (1.43)				1207.6 (2.0)	1227.3 (1.9)
mean of dependent variable		25986	25986	25986	25986	25986
$T = 2$		40	40	40	40	40
$T = 3$		106	106	106	106	106
$T = 4$		582	582	582	582	582
$\bar{R}^2$		0.024	0.076	0.081	0.086	0.09
N	1998	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 105: ANCOVA ESTIMATION OF LIVESTOCK VALUES BY ATTRIBUTES, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		20988.8 (0.0)	19118.6 (0.0)	18323.5 (0.0)	13156.3 (0.0)	12960.5 (0.0)
Upfront	0.785 (0.41)	9623.6 (0.3)	8925.8 (0.1)	8894.7 (0.1)	8594.1 (0.2)	8817.1 (0.2)
WithGrace	0.512 (0.50)	−4814.7 (17.3)	−4402.6 (16.0)	−4167.9 (17.9)	−3823.4 (23.0)	−3816.5 (23.4)
InKind	0.264 (0.44)	−360.1 (86.9)	158.3 (94.3)	−79.0 (97.1)	−129.0 (95.1)	−231.0 (91.2)
AdiCattle0	0.153 (0.36)			4223.3 (2.1)	3812.3 (4.0)	4274.4 (2.6)
AdiCattle0 × Upfront	0.118 (0.32)					−7693.9 (15.1)
AdiCattle0 × WithGrace	0.074 (0.26)					12222.1 (3.3)
AdiCattle0 × InKind	0.046 (0.21)					−8651.9 (10.0)
FloodInRd1	0.491 (0.50)				760.3 (64.4)	689.3 (68.3)
Head literate0	0.114 (0.32)				−637.2 (75.5)	−407.7 (83.9)
livestock value$_1$	5315.315 (12450.23)		0.4 (0.0)	0.4 (0.0)	0.4 (0.0)	0.4 (0.0)
HHsize0	4.219 (1.43)				1207.6 (2.0)	1227.3 (1.9)
mean of dependent variable		25986	25986	25986	25986	25986
$T = 2$		40	40	40	40	40
$T = 3$		106	106	106	106	106
$T = 4$		582	582	582	582	582
$\bar{R}^2$		0.024	0.076	0.081	0.086	0.09
N	1998	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

Table 106: ANCOVA estimation of livestock values by period, cattle rearing experiences

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		18149.0 (0.0)	16157.5 (0.0)	15346.6 (0.0)	10035.0 (0.0)	9797.7 (0.0)
Large	0.273 (0.45)	9780.4 (0.3)	9036.1 (0.1)	9016.3 (0.1)	8692.0 (0.2)	8880.2 (0.2)
LargeGrace	0.248 (0.43)	4348.5 (7.7)	4073.7 (7.7)	4296.9 (5.9)	4331.0 (4.9)	4579.8 (3.5)
Cattle	0.264 (0.44)	4343.4 (1.3)	4566.5 (0.9)	4540.6 (0.8)	4516.9 (0.7)	4597.4 (0.7)
AdiCattle0	0.153 (0.36)			4242.5 (2.1)	3821.7 (4.0)	4590.9 (1.2)
AdiCattle0 × Large	0.044 (0.21)					−6683.7 (19.4)
AdiCattle0 × LargeGrace	0.028 (0.16)					5175.1 (30.4)
AdiCattle0 × Cattle	0.046 (0.21)					−2939.2 (53.8)
rd 3	0.348 (0.48)	2891.6 (0.2)	3011.2 (0.1)	3007.3 (0.1)	3056.4 (0.1)	3049.3 (0.1)
Large × rd 3	0.094 (0.29)	−1951.6 (50.6)	−1782.3 (54.3)	−1835.2 (53.2)	−1776.5 (54.6)	−1619.3 (58.0)
LargeGrace × rd 3	0.085 (0.28)	1083.7 (67.0)	1048.8 (67.4)	910.8 (71.5)	943.0 (70.9)	807.4 (74.1)
Cattle × rd 3	0.091 (0.29)	−611.9 (78.1)	−728.7 (74.1)	−770.6 (72.8)	−737.0 (74.0)	−579.1 (79.4)
AdiCattle0 × rd 3	0.054 (0.23)					−2413.8 (25.1)
AdiCattle0 × Large × rd 3	0.015 (0.12)					−6106.0 (36.4)
AdiCattle0 × LargeGrace × rd 3	0.011 (0.10)					−7107.4 (22.2)
AdiCattle0 × Cattle × rd 3	0.016 (0.12)					−5071.1 (31.8)
rd 4	0.326 (0.47)	5956.7 (0.0)	6180.7 (0.0)	6191.4 (0.0)	6256.1 (0.0)	6360.0 (0.0)
Large × rd 4	0.094 (0.29)	−665.3 (84.7)	−447.3 (89.6)	−517.0 (88.0)	−393.4 (90.8)	−197.8 (95.3)
LargeGrace × rd 4	0.081 (0.27)	4048.1 (17.7)	3936.8 (17.7)	3870.0 (17.9)	3973.4 (17.2)	4203.3 (12.9)
Cattle × rd 4	0.085 (0.28)	2023.3 (46.0)	2293.4 (40.5)	2250.7 (41.1)	2430.9 (37.3)	2792.8 (29.7)
AdiCattle0 × rd 4	0.050 (0.22)					−94.2 (97.8)
AdiCattle0 × Large × rd 4	0.016 (0.12)					−6657.6 (40.3)
AdiCattle0 × LargeGrace × rd 4	0.009 (0.09)					474.6 (96.7)
AdiCattle0 × Cattle × rd 4	0.015 (0.12)					−10334.6 (16.3)
FloodInRd1	0.491 (0.50)				779.7 (63.5)	698.6 (68.0)
Head literate0	0.114 (0.32)				−649.9 (75.1)	−419.7 (83.5)
livestock value$_1$	5315.315 (12450.23)		0.4 (0.0)	0.4 (0.0)	0.4 (0.0)	0.4 (0.0)
HHsize0	4.219 (1.43)				1234.9 (1.7)	1254.5 (1.6)
mean of dependent variable $T = 2$		25986 40	25986 40	25986 40	25986 40	25986 40
$T = 3$		106	106	106	106	106
$T = 4$		582	582	582	582	582
$\bar{R}^2$		0.034	0.088	0.092	0.098	0.101
N	1998	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

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covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		18149.0 (0.0)	16157.5 (0.0)	15346.6 (0.0)	10035.0 (0.0)	9797.7 (0.0)
Upfront	0.785 (0.41)	9780.4 (0.3)	9036.1 (0.1)	9016.3 (0.1)	8692.0 (0.2)	8880.2 (0.2)
WithGrace	0.512 (0.50)	−5431.9 (12.3)	−4962.4 (11.2)	−4719.4 (12.8)	−4361.0 (16.8)	−4300.5 (17.7)
InKind	0.264 (0.44)	−5.1 (99.8)	492.8 (82.2)	243.7 (91.0)	185.9 (92.9)	17.6 (99.3)
AdiCattle0	0.153 (0.36)			4242.5 (2.1)	3821.7 (4.0)	4590.9 (1.2)
AdiCattle0 × Upfront	0.118 (0.32)					−6683.7 (19.4)
AdiCattle0 × WithGrace	0.074 (0.26)					11858.7 (2.8)
AdiCattle0 × InKind	0.046 (0.21)					−8114.2 (11.1)
rd 3	0.348 (0.48)	2891.6 (0.2)	3011.2 (0.1)	3007.3 (0.1)	3056.4 (0.1)	3049.3 (0.1)
Upfront × rd 3	0.269 (0.44)	−1951.6 (50.6)	−1782.3 (54.3)	−1835.2 (53.2)	−1776.5 (54.6)	−1619.3 (58.0)
WithGrace × rd 3	0.176 (0.38)	3035.2 (30.6)	2831.1 (33.3)	2746.0 (34.7)	2719.5 (35.7)	2426.7 (40.3)
InKind × rd 3	0.091 (0.29)	−1695.5 (45.0)	−1777.5 (41.9)	−1681.4 (44.1)	−1680.0 (44.8)	−1386.5 (52.1)
AdiCattle0 × rd 3	0.054 (0.23)					−2413.8 (25.1)
AdiCattle0 × Upfront × rd 3	0.041 (0.20)					−6106.0 (36.4)
AdiCattle0 × WithGrace × rd 3	0.026 (0.16)					−1001.4 (87.9)
AdiCattle0 × InKind × rd 3	0.016 (0.12)					2036.2 (67.5)
rd 4	0.326 (0.47)	5956.7 (0.0)	6180.7 (0.0)	6191.4 (0.0)	6256.1 (0.0)	6360.0 (0.0)
Upfront × rd 4	0.260 (0.44)	−665.3 (84.7)	−447.3 (89.6)	−517.0 (88.0)	−393.4 (90.8)	−197.8 (95.3)
WithGrace × rd 4	0.166 (0.37)	4713.5 (17.3)	4384.1 (20.3)	4387.0 (20.1)	4366.8 (20.6)	4401.1 (19.5)
InKind × rd 4	0.085 (0.28)	−2024.8 (46.2)	−1643.4 (55.3)	−1619.3 (55.4)	−1542.5 (57.3)	−1410.5 (60.2)
AdiCattle0 × rd 4	0.050 (0.22)					−94.2 (97.8)
AdiCattle0 × Upfront × rd 4	0.039 (0.19)					−6657.6 (40.3)
AdiCattle0 × WithGrace × rd 4	0.024 (0.15)					7132.2 (53.7)
AdiCattle0 × InKind × rd 4	0.015 (0.12)					−10809.1 (33.2)
FloodInRd1	0.491 (0.50)				779.7 (63.5)	698.6 (68.0)
Head literate0	0.114 (0.32)				−649.9 (75.1)	−419.7 (83.5)
livestock value$_1$	5315.315 (12450.23)		0.4 (0.0)	0.4 (0.0)	0.4 (0.0)	0.4 (0.0)
HHsize0	4.219 (1.43)				1234.9 (1.7)	1254.5 (1.6)
mean of dependent variable		25986	25986	25986	25986	25986
$T = 2$		40	40	40	40	40
$T = 3$		106	106	106	106	106
$T = 4$		582	582	582	582	582
$\bar{R}^2$		0.034	0.088	0.092	0.098	0.101
N	1998	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 108: ANCOVA ESTIMATION OF LIVESTOCK VALUES BY ARM, POVERTY STATUS, AND PERIOD, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		19529.8 (0.0)	17349.8 (0.0)	16518.1 (0.0)	11021.7 (0.0)	10714.5 (0.0)
Large	0.273 (0.45)	9967.4 (0.2)	9424.6 (0.0)	9399.1 (0.0)	9098.4 (0.1)	9240.2 (0.1)
LargeGrace	0.248 (0.43)	4330.7 (7.2)	4242.1 (6.0)	4461.7 (4.5)	4480.3 (3.8)	4695.1 (2.8)
Cattle	0.264 (0.44)	4488.6 (0.8)	4900.4 (0.4)	4852.2 (0.4)	4848.5 (0.4)	4920.1 (0.4)
AdiCattle0	0.153 (0.36)			4457.5 (1.3)	4056.8 (2.5)	4861.9 (0.7)
UltraPoor	0.630 (0.48)	−2215.7 (14.5)	−2303.4 (12.5)	−2316.7 (12.5)	−2278.0 (14.0)	−2160.5 (15.5)
AdiCattle0 × Large	0.044 (0.21)					−5465.2 (26.2)
AdiCattle0 × LargeGrace	0.028 (0.16)					5366.5 (27.1)
AdiCattle0 × Cattle	0.046 (0.21)					−2731.9 (55.8)
Large × UltraPoor	0.172 (0.38)	−6798.3 (15.3)	−5243.1 (22.9)	−5656.4 (19.7)	−5827.7 (19.2)	−5617.4 (20.1)
LargeGrace × UltraPoor	0.171 (0.38)	2987.0 (40.5)	4791.4 (19.3)	4761.0 (18.8)	5133.0 (14.9)	5161.4 (13.9)
Cattle × UltraPoor	0.181 (0.39)	−329.3 (92.6)	1663.4 (63.7)	1755.0 (61.7)	1994.4 (57.3)	1871.2 (59.3)
rd 3	0.348 (0.48)	2780.4 (0.3)	2911.2 (0.2)	2901.8 (0.2)	2961.2 (0.1)	2959.7 (0.1)
Large × rd 3	0.094 (0.29)	−1553.7 (56.3)	−1471.4 (58.8)	−1530.1 (57.5)	−1503.0 (58.2)	−1338.6 (62.0)
LargeGrace × rd 3	0.085 (0.28)	2068.6 (40.6)	1898.8 (44.3)	1740.4 (48.2)	1741.2 (48.7)	1595.5 (51.3)
Cattle × rd 3	0.091 (0.29)	−176.2 (93.2)	−376.0 (85.9)	−415.9 (84.6)	−409.6 (84.9)	−261.0 (90.4)
UltraPoor × rd 3	0.217 (0.41)	−107.0 (96.0)	−24.2 (99.1)	9.9 (99.6)	−4.9 (99.8)	137.1 (94.8)
Large × UltraPoor × rd 3	0.058 (0.23)	9721.0 (10.0)	8918.9 (12.7)	8882.3 (13.1)	8795.8 (13.2)	9085.4 (12.9)
LargeGrace × UltraPoor × rd 3	0.060 (0.24)	−2198.5 (70.8)	−2252.2 (69.7)	−2026.8 (72.2)	−2465.8 (66.7)	−2330.0 (68.0)
Cattle × UltraPoor × rd 3	0.061 (0.24)	6790.8 (9.3)	6186.2 (12.5)	6172.8 (12.6)	5865.2 (14.2)	5752.5 (14.7)
AdiCattle0 × rd 3	0.054 (0.23)					−2565.3 (23.8)
AdiCattle0 × Large × rd 3	0.015 (0.12)					−6609.2 (33.7)
AdiCattle0 × LargeGrace × rd 3	0.011 (0.10)					−6827.9 (23.6)
AdiCattle0 × Cattle × rd 3	0.016 (0.12)					−4836.0 (32.3)
rd 4	0.326 (0.47)	5746.1 (0.0)	6029.4 (0.0)	6033.8 (0.0)	6110.0 (0.0)	6223.3 (0.0)
Large × rd 4	0.094 (0.29)	−250.7 (93.6)	−194.2 (95.1)	−280.6 (92.9)	−187.0 (95.3)	−8.9 (99.8)
LargeGrace × rd 4	0.081 (0.27)	4588.9 (11.1)	4290.5 (13.2)	4184.5 (13.8)	4256.3 (13.6)	4415.0 (10.7)
Cattle × rd 4	0.085 (0.28)	2418.1 (34.7)	2627.4 (32.7)	2559.2 (33.7)	2705.5 (31.2)	3060.6 (24.8)
UltraPoor × rd 4	0.211 (0.41)	1542.6 (50.9)	1199.2 (61.0)	1328.8 (57.0)	1315.4 (57.6)	1561.2 (51.0)
Large × UltraPoor × rd 4	0.060 (0.24)	13502.2 (4.8)	12728.7 (6.1)	12487.7 (6.6)	12398.9 (6.5)	12393.2 (7.1)
LargeGrace × UltraPoor × rd 4	0.056 (0.23)	4678.4 (45.8)	4379.8 (47.8)	4521.0 (45.4)	4069.7 (50.1)	4600.5 (43.7)
Cattle × UltraPoor × rd 4	0.060 (0.24)	8720.9 (8.8)	6764.0 (21.1)	6641.3 (21.4)	6298.8 (24.0)	5699.4 (29.5)
AdiCattle0 × rd 4	0.050 (0.22)					−296.6 (93.3)
AdiCattle0 × Large × rd 4	0.016 (0.12)					−6937.5 (39.8)
AdiCattle0 × LargeGrace × rd 4	0.009 (0.09)					1833.7 (87.4)
AdiCattle0 × Cattle × rd 4	0.015 (0.12)					−9663.1 (18.6)
FloodInRd1	0.491 (0.50)				659.2 (68.4)	601.2 (71.9)
Head literate0	0.114 (0.32)				−921.0 (64.9)	−673.9 (73.4)
livestock value$_1$	5315.315 (12450.23)		0.4 (0.0)	0.4 (0.0)	0.4 (0.0)	0.4 (0.0)
HHsize0	4.219 (1.43)				1288.2 (1.1)	1306.5 (1.1)
mean of dependent variable		25986	25986	25986	25986	25986
$T = 2$		40	40	40	40	40
$T = 3$		106	106	106	106	106
$T = 4$		582	582	582	582	582
$\bar{R}^2$		0.039	0.093	0.098	0.105	0.106
N	1998	1998	1998	1998	1998	1998

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Source: Estimated with GUK administrative and survey data.

TABLE 109: ANCOVA ESTIMATION OF LIVESTOCK VALUES BY ATTRIBUTES, POVERTY STATUS, AND PERIOD, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		19529.8 (0.0)	17349.8 (0.0)	16518.1 (0.0)	11021.7 (0.0)	10714.5 (0.0)
Upfront	0.785 (0.41)	9967.4 (0.2)	9424.6 (0.0)	9399.1 (0.0)	9098.4 (0.1)	9240.2 (0.1)
WithGrace	0.512 (0.50)	−5636.7 (10.0)	−5182.6 (8.5)	−4937.4 (9.5)	−4618.1 (12.9)	−4545.1 (13.8)
InKind	0.264 (0.44)	157.9 (94.1)	658.3 (76.1)	390.5 (85.4)	368.3 (85.8)	225.0 (91.2)
AdiCattle0	0.153 (0.36)			4457.5 (1.3)	4056.8 (2.5)	4861.9 (0.7)
UltraPoor	0.630 (0.48)	−2215.7 (14.5)	−2303.4 (12.5)	−2316.7 (12.5)	−2278.0 (14.0)	−2160.5 (15.5)
AdiCattle0 × Upfront	0.118 (0.32)					−5465.2 (26.2)
AdiCattle0 × WithGrace	0.074 (0.26)					10831.7 (3.9)
AdiCattle0 × InKind	0.046 (0.21)					−8098.4 (11.1)
Upfront × UltraPoor	0.524 (0.50)	−6798.3 (15.3)	−5243.1 (22.9)	−5656.4 (19.7)	−5827.7 (19.2)	−5617.4 (20.1)
WithGrace × UltraPoor	0.352 (0.48)	9785.2 (3.6)	10034.5 (2.9)	10417.4 (2.5)	10960.6 (2.1)	10778.8 (2.0)
InKind × UltraPoor	0.181 (0.39)	−3316.3 (33.4)	−3128.0 (39.6)	−3006.0 (41.3)	−3138.6 (38.9)	−3290.2 (36.2)
rd 3	0.348 (0.48)	2780.4 (0.3)	2911.2 (0.2)	2901.8 (0.2)	2961.2 (0.1)	2959.7 (0.1)
UltraPoor × rd 3	0.217 (0.41)	−107.0 (96.0)	−24.2 (99.1)	9.9 (99.6)	−4.9 (99.8)	137.1 (94.8)
Upfront × rd 3	0.269 (0.44)	−1553.7 (56.3)	−1471.4 (58.8)	−1530.1 (57.5)	−1503.0 (58.2)	−1338.6 (62.0)
WithGrace × rd 3	0.176 (0.38)	3622.4 (21.4)	3370.3 (24.2)	3270.5 (25.4)	3244.2 (26.2)	2934.1 (29.8)
InKind × rd 3	0.091 (0.29)	−2244.8 (34.1)	−2274.8 (32.6)	−2156.4 (34.8)	−2150.8 (35.4)	−1856.5 (41.4)
Upfront × UltraPoor × rd 3	0.179 (0.38)	9721.0 (10.0)	8918.9 (12.7)	8882.3 (13.1)	8795.8 (13.2)	9085.4 (12.9)
WithGrace × UltraPoor × rd 3	0.121 (0.33)	−11919.4 (9.0)	−11171.1 (10.8)	−10909.2 (11.4)	−11261.6 (10.5)	−11415.4 (10.2)
InKind × UltraPoor × rd 3	0.061 (0.24)	8989.3 (10.6)	8438.4 (12.5)	8199.6 (13.0)	8331.0 (12.9)	8082.5 (13.2)
AdiCattle0 × rd 3	0.054 (0.23)					−2565.3 (23.8)
AdiCattle0 × Upfront × rd 3	0.041 (0.20)					−6609.2 (33.7)
AdiCattle0 × WithGrace × rd 3	0.026 (0.16)					−218.7 (97.5)
AdiCattle0 × InKind × rd 3	0.016 (0.12)					1991.9 (68.7)
rd 4	0.326 (0.47)	5746.1 (0.0)	6029.4 (0.0)	6033.8 (0.0)	6110.0 (0.0)	6223.3 (0.0)
UltraPoor × rd 4	0.211 (0.41)	1542.6 (50.9)	1199.2 (61.0)	1328.8 (57.0)	1315.4 (57.6)	1561.2 (51.0)
Upfront × rd 4	0.260 (0.44)	−250.7 (93.6)	−194.2 (95.1)	−280.6 (92.9)	−187.0 (95.3)	−8.9 (99.8)
WithGrace × rd 4	0.166 (0.37)	4839.6 (14.0)	4484.7 (17.1)	4465.1 (17.0)	4443.3 (17.5)	4424.0 (16.7)
InKind × rd 4	0.085 (0.28)	−2170.8 (43.1)	−1663.1 (55.3)	−1625.3 (55.7)	−1550.8 (57.6)	−1354.5 (62.0)
Upfront × UltraPoor × rd 4	0.176 (0.38)	13502.2 (4.8)	12728.7 (6.1)	12487.7 (6.6)	12398.9 (6.5)	12393.2 (7.1)
WithGrace × UltraPoor × rd 4	0.116 (0.32)	−8823.9 (23.8)	−8348.9 (25.7)	−7966.6 (27.6)	−8329.2 (25.6)	−7792.7 (28.7)
InKind × UltraPoor × rd 4	0.060 (0.24)	4042.5 (49.7)	2384.3 (69.7)	2120.3 (72.4)	2229.1 (71.4)	1098.8 (85.4)
AdiCattle0 × rd 4	0.050 (0.22)					−296.6 (93.3)
AdiCattle0 × Upfront × rd 4	0.039 (0.19)					−6937.5 (39.8)
AdiCattle0 × WithGrace × rd 4	0.024 (0.15)					8771.2 (45.8)
AdiCattle0 × InKind × rd 4	0.015 (0.12)					−11496.8 (30.4)
FloodInRd1	0.491 (0.50)				659.2 (68.4)	601.2 (71.9)
Head literate0	0.114 (0.32)				−921.0 (64.9)	−673.9 (73.4)
livestock value$_1$	5315.315 (12450.23)		0.4 (0.0)	0.4 (0.0)	0.4 (0.0)	0.4 (0.0)
HHsize0	4.219 (1.43)				1288.2 (1.1)	1306.5 (1.1)
mean of dependent variable		25986	25986	25986	25986	25986
$T = 2$		40	40	40	40	40
$T = 3$		106	106	106	106	106
$T = 4$		582	582	582	582	582
$\bar{R}^2$		0.039	0.093	0.098	0.105	0.106
N	1998	1998	1998	1998	1998	1998

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables.

TABLE 110: ANCOVA ESTIMATION OF LIVESTOCK VALUES, CATTLE REARING EXPERIENCES

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				24608.9 (0.0)	27911.4 (0.0)	18234.3 (0.0)
Large	0.289 (0.45)	0.324 (0.47)	0.255 (0.44)	2460.2 (62.2)	18762.5 (2.0)	7221.6 (0.5)
LargeGrace	0.180 (0.39)	0.252 (0.43)	0.262 (0.44)	8853.0 (12.4)	4550.4 (29.1)	4421.2 (8.0)
Cattle	0.302 (0.46)	0.229 (0.42)	0.266 (0.44)	1499.8 (73.7)	4457.2 (14.9)	5247.6 (2.1)
FloodInRd1	0.613 (0.49)	0.494 (0.50)	0.462 (0.50)			
Head literate0	0.121 (0.33)	0.157 (0.36)	0.099 (0.30)			
livestock value$_1$		27300.771 (14001.64)				
HHsize0	4.364 (1.25)	4.506 (1.39)	4.100 (1.47)			
mean of dependent variable				27368	36155	22629
$T=2$				1	4	35
$T=3$				17	11	78
$T=4$				90	121	371
$\bar{R}^2$				0.067		
N	305	389	1304	305	389	1304

TABLE 110: ANCOVA ESTIMATION OF LIVESTOCK VALUES, CATTLE REARING EXPERIENCES (CONTINUED)

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	24608.9 (0.0)	22807.9 (0.0)	18234.3 (0.0)	11551.0 (5.0)	20057.7 (3.6)	13507.8 (0.0)
Large	2460.2 (62.2)	18486.5 (1.8)	7221.6 (0.5)	1909.0 (68.3)	18336.8 (2.3)	6842.7 (0.7)
LargeGrace	8853.0 (12.4)	4389.6 (32.5)	4421.2 (8.0)	9387.7 (7.7)	5579.9 (22.0)	4305.5 (9.0)
Cattle	1499.8 (73.7)	4864.2 (14.0)	5247.6 (2.1)	921.6 (83.5)	5587.9 (11.7)	5078.3 (2.4)
FloodInRd1				−2605.8 (41.7)	1865.4 (68.9)	1138.4 (50.2)
Head literate0				4546.1 (34.3)	−5026.7 (26.3)	533.9 (79.7)
livestock value$_1$		0.2 (26.4)			0.2 (35.1)	
HHsize0				3286.3 (1.7)	558.8 (76.2)	1053.7 (3.4)
mean of dependent variable	27368	36155	22629	27368	36155	22629
$T=2$	1	4	35	1	4	35
$T=3$	17	11	78	17	11	78
$T=4$	90	121	371	90	121	371
$\bar{R}^2$	0.011	0.074	0.018	0.046	0.072	0.024
N	305	389	1304	305	389	1304

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Narrow net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline. Adi and None subgroups do not own cattle at the baseline. We used net asset values at the baseline NetAssets0 in place of NumCows0 in ANCOVA estimation.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 111: ANCOVA ESTIMATION OF LIVESTOCK VALUES BY ATTRIBUTES, CATTLE REARING EXPERIENCES

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				24608.9 (0.0)	27911.4 (0.0)	18234.3 (0.0)
Upfront	0.770 (0.42)	0.805 (0.40)	0.783 (0.41)	2460.2 (62.2)	18762.5 (2.0)	7221.6 (0.5)
WithGrace	0.482 (0.50)	0.481 (0.50)	0.528 (0.50)	6392.7 (27.0)	−14212.1 (9.8)	−2800.4 (26.7)
InKind	0.302 (0.46)	0.229 (0.42)	0.266 (0.44)	−7353.1 (16.9)	−93.2 (98.3)	826.5 (71.3)
FloodInRd1	0.613 (0.49)	0.494 (0.50)	0.462 (0.50)			
Head literate0	0.121 (0.33)	0.157 (0.36)	0.099 (0.30)			
livestock value$_1$		27300.771 (14001.64)				
HHsize0	4.364 (1.25)	4.506 (1.39)	4.100 (1.47)			
mean of dependent variable				27368	36155	22629
$T = 2$				1	4	35
$T = 3$				17	11	78
$T = 4$				90	121	371
$\bar{R}^2$				0.011	0.067	0.018
N	305	389	1304	305	389	1304

TABLE 111: ANCOVA ESTIMATION OF LIVESTOCK VALUES BY ATTRIBUTES, CATTLE REARING EXPERIENCES (CONTINUED)

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	24608.9 (0.0)	22807.9 (0.0)	18234.3 (0.0)	11551.0 (5.0)	20057.7 (3.6)	13507.8 (0.0)
Upfront	2460.2 (62.2)	18486.5 (1.8)	7221.6 (0.5)	1909.0 (68.3)	18336.8 (2.3)	6842.7 (0.7)
WithGrace	6392.7 (27.0)	−14096.9 (9.1)	−2800.4 (26.7)	7478.7 (16.2)	−12756.9 (16.2)	−2537.2 (33.3)
InKind	−7353.1 (16.9)	474.6 (91.6)	826.5 (71.3)	−8466.2 (11.2)	8.0 (99.9)	772.8 (72.9)
FloodInRd1				−2605.8 (41.7)	1865.4 (68.9)	1138.4 (50.2)
Head literate0				4546.1 (34.3)	−5026.7 (26.3)	533.9 (79.7)
livestock value$_1$		0.2 (26.4)			0.2 (35.1)	
HHsize0				3286.3 (1.7)	558.8 (76.2)	1053.7 (3.4)
mean of dependent variable	27368	36155	22629	27368	36155	22629
$T = 2$	1	4	35	1	4	35
$T = 3$	17	11	78	17	11	78
$T = 4$	90	121	371	90	121	371
$\bar{R}^2$	0.011	0.074	0.018	0.046	0.072	0.024
N	305	389	1304	305	389	1304

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Narrow net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline. Adi and None subgroups do not own cattle at the baseline. We used net asset values at the baseline NetAssets0 in place of NumCows0 in ANCOVA estimation.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 112: ANCOVA ESTIMATION OF LIVESTOCK VALUES BY PERIOD, CATTLE REARING EXPERIENCES

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				21787.5 (0.0)	27200.6 (0.0)	14561.5 (0.0)
Large	0.289 (0.45)	0.324 (0.47)	0.255 (0.44)	3420.7 (45.9)	18026.1 (1.9)	7318.5 (0.9)
LargeGrace	0.180 (0.39)	0.252 (0.43)	0.262 (0.44)	9026.8 (9.5)	5271.9 (21.2)	3574.7 (15.0)
Cattle	0.302 (0.46)	0.229 (0.42)	0.266 (0.44)	2367.8 (58.5)	3876.2 (22.1)	5048.1 (3.3)
rd 3	0.351 (0.48)	0.344 (0.48)	0.348 (0.48)	886.0 (66.1)	−175.4 (93.1)	4434.8 (0.0)
Large × rd 3	0.098 (0.30)	0.108 (0.31)	0.088 (0.28)	−6914.6 (32.9)	2742.9 (61.8)	−1486.8 (63.7)
LargeGrace × rd 3	0.069 (0.25)	0.085 (0.28)	0.089 (0.28)	−5485.7 (30.7)	−5765.6 (26.5)	3918.9 (13.4)
Cattle × rd 3	0.102 (0.30)	0.082 (0.28)	0.090 (0.29)	−4923.0 (35.7)	3125.6 (51.0)	−834.8 (72.3)
rd 4	0.325 (0.47)	0.314 (0.46)	0.330 (0.47)	6243.1 (6.5)	3035.0 (25.5)	7236.5 (0.0)
Large × rd 4	0.102 (0.30)	0.105 (0.31)	0.089 (0.28)	−6165.0 (46.9)	5512.5 (47.1)	−391.8 (90.7)
LargeGrace × rd 4	0.056 (0.23)	0.082 (0.28)	0.086 (0.28)	4370.0 (69.5)	−3013.0 (65.9)	6176.6 (4.0)
Cattle × rd 4	0.098 (0.30)	0.067 (0.25)	0.087 (0.28)	−6354.9 (41.2)	4720.0 (44.8)	3412.9 (20.9)
FloodInRd1	0.613 (0.49)	0.494 (0.50)	0.462 (0.50)			
Head literate0	0.121 (0.33)	0.157 (0.36)	0.099 (0.30)			
livestock value$_1$		27300.771 (14001.64)				
HHsize0	4.364 (1.25)	4.506 (1.39)	4.100 (1.47)			
mean of dependent variable				27368	36155	22629
$T = 2$				1	4	35
$T = 3$				17	11	78
$T = 4$				90	121	371
$\bar{R}^2$				0.009	0.054	0.045
N	305	389	1304	305	389	1304

TABLE 112: ANCOVA ESTIMATION OF LIVESTOCK VALUES BY PERIOD, CATTLE REARING EXPERIENCES (CONTINUED)

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	21787.5	22019.8	14561.5	8564.6	19093.2	9686.7
	(0.0)	(0.0)	(0.0)	(17.2)	(4.9)	(0.1)
Large	3420.7	17746.5	7318.5	2834.5	17588.7	6912.9
	(45.9)	(1.7)	(0.9)	(50.4)	(2.3)	(1.3)
LargeGrace	9026.8	5103.4	3574.7	9480.2	6293.3	3445.6
	(9.5)	(25.2)	(15.0)	(5.9)	(16.4)	(16.7)
Cattle	2367.8	4246.3	5048.1	1803.5	4981.0	4859.1
	(58.5)	(21.6)	(3.3)	(67.6)	(18.0)	(3.7)
rd 3	886.0	−194.4	4434.8	1134.3	−186.8	4478.3
	(66.1)	(92.3)	(0.0)	(58.0)	(92.6)	(0.0)
Large × rd 3	−6914.6	2797.3	−1486.8	−6910.4	2857.0	−1441.4
	(32.9)	(61.3)	(63.7)	(33.0)	(60.6)	(64.8)
LargeGrace × rd 3	−5485.7	−5673.2	3918.9	−5209.5	−5583.3	3940.2
	(30.7)	(26.8)	(13.4)	(34.0)	(28.2)	(13.9)
Cattle × rd 3	−4923.0	3252.6	−834.8	−5162.9	3324.8	−798.1
	(35.7)	(49.2)	(72.3)	(34.0)	(48.4)	(73.7)
rd 4	6243.1	3139.8	7236.5	6545.1	3182.3	7286.8
	(6.5)	(24.4)	(0.0)	(5.2)	(23.5)	(0.0)
Large × rd 4	−6165.0	5440.9	−391.8	−5766.3	5442.9	−273.6
	(46.9)	(47.7)	(90.7)	(49.4)	(47.7)	(93.5)
LargeGrace × rd 4	4370.0	−3053.6	6176.6	4977.0	−2962.8	6293.8
	(69.5)	(65.5)	(4.0)	(65.1)	(66.9)	(4.0)
Cattle × rd 4	−6354.9	5247.1	3412.9	−6033.8	5322.2	3589.8
	(41.2)	(40.9)	(20.9)	(42.6)	(41.0)	(18.6)
FloodInRd1				−2787.4	1853.4	1186.2
				(39.5)	(69.5)	(48.1)
Head literate0				4669.9	−5011.2	442.7
				(33.8)	(27.0)	(83.2)
livestock value$_1$		0.2			0.2	
		(26.3)			(35.1)	
HHsize0				3308.8	598.2	1082.8
				(1.8)	(74.8)	(3.1)
mean of dependent variable	27368	36155	22629	27368	36155	22629
$T = 2$	1	4	35	1	4	35
$T = 3$	17	11	78	17	11	78
$T = 4$	90	121	371	90	121	371
$\bar{R}^2$	0.009	0.061	0.045	0.046	0.059	0.052
N	305	389	1304	305	389	1304

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each value of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Narrow net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline. Adi and None subgroups do not own cattle at the baseline. We used net asset values at the baseline NetAssets0 in place of NumCows0 in ANCOVA estimation.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				21787.5 (0.0)	27200.6 (0.0)	14561.5 (0.0)
Upfront	0.770 (0.42)	0.805 (0.40)	0.783 (0.41)	3420.7 (45.9)	18026.1 (1.9)	7318.5 (0.9)
WithGrace	0.482 (0.50)	0.481 (0.50)	0.528 (0.50)	5606.1 (30.3)	−12754.2 (11.4)	−3743.8 (16.2)
InKind	0.302 (0.46)	0.229 (0.42)	0.266 (0.44)	−6659.0 (20.1)	−1395.7 (73.2)	1473.4 (51.0)
rd 3	0.351 (0.48)	0.344 (0.48)	0.348 (0.48)	886.0 (66.1)	−175.4 (93.1)	4434.8 (0.0)
Upfront × rd 3	0.269 (0.44)	0.275 (0.45)	0.268 (0.44)	−6914.6 (32.9)	2742.9 (61.8)	−1486.8 (63.7)
WithGrace × rd 3	0.170 (0.38)	0.167 (0.37)	0.179 (0.38)	1428.8 (81.3)	−8508.5 (16.8)	5405.7 (9.2)
InKind × rd 3	0.102 (0.30)	0.082 (0.28)	0.090 (0.29)	562.8 (88.4)	8891.2 (10.7)	−4753.6 (5.1)
rd 4	0.325 (0.47)	0.314 (0.46)	0.330 (0.47)	6243.1 (6.5)	3035.0 (25.5)	7236.5 (0.0)
Upfront × rd 4	0.256 (0.44)	0.254 (0.44)	0.262 (0.44)	−6165.0 (46.9)	5512.5 (47.1)	−391.8 (90.7)
WithGrace × rd 4	0.154 (0.36)	0.149 (0.36)	0.173 (0.38)	10535.0 (33.5)	−8525.4 (29.8)	6568.4 (5.9)
InKind × rd 4	0.098 (0.30)	0.067 (0.25)	0.087 (0.28)	−10724.8 (30.0)	7733.0 (26.1)	−2763.7 (33.6)
FloodInRd1	0.613 (0.49)	0.494 (0.50)	0.462 (0.50)			
Head literate0	0.121 (0.33)	0.157 (0.36)	0.099 (0.30)			
livestock value$_1$		27300.771 (14001.64)				
HHsize0	4.364 (1.25)	4.506 (1.39)	4.100 (1.47)			
mean of dependent variable				27368	36155	22629
$T = 2$				1	4	35
$T = 3$				17	11	78
$T = 4$				90	121	371
$\bar{R}^2$				0.009	0.054	0.045
N	305	389	1304	305	389	1304

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	21787.5 (0.0)	22019.8 (0.0)	14561.5 (0.0)	8564.6 (17.2)	19093.2 (4.9)	9686.7 (0.1)
Upfront	3420.7 (45.9)	17746.5 (1.7)	7318.5 (0.9)	2834.5 (50.4)	17588.7 (2.3)	6912.9 (1.3)
WithGrace	5606.1 (30.3)	−12643.1 (10.7)	−3743.8 (16.2)	6645.7 (18.2)	−11295.4 (18.8)	−3467.3 (20.7)
InKind	−6659.0 (20.1)	−857.1 (84.1)	1473.4 (51.0)	−7676.7 (14.8)	−1312.3 (75.1)	1413.5 (52.3)
rd 3	886.0 (66.1)	−194.4 (92.3)	4434.8 (0.0)	1134.3 (58.0)	−186.8 (92.6)	4478.3 (0.0)
Upfront × rd 3	−6914.6 (32.9)	2797.3 (61.3)	−1486.8 (63.7)	−6910.4 (33.0)	2857.0 (60.6)	−1441.4 (64.8)
WithGrace × rd 3	1428.8 (81.3)	−8470.5 (16.8)	5405.7 (9.2)	1700.9 (77.9)	−8440.3 (17.6)	5381.7 (9.7)
InKind × rd 3	562.8 (88.4)	8925.8 (10.5)	−4753.6 (5.1)	46.7 (99.1)	8908.1 (10.8)	−4738.3 (5.6)
rd 4	6243.1 (6.5)	3139.8 (24.4)	7236.5 (0.0)	6545.1 (5.2)	3182.3 (23.5)	7286.8 (0.0)
Upfront × rd 4	−6165.0 (46.9)	5440.9 (47.7)	−391.8 (90.7)	−5766.3 (49.4)	5442.9 (47.7)	−273.6 (93.5)
WithGrace × rd 4	10535.0 (33.5)	−8494.5 (30.0)	6568.4 (5.9)	10743.3 (31.9)	−8405.7 (31.2)	6567.5 (6.2)
InKind × rd 4	−10724.8 (30.0)	8300.7 (24.6)	−2763.7 (33.6)	−11010.8 (28.0)	8285.0 (24.5)	−2704.0 (35.2)
FloodInRd1				−2787.4 (39.5)	1853.4 (69.5)	1186.2 (48.1)
Head literate0				4669.9 (33.8)	−5011.2 (27.0)	442.7 (83.2)
livestock value$_1$		0.2 (26.3)			0.2 (35.1)	
HHsize0				3308.8 (1.8)	598.2 (74.8)	1082.8 (3.1)
mean of dependent variable	27368	36155	22629	27368	36155	22629
T = 2	1	4	35	1	4	35
T = 3	17	11	78	17	11	78
T = 4	90	121	371	90	121	371
$\bar{R}^2$	0.009	0.061	0.045	0.046	0.059	0.052
N	305	389	1304	305	389	1304

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Narrow net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline. Adi and None subgroups do not own cattle at the baseline. We used net asset values at the baseline NetAssets0 in place of NumCows0 in ANCOVA estimation.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

III.5.12 Cattle holding, experienced vs. inexperienced

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            AttritIn
Arm             2    3    4    9  Sum
  traditional   7    4   20  144  175
  large         5    2    1  191  199
  large grace  12    3    3  170  188
  cattle        5    5   13  176  199
  Sum          29   14   37  681  761

     NumCows
tee      0    1    2    3    4    5    6    7    8    9  <NA>   Sum
  2     15  308  153   40   11    1    2    0    1    1   196   728
  3      5  337  175   40   15    1    2    2    1    0   110   688
  4      4  218  201   54   11    4    2    0    1    1    86   582
  Sum   24  863  529  134   37    6    6    2    3    2   392  1998
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        NumCows0
Cattle   0   1   2   3   4   5 Sum
  Adi  108   0   0   0   0   0 108
  None 484   0   0   0   0   0 484
  Own    0  98  30   5   2   1 136
  Sum  592  98  30   5   2   1 728
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[1]
 ~  + dummyLarge + dummyLargeGrace + dummyCattle

 + NumCows0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA

dummyAdiCattle0.Large + dummyAdiCattle0.LargeGrace + dummyAdiCattle0.Cattle + NA



[2]
 ~  + dummyUltraPoor + dummyLargeSize + dummyWithGrace
 + dummyWithGrace + dummyInKind + UDdummyUltraPoor
 + dummyLargeSize.UltraPoor + UDdummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor
 + UDdummyWithGrace.UltraPoor + dummyInKind.UltraPoor + UDdummyInKind.UltraPoor
 +

 + NumCows0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA

dummyAdiCattle0.LargeSize + dummyAdiCattle0.WithGrace + dummyAdiCattle0.InKind + NA



[3]
 ~  + dummyLargeSize + dummyWithGrace + dummyInKind

 + NumCows0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA

dummyAdiCattle0.LargeSize + dummyAdiCattle0.WithGrace + dummyAdiCattle0.InKind + NA



[4]
 ~  + Time.3 + Time.4 + dummyLarge
 + dummyLarge + dummyLargeGrace + dummyCattle
 + dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3
 + dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4
 +

 + NumCows0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA

dummyAdiCattle0.Large + dummyAdiCattle0.Time3 + dummyAdiCattle0.Large.Time3 + dummyAdiCatt
 + dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 + dummyAdiCattle0.LargeGrace
 + dummyAdiCattle0.LargeGrace.Time3 + dummyAdiCattle0.LargeGrace.Time4 + dummyAdiCattle0.C
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 + dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4



[5]
 ~   + Time.3 + Time.4 + dummyLargeSize
 + dummyLargeSize + dummyWithGrace + dummyInKind
 + dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3
 + dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4
 +

 + NumCows0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA

dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.LargeSize + dummyAdiCattle
 + dummyAdiCattle0.LargeSize.Time3 + dummyAdiCattle0.LargeSize.Time4 + dummyAdiCattle0.Wi
 + dummyAdiCattle0.WithGrace.Time3 + dummyAdiCattle0.WithGrace.Time4 + dummyAdiCattle0.InK
 + dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4



[6]
 ~   + Time.3 + Time.4 + dummyLarge
 + dummyLarge + dummyLargeGrace + dummyCattle
 + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3
 + dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4
 + dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4
 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor
 + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Tim
 + dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.T
 +

 + NumCows0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA

dummyAdiCattle0.Large + dummyAdiCattle0.Time3 + dummyAdiCattle0.Large.Time3 + dummyAdiCatt
 + dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 + dummyAdiCattle0.LargeGrace
 + dummyAdiCattle0.LargeGrace.Time3 + dummyAdiCattle0.LargeGrace.Time4 + dummyAdiCattle0.C
 + dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4



[7]
 ~   + Time.3 + Time.4 + dummyUltraPoor
 + dummyUltraPoor + dummyLargeSize + dummyWithGrace
 + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3
 + dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4
 + dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4
 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor
 + dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraP
 + dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Ti
 +

 + NumCows0
 + dummyAdiCattle0
FloodInRd1 + HHsize0 + HeadLiteracy0 + NA

dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.LargeSize + dummyAdiCattle
 + dummyAdiCattle0.LargeSize.Time3 + dummyAdiCattle0.LargeSize.Time4 + dummyAdiCattle0.Wi
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 + dummyAdiCattle0.WithGrace.Time3 + dummyAdiCattle0.WithGrace.Time4 + dummyAdiCattle0.Ink
 + dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4
```

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[1] excl
[[1]]
NumCows ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
NumCows ~ dummyLarge + dummyLargeGrace + dummyCattle + NumCows0

[[3]]
NumCows ~ dummyLarge + dummyLargeGrace + dummyCattle + NumCows0 +
    dummyAdiCattle0

[[4]]
NumCows ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NumCows0 + dummyAdiCattle0

[[5]]
NumCows ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NumCows0 + dummyAdiCattle0.Large +
    dummyAdiCattle0.LargeGrace + dummyAdiCattle0.Cattle + dummyAdiCattle0

[[6]]
NumCows ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NumCows0 + dummyAdiCattle0.Large +
    dummyAdiCattle0.LargeGrace + dummyAdiCattle0.Cattle + dummyAdiCattle0

[1] exclP
[[1]]
NumCows ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
NumCows ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[3]]
NumCows ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyAdiCattle0

[[4]]
NumCows ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyAdiCattle0

[[5]]
NumCows ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyAdiCattle0.LargeSize +
    dummyAdiCattle0.WithGrace + dummyAdiCattle0.InKind + dummyAdiCattle0

[[6]]
NumCows ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyAdiCattle0.LargeSize +
    dummyAdiCattle0.WithGrace + dummyAdiCattle0.InKind + dummyAdiCattle0
```

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[1] excla
[[1]]
NumCows ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NumCows ~ dummyLargeSize + dummyWithGrace + dummyInKind + NumCows0

[[3]]
NumCows ~ dummyLargeSize + dummyWithGrace + dummyInKind + NumCows0 +
    dummyAdiCattle0

[[4]]
NumCows ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NumCows0 + dummyAdiCattle0

[[5]]
NumCows ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NumCows0 + dummyAdiCattle0.LargeSize +
    dummyAdiCattle0.WithGrace + dummyAdiCattle0.InKind + dummyAdiCattle0

[[6]]
NumCows ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NumCows0 + dummyAdiCattle0.LargeSize +
    dummyAdiCattle0.WithGrace + dummyAdiCattle0.InKind + dummyAdiCattle0

[1] exclT
[[1]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[2]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    NumCows0

[[3]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    NumCows0 + dummyAdiCattle0

[[4]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    dummyAdiCattle0

[[5]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    dummyAdiCattle0.Large + dummyAdiCattle0.Time3 + dummyAdiCattle0.Large.Time3 +
    dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 + dummyAdiCattle0.LargeGrace +
    dummyAdiCattle0.LargeGrace.Time3 + dummyAdiCattle0.LargeGrace.Time4 +
    dummyAdiCattle0.Cattle + dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4 +
    dummyAdiCattle0
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```
[[6]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    dummyAdiCattle0.Large + dummyAdiCattle0.Time3 + dummyAdiCattle0.Large.Time3 +
    dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 + dummyAdiCattle0.LargeGrace +
    dummyAdiCattle0.LargeGrace.Time3 + dummyAdiCattle0.LargeGrace.Time4 +
    dummyAdiCattle0.Cattle + dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4 +
    dummyAdiCattle0

[1] exclTa
[[1]]
NumCows ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NumCows ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NumCows0

[[3]]
NumCows ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NumCows0 + dummyAdiCattle0

[[4]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    dummyAdiCattle0

[[5]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.LargeSize +
    dummyAdiCattle0.LargeSize.Time3 + dummyAdiCattle0.LargeSize.Time4 +
    dummyAdiCattle0.WithGrace + dummyAdiCattle0.WithGrace.Time3 +
    dummyAdiCattle0.WithGrace.Time4 + dummyAdiCattle0.InKind +
    dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4 +
    dummyAdiCattle0

[[6]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.LargeSize +
    dummyAdiCattle0.LargeSize.Time3 + dummyAdiCattle0.LargeSize.Time4 +
    dummyAdiCattle0.WithGrace + dummyAdiCattle0.WithGrace.Time3 +
    dummyAdiCattle0.WithGrace.Time4 + dummyAdiCattle0.InKind +
    dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4 +
    dummyAdiCattle0
```

```
[1] exclTP
[[1]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[2]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    NumCows0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[3]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    NumCows0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    dummyAdiCattle0

[[4]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + NumCows0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4 + dummyAdiCattle0

[[5]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + NumCows0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4 + dummyAdiCattle0.Large + dummyAdiCattle0.Time3 +
    dummyAdiCattle0.Large.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 +
    dummyAdiCattle0.LargeGrace + dummyAdiCattle0.LargeGrace.Time3 +
    dummyAdiCattle0.LargeGrace.Time4 + dummyAdiCattle0.Cattle +
    dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4 +
    dummyAdiCattle0

[[6]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
```

```
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + NumCows0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4 + dummyAdiCattle0.Large + dummyAdiCattle0.Time3 +
    dummyAdiCattle0.Large.Time3 + dummyAdiCattle0.Time4 + dummyAdiCattle0.Large.Time4 +
    dummyAdiCattle0.LargeGrace + dummyAdiCattle0.LargeGrace.Time3 +
    dummyAdiCattle0.LargeGrace.Time4 + dummyAdiCattle0.Cattle +
    dummyAdiCattle0.Cattle.Time3 + dummyAdiCattle0.Cattle.Time4 +
    dummyAdiCattle0

[1] exclTPa
[[1]]
NumCows ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[2]]
NumCows ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[3]]
NumCows ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + dummyAdiCattle0

[[4]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    HHsize0 + HeadLiteracy0 + NumCows0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + dummyAdiCattle0

[[5]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
```

```
        dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
        dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
        HHsize0 + HeadLiteracy0 + NumCows0 + dummyLargeSize.UltraPoor +
        dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
        dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
        dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
        dummyInKind.UltraPoor.Time4 + dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 +
        dummyAdiCattle0.LargeSize + dummyAdiCattle0.LargeSize.Time3 +
        dummyAdiCattle0.LargeSize.Time4 + dummyAdiCattle0.WithGrace +
        dummyAdiCattle0.WithGrace.Time3 + dummyAdiCattle0.WithGrace.Time4 +
        dummyAdiCattle0.InKind + dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4 +
        dummyAdiCattle0

[[6]]
NumCows ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
        dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
        dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
        dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
        HHsize0 + HeadLiteracy0 + NumCows0 + dummyLargeSize.UltraPoor +
        dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
        dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
        dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
        dummyInKind.UltraPoor.Time4 + dummyAdiCattle0.Time3 + dummyAdiCattle0.Time4 +
        dummyAdiCattle0.LargeSize + dummyAdiCattle0.LargeSize.Time3 +
        dummyAdiCattle0.LargeSize.Time4 + dummyAdiCattle0.WithGrace +
        dummyAdiCattle0.WithGrace.Time3 + dummyAdiCattle0.WithGrace.Time4 +
        dummyAdiCattle0.InKind + dummyAdiCattle0.InKind.Time3 + dummyAdiCattle0.InKind.Time4 +
        dummyAdiCattle0
```

```
[1] excl
[[1]]
NumCows ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
NumCows ~ dummyLarge + dummyLargeGrace + dummyCattle

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0

[1] exclP
[[1]]
NumCows ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
NumCows ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[4]]
```

```
NumCows ~ NetValue0 + FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[1] excla
[[1]]
NumCows ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NumCows ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0

[1] exclT
[[1]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[2]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0

[1] exclTa
[[1]]
NumCows ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NumCows ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0
```

```
[[4]]
NumCows ~ NetValue0 + FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0

[1] excl
[[1]]
NumCows ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
NumCows ~ dummyLarge + dummyLargeGrace + dummyCattle + NumCows0

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + NumCows0

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0 + NumCows0

[1] exclP
[[1]]
NumCows ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
NumCows ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[1] excla
[[1]]
NumCows ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NumCows ~ dummyLargeSize + dummyWithGrace + dummyInKind + NumCows0

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0

[1] exclT
[[1]]
```

```
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[2]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    NumCows0

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0

[1] exclTa
[[1]]
NumCows ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NumCows ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NumCows0

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0

[1] excl
[[1]]
NumCows ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
NumCows ~ dummyLarge + dummyLargeGrace + dummyCattle

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + dummyLarge + dummyLargeGrace +
    dummyCattle + HHsize0 + HeadLiteracy0
```

```
[1] exclP
[[1]]
NumCows ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
NumCows ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[1] excla
[[1]]
NumCows ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NumCows ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0

[1] exclT
[[1]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[2]]
NumCows ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + Time.3 + Time.4 + dummyLarge +
    dummyLargeGrace + dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0

[1] exclTa
```

```
[[1]]
NumCows ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NumCows ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[3]]
NumCows ~ NetValue0 + FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0

[[4]]
NumCows ~ NetValue0 + FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0
```

TABLE 114: ANCOVA ESTIMATION OF CATTLE HOLDING, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		1.49 (0.0)	1.39 (0.0)	1.36 (0.0)	1.15 (0.0)	1.14 (0.0)
Large	0.273 (0.45)	0.39 (0.9)	0.37 (0.6)	0.37 (0.6)	0.36 (1.0)	0.37 (0.9)
LargeGrace	0.248 (0.43)	0.07 (53.9)	0.08 (47.6)	0.09 (42.9)	0.09 (40.1)	0.10 (34.9)
Cattle	0.264 (0.44)	0.00 (98.8)	0.02 (77.9)	0.02 (76.9)	0.02 (79.0)	0.03 (73.0)
AdiCattle0	0.153 (0.36)			0.15 (5.7)	0.14 (9.5)	0.16 (7.5)
AdiCattle0 × Large	0.044 (0.21)					−0.49 (6.6)
AdiCattle0 × LargeGrace	0.028 (0.16)					0.15 (60.5)
AdiCattle0 × Cattle	0.046 (0.21)					−0.18 (44.3)
FloodInRd1	0.491 (0.50)				0.03 (68.1)	0.03 (74.2)
Head literate0	0.114 (0.32)				0.01 (92.7)	0.02 (84.3)
NumCattle0	0.266 (0.62)		0.30 (0.3)	0.32 (0.1)	0.31 (0.4)	0.30 (0.3)
HHsize0	4.219 (1.43)				0.05 (5.2)	0.05 (5.3)
mean of dependent variable		2	2	2	2	2
$T = 2$		85	85	85	85	85
$T = 3$		168	168	168	168	168
$T = 4$		395	395	395	395	395
$\bar{R}^2$		0.03	0.074	0.076	0.08	0.087
N	1998	1606	1606	1606	1606	1606

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 115: ANCOVA ESTIMATION OF CATTLE HOLDING BY ATTRIBUTES, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		1.49 (0.0)	1.39 (0.0)	1.36 (0.0)	1.15 (0.0)	1.14 (0.0)
Upfront	0.785 (0.41)	0.39 (0.9)	0.37 (0.6)	0.37 (0.6)	0.36 (1.0)	0.37 (0.9)
WithGrace	0.512 (0.50)	−0.32 (6.2)	−0.29 (5.1)	−0.28 (5.9)	−0.26 (9.1)	−0.27 (8.6)
InKind	0.264 (0.44)	−0.07 (50.7)	−0.06 (57.5)	−0.07 (52.5)	−0.07 (47.7)	−0.08 (45.3)
AdiCattle0	0.153 (0.36)			0.15 (5.7)	0.14 (9.5)	0.16 (7.5)
AdiCattle0 × Upfront	0.118 (0.32)					−0.49 (6.6)
AdiCattle0 × WithGrace	0.074 (0.26)					0.64 (2.0)
AdiCattle0 × InKind	0.046 (0.21)					−0.33 (18.3)
FloodInRd1	0.491 (0.50)				0.03 (68.1)	0.03 (74.2)
Head literate0	0.114 (0.32)				0.01 (92.7)	0.02 (84.3)
NumCattle0	0.266 (0.62)		0.30 (0.3)	0.32 (0.1)	0.31 (0.4)	0.30 (0.3)
HHsize0	4.219 (1.43)				0.05 (5.2)	0.05 (5.3)
mean of dependent variable $T = 2$		2 85	2 85	2 85	2 85	2 85
$T = 3$ $T = 4$		168 395	168 395	168 395	168 395	168 395
$\bar{R}^2$ N	1998	0.03 1606	0.074 1606	0.076 1606	0.08 1606	0.087 1606

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 116: ANCOVA ESTIMATION OF CATTLE HOLDING BY PERIOD, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		1.47 (0.0)	1.36 (0.0)	1.33 (0.0)	1.11 (0.0)	1.10 (0.0)
Large	0.273 (0.45)	0.39 (0.6)	0.37 (0.4)	0.37 (0.4)	0.35 (0.8)	0.37 (0.7)
LargeGrace	0.248 (0.43)	0.01 (93.4)	0.02 (87.4)	0.03 (80.9)	0.03 (78.5)	0.04 (71.0)
Cattle	0.264 (0.44)	−0.05 (44.1)	−0.03 (72.0)	−0.03 (73.2)	−0.03 (69.5)	−0.03 (74.1)
AdiCattle0	0.153 (0.36)			0.16 (5.1)	0.14 (8.8)	0.16 (5.4)
AdiCattle0 × Large	0.044 (0.21)					−0.47 (6.9)
AdiCattle0 × LargeGrace	0.028 (0.16)					0.21 (44.4)
AdiCattle0 × Cattle	0.046 (0.21)					−0.13 (57.0)
rd 3	0.348 (0.48)	−0.02 (71.4)	0.00 (97.3)	0.00 (95.0)	0.01 (91.9)	0.00 (93.9)
Large × rd 3	0.094 (0.29)	−0.05 (74.9)	−0.05 (75.5)	−0.05 (75.1)	−0.05 (77.1)	−0.04 (79.1)
LargeGrace × rd 3	0.085 (0.28)	0.19 (28.5)	0.20 (25.5)	0.20 (26.6)	0.20 (26.0)	0.20 (25.9)
Cattle × rd 3	0.091 (0.29)	0.17 (18.0)	0.16 (23.6)	0.16 (24.0)	0.16 (25.1)	0.16 (23.7)
AdiCattle0 × rd 3	0.054 (0.23)					−0.11 (32.2)
AdiCattle0 × Large × rd 3	0.015 (0.12)					−0.20 (58.2)
AdiCattle0 × LargeGrace × rd 3	0.011 (0.10)					−0.39 (21.1)
AdiCattle0 × Cattle × rd 3	0.016 (0.12)					−0.13 (68.4)
rd 4	0.326 (0.47)	0.16 (1.0)	0.18 (0.5)	0.19 (0.4)	0.19 (0.4)	0.19 (0.4)
Large × rd 4	0.094 (0.29)	0.04 (80.3)	0.04 (81.9)	0.04 (81.8)	0.05 (78.7)	0.04 (80.4)
LargeGrace × rd 4	0.081 (0.27)	0.41 (3.0)	0.39 (3.2)	0.39 (3.3)	0.40 (3.1)	0.40 (2.5)
Cattle × rd 4	0.085 (0.28)	0.34 (0.8)	0.34 (1.1)	0.34 (1.1)	0.35 (1.1)	0.36 (0.9)
AdiCattle0 × rd 4	0.050 (0.22)					0.10 (57.0)
AdiCattle0 × Large × rd 4	0.016 (0.12)					−0.02 (94.8)
AdiCattle0 × LargeGrace × rd 4	0.009 (0.09)					−0.10 (87.0)
AdiCattle0 × Cattle × rd 4	0.015 (0.12)					−0.28 (42.8)
FloodInRd1	0.491 (0.50)				0.04 (65.7)	0.03 (72.6)
Head literate0	0.114 (0.32)				0.01 (89.0)	0.02 (80.3)
NumCattle0	0.266 (0.62)		0.31 (0.3)	0.32 (0.1)	0.31 (0.4)	0.30 (0.3)
HHsize0	4.219 (1.43)				0.05 (4.6)	0.05 (4.7)
mean of dependent variable T = 2		2 85	2 85	2 85	2 85	2 85
T = 3		168	168	168	168	168
T = 4		395	395	395	395	395
$\bar{R}^2$		0.039	0.083	0.086	0.091	0.095
N	1998	1606	1606	1606	1606	1606

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 117: ANCOVA estimation of cattle holding by period, attributes, cattle rearing experiences

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		1.47 (0.0)	1.36 (0.0)	1.33 (0.0)	1.11 (0.0)	1.10 (0.0)
Upfront	0.785 (0.41)	0.39 (0.6)	0.37 (0.4)	0.37 (0.4)	0.35 (0.8)	0.37 (0.7)
WithGrace	0.512 (0.50)	−0.38 (2.6)	−0.35 (1.9)	−0.34 (2.3)	−0.32 (4.0)	−0.33 (3.6)
InKind	0.264 (0.44)	−0.06 (59.8)	−0.05 (68.3)	−0.05 (62.7)	−0.06 (58.3)	−0.07 (53.3)
OwnCattle0	0.195 (0.40)					
AdiCattle0	0.153 (0.36)			0.16 (5.1)	0.14 (8.8)	0.16 (5.4)
AdiCattle0 × Upfront	0.118 (0.32)					−0.47 (6.9)
AdiCattle0 × WithGrace	0.074 (0.26)					0.68 (0.9)
AdiCattle0 × InKind	0.046 (0.21)					−0.34 (16.0)

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covariates	mean/std	(1)	(2)	(3)	(4)	(5)
rd 3	0.348 (0.48)	−0.02 (71.4)	0.00 (97.3)	0.00 (95.0)	0.01 (91.9)	0.00 (93.9)
Upfront × rd 3	0.269 (0.44)	−0.05 (74.9)	−0.05 (75.5)	−0.05 (75.1)	−0.05 (77.1)	−0.04 (79.1)
WithGrace × rd 3	0.176 (0.38)	0.24 (17.1)	0.25 (14.2)	0.25 (14.6)	0.25 (15.0)	0.24 (15.6)
InKind × rd 3	0.091 (0.29)	−0.02 (90.7)	−0.05 (75.1)	−0.04 (76.7)	−0.05 (74.0)	−0.04 (78.5)
AdiCattle0 × rd 3	0.054 (0.23)					−0.11 (32.2)
AdiCattle0 × Upfront × rd 3	0.041 (0.20)					−0.20 (58.2)
AdiCattle0 × WithGrace × rd 3	0.026 (0.16)					−0.19 (53.7)
AdiCattle0 × InKind × rd 3	0.016 (0.12)					0.26 (32.2)
rd 4	0.326 (0.47)	0.16 (1.0)	0.18 (0.5)	0.19 (0.4)	0.19 (0.4)	0.19 (0.4)
Upfront × rd 4	0.260 (0.44)	0.04 (80.3)	0.04 (81.9)	0.04 (81.8)	0.05 (78.7)	0.04 (80.4)
WithGrace × rd 4	0.166 (0.37)	0.36 (7.8)	0.35 (8.3)	0.35 (8.6)	0.35 (8.7)	0.36 (7.0)
InKind × rd 4	0.085 (0.28)	−0.06 (73.2)	−0.05 (77.4)	−0.05 (79.4)	−0.05 (77.9)	−0.05 (78.7)
AdiCattle0 × rd 4	0.050 (0.22)					0.10 (57.0)
AdiCattle0 × Upfront × rd 4	0.039 (0.19)					−0.02 (94.8)
AdiCattle0 × WithGrace × rd 4	0.024 (0.15)					−0.07 (90.2)
AdiCattle0 × InKind × rd 4	0.015 (0.12)					−0.19 (74.0)
FloodInRd1	0.491 (0.50)				0.04 (65.7)	0.03 (72.6)
Head literate0	0.114 (0.32)				0.01 (89.0)	0.02 (80.3)
NumCattle0	0.266 (0.62)		0.31 (0.3)	0.32 (0.1)	0.31 (0.4)	0.30 (0.3)
HHsize0	4.219 (1.43)				0.05 (4.6)	0.05 (4.7)
mean of dependent variable $T = 2$		2 85	2 85	2 85	2 85	2 85
$T = 3$		168	168	168	168	168
$T = 4$		395	395	395	395	395
$\bar{R}^2$		0.039	0.083	0.086	0.091	0.095
N	1998	1606	1606	1606	1606	1606

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 118: ANCOVA ESTIMATION OF CATTLE HOLDING BY ARM, POVERTY STATUS, AND PERIOD, CATTLE REARING EXPERIENCES

covariates	mean/std	(1)	(2)	(3)	(4)
(Intercept)		1.36 (0.0)	1.37 (0.0)	1.21 (0.0)	1.27 (0.0)
Large	0.285 (0.45)	0.48 (1.0)	0.47 (0.7)	0.47 (1.0)	0.43 (0.5)
LargeGrace	0.244 (0.43)	0.30 (4.4)	0.29 (4.4)	0.29 (4.9)	0.30 (5.3)
Cattle	0.275 (0.45)	0.19 (4.3)	0.20 (2.9)	0.20 (3.4)	0.20 (3.6)
OwnCattle0	0.208 (0.41)	0.46 (1.7)	0.03 (94.0)	0.03 (93.2)	
AdiCattle0	0.155 (0.36)	0.31 (2.7)	0.31 (2.8)	0.30 (3.5)	
UltraPoor	0.649 (0.48)	−0.04 (57.8)	−0.05 (49.5)	−0.05 (51.1)	−0.03 (69.9)
OwnCattle0 × Large	0.070 (0.26)				0.58 (26.0)
OwnCattle0 × LargeGrace	0.055 (0.23)				0.01 (97.1)
OwnCattle0 × Cattle	0.043 (0.20)				0.16 (50.8)
AdiCattle0 × Large	0.046 (0.21)				−0.14 (66.3)
AdiCattle0 × LargeGrace	0.022 (0.15)				0.45 (47.0)
AdiCattle0 × Cattle	0.052 (0.22)				−0.24 (41.8)
Large × UltraPoor	0.184 (0.39)	0.14 (53.4)	0.11 (60.2)	0.11 (58.4)	0.09 (67.0)
LargeGrace × UltraPoor	0.168 (0.37)	0.50 (2.6)	0.48 (3.6)	0.50 (3.0)	0.46 (5.3)
Cattle × UltraPoor	0.194 (0.40)	0.49 (2.5)	0.47 (3.1)	0.48 (3.1)	0.42 (7.0)
OwnCattle0 × rd 3	0.000 (0.00)				−0.09 (94.9)
AdiCattle0 × rd 3	0.000 (0.00)				−1.42 (4.1)
FloodInRd1	0.483 (0.50)			−0.02 (86.9)	−0.02 (86.7)
Head literate0	0.112 (0.32)			0.04 (77.9)	0.06 (62.5)
NumCattle0	0.282 (0.64)		0.32 (30.5)	0.31 (33.6)	0.30 (32.4)
HHsize0	4.256 (1.43)			0.04 (18.0)	0.04 (25.3)
mean of dependent variable		2	2	2	2
R^2		0.064	0.075	0.073	0.084
N	582	496	496	496	496

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). UltraPoor is an indicator variable if the household is classified as the ultra poor. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		1.52 (0.0)	1.40 (0.0)	1.36 (0.0)	1.12 (0.0)	1.11 (0.0)
Upfront	0.785 (0.41)	0.41 (0.2)	0.40 (0.1)	0.40 (0.1)	0.38 (0.2)	0.40 (0.2)
WithGrace	0.512 (0.50)	−0.39 (1.8)	−0.35 (1.0)	−0.34 (1.2)	−0.32 (2.6)	−0.33 (2.5)
InKind	0.264 (0.44)	−0.06 (57.3)	−0.05 (66.6)	−0.05 (60.3)	−0.06 (54.9)	−0.07 (50.6)
AdiCattle0	0.153 (0.36)			0.18 (2.0)	0.16 (4.0)	0.18 (2.1)
UltraPoor	0.630 (0.48)	−0.10 (16.1)	−0.11 (13.3)	−0.11 (12.2)	−0.11 (13.3)	−0.10 (16.5)
AdiCattle0 × Upfront	0.118 (0.32)					−0.37 (10.0)
AdiCattle0 × WithGrace	0.074 (0.26)					0.60 (1.2)
AdiCattle0 × InKind	0.046 (0.21)					−0.34 (15.9)
Upfront × UltraPoor	0.524 (0.50)	−0.26 (17.0)	−0.18 (32.7)	−0.20 (28.6)	−0.18 (33.1)	−0.16 (37.2)
WithGrace × UltraPoor	0.352 (0.48)	0.67 (0.2)	0.68 (0.1)	0.70 (0.1)	0.72 (0.1)	0.70 (0.1)
InKind × UltraPoor	0.181 (0.39)	−0.23 (21.0)	−0.21 (27.2)	−0.22 (26.2)	−0.21 (27.2)	−0.22 (24.5)
rd 3	0.348 (0.48)	−0.03 (59.3)	−0.00 (93.5)	−0.00 (95.7)	0.00 (100.0)	−0.00 (99.1)
UltraPoor × rd 3	0.217 (0.41)	−0.05 (62.8)	−0.04 (73.1)	−0.03 (77.3)	−0.03 (79.6)	−0.02 (83.6)
Upfront × rd 3	0.269 (0.44)	−0.03 (84.8)	−0.03 (82.8)	−0.03 (82.0)	−0.03 (83.5)	−0.02 (87.9)
WithGrace × rd 3	0.176 (0.38)	0.27 (9.2)	0.28 (7.7)	0.27 (8.1)	0.27 (8.3)	0.26 (8.9)
InKind × rd 3	0.091 (0.29)	−0.04 (75.9)	−0.07 (62.4)	−0.06 (64.4)	−0.07 (62.0)	−0.06 (65.9)
Upfront × UltraPoor × rd 3	0.179 (0.38)	0.70 (0.6)	0.65 (1.1)	0.65 (1.1)	0.65 (1.0)	0.67 (1.0)
WithGrace × UltraPoor × rd 3	0.121 (0.33)	−1.04 (0.4)	−0.97 (0.5)	−0.96 (0.5)	−0.98 (0.4)	−0.99 (0.4)
InKind × UltraPoor × rd 3	0.061 (0.24)	0.84 (1.1)	0.78 (1.6)	0.78 (1.6)	0.77 (1.7)	0.77 (1.4)
AdiCattle0 × rd 3	0.054 (0.23)					−0.13 (26.1)
AdiCattle0 × Upfront × rd 3	0.041 (0.20)					−0.28 (46.8)
AdiCattle0 × WithGrace × rd 3	0.026 (0.16)					−0.12 (73.8)
AdiCattle0 × InKind × rd 3	0.016 (0.12)					0.27 (30.7)
rd 4	0.326 (0.47)	0.15 (0.9)	0.18 (0.4)	0.18 (0.3)	0.18 (0.3)	0.18 (0.3)
UltraPoor × rd 4	0.211 (0.41)	0.09 (46.7)	0.08 (51.9)	0.09 (46.5)	0.09 (46.0)	0.10 (41.4)
Upfront × rd 4	0.260 (0.44)	0.05 (74.1)	0.04 (78.9)	0.04 (79.3)	0.05 (76.7)	0.04 (77.7)
WithGrace × rd 4	0.166 (0.37)	0.36 (4.8)	0.35 (5.4)	0.35 (5.7)	0.35 (5.7)	0.35 (4.8)
InKind × rd 4	0.085 (0.28)	−0.07 (68.1)	−0.05 (75.0)	−0.05 (77.7)	−0.05 (76.4)	−0.05 (78.3)
Upfront × UltraPoor × rd 4	0.176 (0.38)	0.77 (2.4)	0.74 (3.0)	0.73 (3.3)	0.74 (2.9)	0.71 (3.9)
WithGrace × UltraPoor × rd 4	0.116 (0.32)	−0.93 (2.1)	−0.89 (2.4)	−0.87 (2.5)	−0.89 (2.1)	−0.84 (3.0)
InKind × UltraPoor × rd 4	0.060 (0.24)	0.61 (7.7)	0.52 (14.4)	0.51 (14.4)	0.50 (15.3)	0.46 (18.4)
AdiCattle0 × rd 4	0.050 (0.22)					0.07 (68.6)
AdiCattle0 × Upfront × rd 4	0.039 (0.19)					−0.08 (85.1)
AdiCattle0 × WithGrace × rd 4	0.024 (0.15)					0.07 (91.2)
AdiCattle0 × InKind × rd 4	0.015 (0.12)					−0.22 (69.7)
FloodInRd1	0.491 (0.50)				0.04 (62.4)	0.03 (67.7)
Head literate0	0.114 (0.32)				0.01 (89.0)	0.02 (79.1)
NumCattle0	0.266 (0.62)		0.31 (0.3)	0.33 (0.1)	0.32 (0.4)	0.31 (0.3)
HHsize0	4.219 (1.43)				0.05 (2.2)	0.05 (2.4)
mean of dependent variable $T = 2$		2 85	2 85	2 85	2 85	2 85
$T = 3$		168	168	168	168	168
$T = 4$		395	395	395	395	395
$\bar{R}^2$		0.054	0.101	0.105	0.11	0.113
N	1998	1606	1606	1606	1606	1606

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Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables.

TABLE 120: ANCOVA ESTIMATION OF LIVESTOCK HOLDING, CATTLE REARING EXPERIENCES

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				1.65 (0.0)	1.54 (0.0)	1.42 (0.0)
Large	0.333 (0.47)	0.342 (0.48)	0.268 (0.44)	−0.05 (84.7)	0.93 (1.6)	0.26 (1.5)
LargeGrace	0.127 (0.33)	0.268 (0.44)	0.254 (0.44)	0.22 (47.7)	0.38 (3.2)	−0.02 (84.3)
Cattle	0.321 (0.47)	0.200 (0.40)	0.278 (0.45)	−0.12 (60.6)	0.18 (24.0)	−0.01 (90.1)
FloodInRd1	0.533 (0.50)	0.447 (0.50)	0.393 (0.49)			
Head literate0	0.133 (0.34)	0.166 (0.37)	0.129 (0.34)			
NumCattle0		1.420 (0.71)				
net asset value$_1$	959.667 (8196.80)	30907.220 (15484.74)	2795.554 (3689.93)			
HHsize0	4.655 (1.17)	4.563 (1.42)	4.346 (1.38)			
mean of dependent variable				2	2	1
$T = 2$				13	11	61
$T = 3$				24	16	128
$T = 4$				64	104	227
N	165	295	791	253	355	998

TABLE 120: ANCOVA ESTIMATION OF LIVESTOCK HOLDING, CATTLE REARING EXPERIENCES (CONTINUED)

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	1.65 (0.0)	1.26 (0.0)	1.42 (0.0)	1.02 (0.6)	1.37 (1.5)	1.24 (0.0)
Large	−0.05 (84.7)	0.91 (1.4)	0.26 (1.5)	−0.12 (65.0)	0.93 (9.5)	0.12 (47.6)
LargeGrace	0.22 (47.7)	0.37 (4.3)	−0.02 (84.3)	0.74 (14.5)	0.19 (48.0)	0.02 (91.8)
Cattle	−0.12 (60.6)	0.19 (24.1)	−0.01 (90.1)	−0.08 (80.4)	0.14 (55.8)	−0.08 (61.7)
FloodInRd1				−0.32 (13.8)	0.06 (82.2)	0.20 (4.5)
Head literate0				0.39 (20.9)	−0.18 (52.1)	−0.01 (92.2)
NumCattle0		0.21 (16.3)			−0.74 (7.6)	
net asset value$_1$				0.00 (2.4)	0.00 (1.0)	−0.00 (93.8)
HHsize0				0.16 (4.1)	0.01 (96.3)	0.04 (26.1)
mean of dependent variable	2	2	1	2	2	1
$T = 2$	13	11	61	8	6	31
$T = 3$	24	16	128	12	12	83
$T = 4$	64	104	227	35	79	134
$\bar{R}^2$	0.006	0.08	0.024	0.074	0.086	0.024
N	253	355	998	137	267	599

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Narrow net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline. Adi and None subgroups do not own cattle at the baseline. We used net asset values at the baseline NetAssets0 in place of NumCows0 in ANCOVA estimation.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

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TABLE 121: ANCOVA ESTIMATION OF LIVESTOCK HOLDING BY ATTRIBUTES, CATTLE REARING EXPERIENCES

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				1.65 (0.0)	1.54 (0.0)	1.42 (0.0)
Upfront	0.782 (0.41)	0.810 (0.39)	0.800 (0.40)	−0.05 (84.7)	0.93 (1.6)	0.26 (1.5)
WithGrace	0.448 (0.50)	0.468 (0.50)	0.532 (0.50)	0.27 (34.0)	−0.55 (16.2)	−0.28 (1.3)
InKind	0.321 (0.47)	0.200 (0.40)	0.278 (0.45)	−0.34 (21.0)	−0.20 (25.7)	0.01 (91.2)
FloodInRd1	0.533 (0.50)	0.447 (0.50)	0.393 (0.49)			
Head literate0	0.133 (0.34)	0.166 (0.37)	0.129 (0.34)			
NumCattle0		1.420 (0.71)				
net asset value₁	959.667 (8196.80)	30907.220 (15484.74)	2795.554 (3689.93)			
HHsize0	4.655 (1.17)	4.563 (1.42)	4.346 (1.38)			
mean of dependent variable				2	2	1
T = 2				13	11	61
T = 3				24	16	128
T = 4				64	104	227
$\bar{R}^2$				0.006	0.071	0.024
N	165	295	791	253	355	998

TABLE 121: ANCOVA ESTIMATION OF LIVESTOCK HOLDING BY ATTRIBUTES, CATTLE REARING EXPERIENCES (CONTINUED)

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	1.65 (0.0)	1.26 (0.0)	1.42 (0.0)	1.02 (0.6)	1.37 (1.5)	1.24 (0.0)
Upfront	−0.05 (84.7)	0.91 (1.4)	0.26 (1.5)	−0.12 (65.0)	0.93 (9.5)	0.12 (47.6)
WithGrace	0.27 (34.0)	−0.54 (15.3)	−0.28 (1.3)	0.86 (5.8)	−0.74 (21.8)	−0.10 (44.0)
InKind	−0.34 (21.0)	−0.18 (33.0)	0.01 (91.2)	−0.82 (8.5)	−0.05 (84.0)	−0.09 (39.5)
FloodInRd1				−0.32 (13.8)	0.06 (82.2)	0.20 (4.5)
Head literate0				0.39 (20.9)	−0.18 (52.1)	−0.01 (92.2)
NumCattle0		0.21 (16.3)			−0.74 (7.6)	
net asset value₁				0.00 (2.4)	0.00 (1.0)	−0.00 (93.8)
HHsize0				0.16 (4.1)	0.01 (96.3)	0.04 (26.1)
mean of dependent variable	2	2	1	2	2	1
T = 2	13	11	61	8	6	31
T = 3	24	16	128	12	12	83
T = 4	64	104	227	35	79	134
$\bar{R}^2$	0.006	0.08	0.024	0.074	0.086	0.024
N	253	355	998	137	267	599

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Narrow net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline. Adi and None subgroups do not own cattle at the baseline. We used net asset values at the baseline NetAssets0 in place of NumCows0 in ANCOVA estimation.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 122: ANCOVA ESTIMATION OF LIVESTOCK HOLDING BY PERIOD, CATTLE REARING EXPERIENCES

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				1.60 (0.0)	1.50 (0.0)	1.41 (0.0)
Large	0.333 (0.47)	0.342 (0.48)	0.268 (0.44)	−0.02 (91.5)	0.91 (1.1)	0.25 (3.1)
LargeGrace	0.127 (0.33)	0.268 (0.44)	0.254 (0.44)	0.22 (45.2)	0.38 (3.4)	−0.13 (28.3)
Cattle	0.321 (0.47)	0.200 (0.40)	0.278 (0.45)	−0.12 (56.3)	0.13 (40.1)	−0.08 (38.6)
rd 3	0.352 (0.48)	0.346 (0.48)	0.349 (0.48)	−0.09 (37.2)	0.04 (73.8)	0.01 (90.1)
Large × rd 3	0.115 (0.32)	0.115 (0.32)	0.091 (0.29)	−0.23 (56.4)	0.10 (75.9)	−0.01 (92.5)
LargeGrace × rd 3	0.048 (0.22)	0.092 (0.29)	0.088 (0.28)	−0.15 (62.1)	0.07 (83.8)	0.35 (5.9)
Cattle × rd 3	0.109 (0.31)	0.071 (0.26)	0.095 (0.29)	0.04 (91.4)	0.29 (30.4)	0.18 (17.1)
rd 4	0.315 (0.47)	0.319 (0.47)	0.327 (0.47)	0.27 (10.6)	0.14 (30.6)	0.17 (0.6)
Large × rd 4	0.115 (0.32)	0.112 (0.32)	0.091 (0.29)	−0.00 (99.8)	0.16 (69.9)	0.05 (75.3)
LargeGrace × rd 4	0.036 (0.19)	0.088 (0.28)	0.083 (0.28)	0.30 (58.7)	−0.05 (90.0)	0.61 (0.2)
Cattle × rd 4	0.103 (0.30)	0.061 (0.24)	0.091 (0.29)	0.10 (79.1)	0.38 (20.0)	0.42 (0.2)
FloodInRd1	0.533 (0.50)	0.447 (0.50)	0.393 (0.49)			
Head literate0	0.133 (0.34)	0.166 (0.37)	0.129 (0.34)			
NumCattle0		1.420 (0.71)				
net asset value₁	959.667 (8196.80)	30907.220 (15484.74)	2795.554 (3689.93)			
HHsize0	4.655 (1.17)	4.563 (1.42)	4.346 (1.38)			
mean of dependent variable $T = 2$				2 13	2 11	1 61
$T = 3$				24	16	128
$T = 4$				64	104	227
$\bar{R}^2$				0.007	0.054	0.05
N	165	295	791	253	355	998

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	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	1.60 (0.0)	1.22 (0.0)	1.41 (0.0)	0.98 (1.9)	1.35 (2.2)	1.29 (0.0)
Large	−0.02 (91.5)	0.88 (1.0)	0.25 (3.1)	−0.03 (91.7)	0.89 (9.1)	0.07 (68.4)
LargeGrace	0.22 (45.2)	0.36 (5.4)	−0.13 (28.3)	0.59 (16.6)	0.20 (50.0)	−0.09 (56.8)
Cattle	−0.12 (56.3)	0.14 (40.9)	−0.08 (38.6)	−0.05 (87.2)	0.10 (68.2)	−0.17 (25.6)
rd 3	−0.09 (37.2)	0.04 (72.3)	0.01 (90.1)	−0.16 (32.4)	−0.00 (96.9)	−0.06 (33.0)
Large × rd 3	−0.23 (56.4)	0.11 (74.1)	−0.01 (92.5)	−0.54 (29.2)	0.20 (57.5)	0.20 (28.8)
LargeGrace × rd 3	−0.15 (62.1)	0.11 (76.1)	0.35 (5.9)	0.12 (75.0)	0.06 (88.2)	0.33 (7.1)
Cattle × rd 3	0.04 (91.4)	0.30 (28.5)	0.18 (17.1)	−0.16 (68.7)	0.24 (37.3)	0.30 (7.4)
rd 4	0.27 (10.6)	0.14 (29.7)	0.17 (0.6)	0.38 (23.0)	0.09 (48.6)	0.10 (11.3)
Large × rd 4	−0.00 (99.8)	0.16 (69.3)	0.05 (75.3)	−0.21 (69.5)	0.15 (71.1)	0.16 (37.2)
LargeGrace × rd 4	0.30 (58.7)	−0.05 (90.0)	0.61 (0.2)	1.37 (21.6)	−0.18 (61.3)	0.58 (0.3)
Cattle × rd 4	0.10 (79.1)	0.41 (17.0)	0.42 (0.2)	−0.06 (87.6)	0.20 (48.5)	0.47 (0.7)
FloodInRd1				−0.35 (15.2)	0.06 (83.1)	0.20 (4.5)
Head literate0				0.39 (22.1)	−0.18 (53.7)	0.00 (97.7)
NumCattle0		0.21 (15.4)		−0.74 (8.2)		
net asset value1				0.00 (1.8)	0.00 (1.2)	−0.00 (89.4)
HHsize0				0.16 (5.3)	0.01 (94.8)	0.04 (23.8)
mean of dependent variable T = 2	2 13	2 11	1 61	2 8	2 6	1 31
T = 3	24	16	128	12	12	83
T = 4	64	104	227	35	79	134
$\bar{R}^2$	0.007	0.064	0.05	0.094	0.06	0.035
N	253	355	998	137	267	599

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Narrow net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline. Adi and None subgroups do not own cattle at the baseline. We used net asset values at the baseline NetAssets0 in place of NumCows0 in ANCOVA estimation.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

	mean/std			(1)		
	Adi	Own	None	Adi	Own	None
(Intercept)				1.60 (0.0)	1.50 (0.0)	1.41 (0.0)
Upfront	0.782 (0.41)	0.810 (0.39)	0.800 (0.40)	−0.02 (91.5)	0.91 (1.1)	0.25 (3.1)
WithGrace	0.448 (0.50)	0.468 (0.50)	0.532 (0.50)	0.24 (35.7)	−0.53 (14.1)	−0.38 (0.3)
InKind	0.321 (0.47)	0.200 (0.40)	0.278 (0.45)	−0.34 (20.2)	−0.25 (15.2)	0.05 (66.3)
rd 3	0.352 (0.48)	0.346 (0.48)	0.349 (0.48)	−0.09 (37.2)	0.04 (73.8)	0.01 (90.1)
Upfront × rd 3	0.273 (0.45)	0.278 (0.45)	0.274 (0.45)	−0.23 (56.4)	0.10 (75.9)	−0.01 (92.5)
WithGrace × rd 3	0.158 (0.37)	0.163 (0.37)	0.183 (0.39)	0.07 (78.5)	−0.03 (93.8)	0.36 (5.5)
InKind × rd 3	0.109 (0.31)	0.071 (0.26)	0.095 (0.29)	0.19 (31.1)	0.21 (50.0)	−0.17 (32.0)
rd 4	0.315 (0.47)	0.319 (0.47)	0.327 (0.47)	0.27 (10.6)	0.14 (30.6)	0.17 (0.6)
Upfront × rd 4	0.255 (0.44)	0.261 (0.44)	0.265 (0.44)	−0.00 (99.8)	0.16 (69.9)	0.05 (75.3)
WithGrace × rd 4	0.139 (0.35)	0.149 (0.36)	0.174 (0.38)	0.30 (57.8)	−0.21 (64.2)	0.56 (0.6)
InKind × rd 4	0.103 (0.30)	0.061 (0.24)	0.091 (0.29)	−0.20 (70.0)	0.42 (21.0)	−0.19 (31.6)
FloodInRd1	0.533 (0.50)	0.447 (0.50)	0.393 (0.49)			
Head literate0	0.133 (0.34)	0.166 (0.37)	0.129 (0.34)			
NumCattle0		1.420 (0.71)				
net asset value₁	959.667 (8196.80)	30907.220 (15484.74)	2795.554 (3689.93)			
HHsize0	4.655 (1.17)	4.563 (1.42)	4.346 (1.38)			
mean of dependent variable T = 2				2 13	2 11	1 61
T = 3 T = 4				24 64	16 104	128 227
$\bar{R}^2$ N				0.007 253	0.054 355	0.05 998
N	165	295	791	253	355	998

	(2)			(3)		
	Adi	Own	None	Adi	Own	None
(Intercept)	1.60 (0.0)	1.22 (0.0)	1.41 (0.0)	0.98 (1.9)	1.35 (2.2)	1.29 (0.0)
Upfront	−0.02 (91.5)	0.88 (1.0)	0.25 (3.1)	−0.03 (91.7)	0.89 (9.1)	0.07 (68.4)
WithGrace	0.24 (35.7)	−0.52 (13.4)	−0.38 (0.3)	0.62 (9.5)	−0.70 (22.8)	−0.16 (23.6)
InKind	−0.34 (20.2)	−0.22 (21.2)	0.05 (66.3)	−0.64 (11.1)	−0.09 (73.1)	−0.08 (44.4)
rd 3	−0.09 (37.2)	0.04 (72.3)	0.01 (90.1)	−0.16 (32.4)	−0.00 (96.9)	−0.06 (33.0)
Upfront × rd 3	−0.23 (56.4)	0.11 (74.1)	−0.01 (92.5)	−0.54 (29.2)	0.20 (57.5)	0.20 (28.8)
WithGrace × rd 3	0.07 (78.5)	0.00 (100.0)	0.36 (5.5)	0.66 (15.0)	−0.15 (69.3)	0.14 (43.6)
InKind × rd 3	0.19 (31.1)	0.19 (56.4)	−0.17 (32.0)	−0.28 (44.1)	0.19 (55.1)	−0.04 (82.1)
rd 4	0.27 (10.6)	0.14 (29.7)	0.17 (0.6)	0.38 (23.0)	0.09 (48.6)	0.10 (11.3)
Upfront × rd 4	−0.00 (99.8)	0.16 (69.3)	0.05 (75.3)	−0.21 (69.5)	0.15 (71.1)	0.16 (37.2)
WithGrace × rd 4	0.30 (57.8)	−0.21 (63.8)	0.56 (0.6)	1.57 (16.1)	−0.33 (44.0)	0.42 (2.4)
InKind × rd 4	−0.20 (70.0)	0.46 (19.3)	−0.19 (31.6)	−1.43 (19.2)	0.38 (22.9)	−0.11 (53.7)
FloodInRd1				−0.35 (15.2)	0.06 (83.1)	0.20 (4.5)
Head literate0				0.39 (22.1)	−0.18 (53.7)	0.00 (97.7)
NumCattle0		0.21 (15.4)			−0.74 (8.2)	
net asset value₁				0.00 (1.8)	0.00 (1.2)	−0.00 (89.4)
HHsize0				0.16 (5.3)	0.01 (94.8)	0.04 (23.8)
mean of dependent variable T = 2	2 13	2 11	1 61	2 8	2 6	1 31
T = 3	24	16	128	12	12	83
T = 4	64	104	227	35	79	134
$\bar{R}^2$	0.007	0.064	0.05	0.094	0.06	0.035
N	253	355	998	137	267	599

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Narrow net assets uses only assets observed for all 4 rounds in household assets. Household assets do not include livestock. OwnCattle0 is an indicator if a household owned cattle at the baseline. AdiCattle0 is an indicator if a household engaged in the cattle lease-in contract at the baseline. Adi and None subgroups do not own cattle at the baseline. We used net asset values at the baseline NetAssets0 in place of NumCows0 in ANCOVA estimation.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

IV Estimation using complete panel HHs in household assets

This section uses subsample limited to households which gives complete panel of household assets.

IV.1 Assets

IV.1.1 Productive assets

Productive assets are sorveyed consistently across rounds, except hand pumps that were asked only in round 1. Major productive assets (above 300 entries) are bees-box, cage incubator, dheki, fishing net, ginning machine, hand pump, sickle/dao/axe/spade. Bee boxes have increased dramat-

ically from round 2. Sickles/dao/axes/spades and fishing nets have decreased dramatically since round 2. These indicate that household production may have shifted to more domestic-oriented tasks. There is no indication that productive asset holding related to cattle rearing has increased.

```
Number of obs by Arm and attrition
            AttritIn
Arm            2    3    4    9  Sum
  traditional  6    4   20  144  174
  large        5    2    1  191  199
  large grace 22    3    3  170  198
  cattle       5    5   13  176  199
  Sum         38   14   37  681  770


Number of obs by membership status and attrition
                   AttritIn
BStatus              2    3    4    9  Sum
  borrower           8    6    8  575  597
  pure saver         0    0    0    0    0
  individual rejection  9    4    1   75   89
  group rejection    9    4    0   55   68
  rejection by flood 12    0   28    0   40
  Sum               38   14   37  705  794
```

```
[1] excl
[[1]]
PAssetAmount ~ dummyLarge + dummyLargeGrace + dummyCattle


[[2]]
PAssetAmount ~ dummyLarge + dummyLargeGrace + dummyCattle + PAssetAmount0

[[3]]
PAssetAmount ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + PAssetAmount0

[[4]]
PAssetAmount ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    dummyHadCows.Large + dummyHadCows.LargeGrace + dummyHadCows.Cattle

[[5]]
PAssetAmount ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + PAssetAmount0 + NumCows0

[[6]]
PAssetAmount ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    NumCows0 + dummyHadCows.Large + dummyHadCows.LargeGrace +
    dummyHadCows.Cattle

[1] exclP
[[1]]
PAssetAmount ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
PAssetAmount ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + PAssetAmount0 + dummyLargeSize.UltraPoor +
```

```
       dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[3]]
PAssetAmount ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[4]]
PAssetAmount ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[[5]]
PAssetAmount ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[6]]
PAssetAmount ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[1] excla
[[1]]
PAssetAmount ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
PAssetAmount ~ dummyLargeSize + dummyWithGrace + dummyInKind +
    PAssetAmount0

[[3]]
PAssetAmount ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + PAssetAmount0

[[4]]
PAssetAmount ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    dummyHadCows.LargeSize + dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
PAssetAmount ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + PAssetAmount0 + NumCows0

[[6]]
PAssetAmount ~ FloodInRd1 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    NumCows0 + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
    dummyHadCows.InKind

[1] exclT
[[1]]
PAssetAmount ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4
```

```
[[2]]
PAssetAmount ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + PAssetAmount0

[[3]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + PAssetAmount0

[[4]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[[5]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    NumCows0

[[6]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + NumCows0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[1] exclTa
[[1]]
PAssetAmount ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
PAssetAmount ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + PAssetAmount0

[[3]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + PAssetAmount0
```

```
[[4]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    NumCows0

[[6]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + NumCows0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[1] exclTPa
[[1]]
PAssetAmount ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[2]]
PAssetAmount ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    PAssetAmount0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[3]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[4]]
```

```
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + PAssetAmount0 +
    NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[6]]
PAssetAmount ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor +
    dummyLargeSize + dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 +
    dummyLargeSize.Time3 + dummyWithGrace.Time3 + dummyInKind.Time3 +
    dummyUltraPoor.Time4 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    PAssetAmount0 + NumCows0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4
```

FIGURE 25: PRODUCTIVE ASSET HOLDING
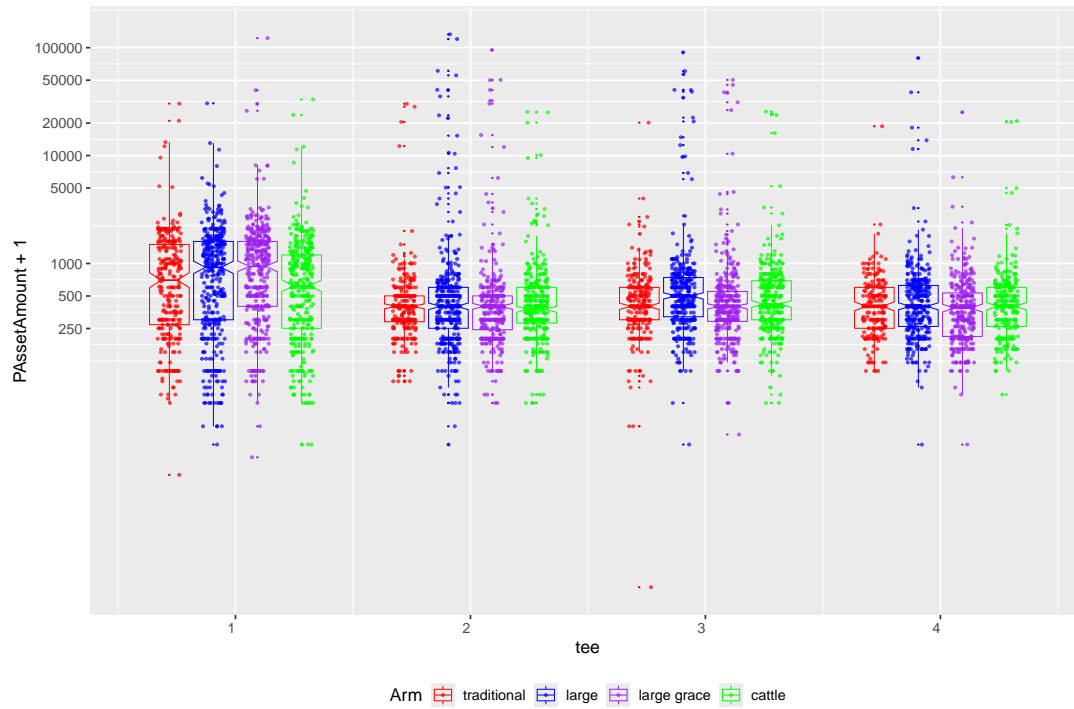
Source: Survey data.

Note: Productive assets are bees-box, brooder, cage incubator, country boat, deep tube well, dheki, done/swing basket, engine boat, fishing net, ginning machine, gola (grain storage), hand pump, husking machine, jata, ladder(moi), other, specify, plough and yoke, power pump, power tiller, rickshaw, rower pump, saw, sewing machine, shallow tube well, sickle/dao/axe/spade, spray, thresher, tractor, treddle pump, weeder.

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TABLE 124: ANCOVA ESTIMATION OF PRODUCTIVE ASSETS

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		571.2 (0.0)	200.5 (16.1)	313.7 (30.8)	358.2 (33.6)	331.2 (33.9)
Large	0.021 (0.45)	1240.1 (3.6)	1166.3 (4.2)	1281.1 (2.8)	1526.2 (2.5)	1354.3 (2.7)
LargeGrace	0.002 (0.43)	796.4 (9.6)	655.8 (16.2)	609.1 (17.9)	667.1 (17.8)	644.3 (15.7)
Cattle	0.017 (0.44)	149.9 (39.8)	188.5 (32.3)	253.7 (23.5)	291.3 (21.4)	350.6 (13.7)
HadCattle	0.218 (0.41)				88.4 (83.9)	
FloodInRd1	0.487 (0.50)			−662.6 (8.8)	−867.9 (6.3)	−709.0 (9.6)
Head literate0	0.121 (0.33)			−595.0 (2.0)	−692.3 (4.2)	−622.5 (2.7)
productive asset value$_1$	1255.054 (2646.96)		0.4 (0.3)	0.3 (0.5)	0.4 (0.2)	0.4 (0.2)
HHsize0	4.306 (1.43)			58.9 (52.5)	48.3 (68.1)	35.3 (74.2)
HadCattle × Large	0.016 (0.22)				139.7 (90.6)	
HadCattle × LargeGrace	0.004 (0.20)				1548.0 (21.3)	
HadCattle × Cattle	−0.006 (0.19)				201.2 (59.7)	
NumCattle0	0.300 (0.66)					93.8 (79.0)
mean of dependent variable		1125	1125	1125	1125	1125
T = 2		20	20	20	17	14
T = 3		101	101	101	57	56
T = 4		632	625	625	529	604
$\bar{R}^2$		0.005	0.026	0.028	0.031	0.03
N	1718	2118	2097	2097	1718	1938

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Only households that are observed for all 4 rounds are used. Households are continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 125: ANCOVA ESTIMATION OF PRODUCTIVE ASSETS BY ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		571.2	200.5	313.7	358.2	331.2
		(0.0)	(16.1)	(30.8)	(33.6)	(33.9)
Unfront	0.040	1240.1	1166.3	1281.1	1526.2	1354.3
	(0.41)	(3.6)	(4.2)	(2.8)	(2.5)	(2.7)
WithGrace	0.019	−443.7	−510.4	−672.0	−859.2	−710.0
	(0.50)	(55.6)	(48.6)	(35.4)	(30.3)	(35.1)
InKind	0.017	−646.5	−467.3	−355.5	−375.8	−293.7
	(0.44)	(19.7)	(34.2)	(44.8)	(45.0)	(53.4)
HadCattle	0.218				88.4	
	(0.41)				(83.9)	
FloodInRd1	0.487			−662.6	−867.9	−709.0
	(0.50)			(8.8)	(6.3)	(9.6)
Head literate0	0.121			−595.0	−692.3	−622.5
	(0.33)			(2.0)	(4.2)	(2.7)
productive asset value$_1$	1255.054		0.4	0.3	0.4	0.4
	(2646.96)		(0.3)	(0.5)	(0.2)	(0.2)
HHsize0	4.306			58.9	48.3	35.3
	(1.43)			(52.5)	(68.1)	(74.2)
HadCattle × Unfront	0.014				139.7	
	(0.18)				(90.6)	
HadCattle × WithGrace	−0.002				1408.3	
	(0.23)				(40.1)	
HadCattle × InKind	−0.006				−1346.8	
	(0.19)				(28.3)	
NumCattle0	0.300					93.8
	(0.66)					(79.0)
mean of dependent variable		1125	1125	1125	1125	1125
T = 2		20	20	20	17	14
T = 3		101	101	101	57	56
T = 4		632	625	625	529	604
$\bar{R}^2$		0.005	0.026	0.028	0.031	0.03
N	1718	2118	2097	2097	1718	1938

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Only households that are observed for all 4 rounds are used. Households are continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		841.5 (0.0)	470.6 (1.7)	591.4 (10.7)	657.3 (12.0)	606.0 (13.4)
Large	0.021 (0.45)	1460.4 (3.5)	1388.4 (4.0)	1505.5 (2.8)	1737.5 (2.7)	1545.9 (2.8)
LargeGrace	0.002 (0.43)	928.2 (10.5)	791.6 (15.9)	744.0 (17.4)	766.8 (18.4)	755.4 (16.2)
Cattle	0.017 (0.44)	117.7 (51.4)	165.6 (39.0)	232.5 (28.4)	270.7 (28.1)	307.4 (19.9)
rd 3	0.342 (0.47)	−293.2 (19.3)	−300.5 (18.8)	−303.4 (18.4)	−334.6 (19.3)	−275.7 (22.4)
Large × rd 3	0.094 (0.29)	−814.3 (28.0)	−822.5 (27.8)	−820.2 (27.9)	−826.4 (35.6)	−701.6 (35.5)
LargeGrace × rd 3	0.084 (0.28)	−157.1 (73.3)	−157.3 (73.8)	−144.5 (75.8)	47.8 (92.2)	−26.8 (95.4)
Cattle × rd 3	0.089 (0.28)	228.4 (33.1)	149.8 (55.0)	158.0 (53.3)	182.6 (44.4)	315.4 (21.3)
rd 4	0.316 (0.47)	−746.5 (0.8)	−745.6 (0.8)	−747.7 (0.8)	−855.6 (0.5)	−758.7 (0.7)
Large × rd 4	0.093 (0.29)	−1534.3 (7.1)	−1544.9 (7.0)	−1566.5 (6.8)	−1540.0 (11.0)	−1441.9 (9.0)
LargeGrace × rd 4	0.079 (0.27)	−1223.1 (9.0)	−1260.4 (8.6)	−1271.0 (8.6)	−1178.3 (10.4)	−1189.4 (10.5)
Cattle × rd 4	0.082 (0.27)	115.3 (65.0)	96.3 (71.2)	67.3 (80.4)	75.0 (76.9)	207.1 (44.0)
HadCattle	0.218 (0.41)				173.8 (74.1)	
HadCattle × rd 3	0.075 (0.26)				−164.7 (71.5)	
HadCattle × rd 4	0.068 (0.25)				−829.9 (31.7)	
FloodInRd1	0.487 (0.50)			−666.2 (8.8)	−868.0 (6.4)	−707.9 (9.7)
Head literate0	0.121 (0.33)			−596.9 (2.0)	−685.4 (4.5)	−621.8 (2.7)
productive asset value₁	1255.054 (2646.96)		0.4 (0.3)	0.3 (0.6)	0.4 (0.2)	0.4 (0.2)
HHsize0	4.306 (1.43)			57.8 (53.4)	48.3 (68.3)	35.9 (73.9)
HadCattle × Large	0.016 (0.22)				40.2 (97.6)	
HadCattle × Large × rd 3	0.005 (0.13)				841.8 (46.3)	
HadCattle × Large × rd 4	0.006 (0.13)				153.9 (92.8)	
HadCattle × LargeGrace	0.004 (0.20)				2070.8 (19.4)	
HadCattle × LargeGrace × rd 3	0.001 (0.12)				−2020.7 (14.6)	
HadCattle × LargeGrace × rd 4	0.002 (0.12)				−3922.5 (16.7)	
HadCattle × Cattle	−0.006 (0.19)				286.1 (47.1)	
HadCattle × Cattle × rd 3	−0.001 (0.11)				−583.7 (16.7)	
HadCattle × Cattle × rd 4	−0.003 (0.10)				−621.5 (15.3)	
NumCattle0	0.300 (0.66)					93.3 (79.2)
mean of dependent variable		1125	1125	1125	1125	1125
T = 2		20	20	20	17	14
T = 3		101	101	101	57	56
T = 4		632	625	625	529	604
$\bar{R}^2$		0.007	0.027	0.029	0.029	0.031
N	1718	2118	2097	2097	1718	1938

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Only households that are observed for all 4 rounds are used. Households are continuing members and replacing members of early rejecters and received loans prior to 2015 January. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

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TABLE 127: ANCOVA ESTIMATION OF BROAD PRODUCTIVE ASSETS BY ATTRIBUTES AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		841.5 (0.0)	470.6 (1.7)	591.4 (10.7)	657.3 (12.0)	606.0 (13.4)
Upfront	0.040 (0.41)	1460.4 (3.5)	1388.4 (4.0)	1505.5 (2.8)	1737.5 (2.7)	1545.9 (2.8)
WithGrace	0.019 (0.50)	−532.2 (54.9)	−596.8 (49.2)	−761.5 (37.6)	−970.7 (31.4)	−790.5 (37.0)
InKind	0.017 (0.44)	−810.6 (16.7)	−626.0 (27.6)	−511.5 (35.2)	−496.1 (38.4)	−448.0 (41.0)
rd 3	0.342 (0.47)	−293.2 (19.3)	−300.5 (18.8)	−303.4 (18.4)	−334.6 (19.3)	−275.7 (22.4)
Upfront × rd 3	0.267 (0.44)	−814.3 (28.0)	−822.5 (27.8)	−820.2 (27.9)	−826.4 (35.6)	−701.6 (35.5)
WithGrace × rd 3	0.173 (0.38)	657.2 (43.8)	665.2 (43.6)	675.7 (43.1)	874.2 (36.9)	674.9 (42.8)
InKind × rd 3	0.089 (0.28)	385.5 (39.3)	307.1 (50.9)	302.6 (51.5)	134.8 (76.1)	342.1 (44.8)
rd 4	0.316 (0.47)	−746.5 (0.8)	−745.6 (0.8)	−747.7 (0.8)	−855.6 (0.5)	−758.7 (0.7)
Upfront × rd 4	0.254 (0.44)	−1534.3 (7.1)	−1544.9 (7.0)	−1566.5 (6.8)	−1540.0 (11.0)	−1441.9 (9.0)
WithGrace × rd 4	0.161 (0.37)	311.2 (77.2)	284.4 (79.4)	295.5 (78.7)	361.7 (75.4)	252.6 (81.6)
InKind × rd 4	0.082 (0.27)	1338.4 (5.9)	1356.8 (6.0)	1338.3 (6.3)	1253.3 (6.3)	1396.5 (5.4)
HadCattle	0.218 (0.41)				173.8 (74.1)	
HadCattle × rd 3	0.075 (0.26)				−164.7 (71.5)	
HadCattle × rd 4	0.068 (0.25)				−829.9 (31.7)	
FloodInRd1	0.487 (0.50)			−666.2 (8.8)	−868.0 (6.4)	−707.9 (9.7)
Head literate0	0.121 (0.33)			−596.9 (2.0)	−685.4 (4.5)	−621.8 (2.7)
productive asset value₁	1255.054 (2646.96)		0.4 (0.3)	0.3 (0.6)	0.4 (0.2)	0.4 (0.2)
HHsize0	4.306 (1.43)			57.8 (53.4)	48.3 (68.3)	35.9 (73.9)
HadCattle × Upfront	0.014 (0.18)				40.2 (97.6)	
HadCattle × Upfront × rd 3	0.004 (0.11)				841.8 (46.3)	
HadCattle × Upfront × rd 4	0.005 (0.10)				153.9 (92.8)	
HadCattle × WithGrace	−0.002 (0.23)				2030.5 (32.3)	
HadCattle × WithGrace × rd 3	−0.000 (0.14)				−2862.5 (10.4)	
HadCattle × WithGrace × rd 4	−0.001 (0.13)				−4076.3 (21.6)	
HadCattle × InKind	−0.006 (0.19)				−1784.7 (26.6)	
HadCattle × InKind × rd 3	−0.001 (0.11)				1437.0 (30.6)	
HadCattle × InKind × rd 4	−0.003 (0.10)				3300.9 (24.3)	
NumCattle0	0.300 (0.66)					93.3 (79.2)
mean of dependent variable		1125	1125	1125	1125	1125
T = 2		20	20	20	17	14
T = 3		101	101	101	57	56
T = 4		632	625	625	529	604
R̄²		0.007	0.027	0.029	0.029	0.031
N	1718	2118	2097	2097	1718	1938

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Only households that are observed for all 4 rounds are used. Households are continuing members and replacing members of early rejecters and received loans prior to 2015 Janunary. Productive assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 128: ANCOVA ESTIMATION OF BROAD PRODUCTIVE ASSETS BY ATTRIBUTES, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)
(Intercept)		869.2 (0.0)	499.8 (1.7)	643.9 (9.1)	693.1 (11.9)	657.0 (11.9)
Unfront	0.040 (0.41)	1428.7 (4.0)	1349.6 (4.6)	1455.0 (3.1)	1699.9 (3.4)	1489.2 (3.0)
WithGrace	0.019 (0.50)	−572.1 (51.9)	−640.3 (46.0)	−820.9 (34.0)	−1073.4 (27.5)	−849.4 (33.6)
InKind	0.017 (0.44)	−760.9 (19.6)	−569.2 (32.6)	−438.7 (43.1)	−396.5 (48.4)	−378.2 (49.0)
UltraPoor	0.625 (0.48)	−148.6 (75.7)	−144.4 (76.6)	−147.0 (76.3)	−194.3 (73.0)	−146.4 (76.7)
Unfront × UltraPoor	0.051 (0.30)	−1260.9 (47.2)	−1332.1 (45.5)	−1682.8 (37.4)	−2034.2 (35.7)	−1655.9 (39.5)
WithGrace × UltraPoor	0.036 (0.39)	1494.4 (40.5)	1550.3 (39.1)	1723.2 (35.6)	2278.0 (29.5)	1762.8 (35.2)
InKind × UltraPoor	0.019 (0.35)	−714.1 (22.5)	−778.3 (15.9)	−847.1 (12.4)	−1232.3 (4.2)	−837.1 (13.4)
rd 3	0.342 (0.47)	−298.5 (18.3)	−304.6 (17.9)	−308.1 (17.5)	−344.4 (17.5)	−287.0 (20.5)
UltraPoor × rd 3	0.210 (0.41)	−217.1 (57.1)	−249.2 (52.1)	−257.3 (50.8)	−343.9 (40.7)	−233.6 (54.3)
Upfront × rd 3	0.267 (0.44)	−786.6 (30.7)	−796.5 (30.4)	−794.1 (30.6)	−758.6 (40.1)	−657.1 (40.0)
WithGrace × rd 3	0.173 (0.38)	682.0 (41.1)	692.9 (40.8)	705.1 (40.2)	914.3 (33.2)	704.9 (39.9)
InKind × rd 3	0.089 (0.28)	362.8 (37.7)	286.0 (49.7)	280.6 (50.6)	95.9 (81.0)	312.1 (44.7)
Unfront × UltraPoor × rd 3	0.017 (0.18)	−252.8 (85.3)	−265.7 (84.7)	−278.5 (83.9)	−40.3 (97.8)	−209.7 (87.7)
WithGrace × UltraPoor × rd 3	0.012 (0.23)	287.4 (84.0)	297.2 (83.6)	310.3 (82.8)	367.9 (80.7)	426.1 (76.2)
InKind × UltraPoor × rd 3	0.006 (0.20)	320.9 (58.7)	211.7 (72.5)	204.4 (73.8)	59.7 (93.0)	239.8 (69.3)
rd 4	0.316 (0.47)	−729.0 (0.8)	−725.6 (0.9)	−729.8 (0.9)	−837.4 (0.4)	−747.5 (0.7)
UltraPoor × rd 4	0.202 (0.40)	−358.9 (45.2)	−368.4 (44.3)	−381.1 (42.9)	−595.8 (26.5)	−418.6 (38.2)
Upfront × rd 4	0.254 (0.44)	−1489.3 (8.4)	−1498.5 (8.3)	−1511.3 (8.2)	−1443.4 (13.6)	−1370.0 (11.4)
WithGrace × rd 4	0.161 (0.37)	421.2 (68.6)	403.5 (70.1)	415.5 (69.4)	494.0 (65.6)	371.3 (72.4)
InKind × rd 4	0.082 (0.27)	1222.5 (6.1)	1232.9 (6.3)	1213.9 (6.6)	1118.4 (6.7)	1271.8 (5.8)
Unfront × UltraPoor × rd 4	0.017 (0.17)	268.9 (87.0)	253.0 (87.8)	243.1 (88.3)	421.7 (81.3)	344.4 (83.3)
WithGrace × UltraPoor × rd 4	0.011 (0.23)	−1379.7 (44.3)	−1394.1 (44.0)	−1385.5 (44.3)	−1740.3 (38.4)	−1390.7 (43.7)
InKind × UltraPoor × rd 4	0.006 (0.20)	1581.2 (6.6)	1589.5 (6.6)	1565.8 (7.4)	1855.4 (9.2)	1604.9 (6.3)
HadCattle	0.218 (0.41)				139.7 (79.2)	
HadCattle × rd 3	0.075 (0.26)				−131.8 (77.0)	
HadCattle × rd 4	0.068 (0.25)				−804.0 (33.0)	
FloodInRd1	0.487 (0.50)			−728.9 (8.5)	−953.4 (6.4)	−765.9 (9.6)
Head literate0	0.121 (0.33)			−693.8 (2.4)	−812.3 (4.2)	−708.4 (2.9)
productive asset value1	1255.054 (2646.96)		0.4 (0.3)	0.3 (0.5)	0.4 (0.2)	0.4 (0.2)
HHsize0	4.306 (1.43)			66.7 (49.6)	68.7 (59.3)	46.6 (68.3)
HadCattle × Unfront	0.014 (0.18)				89.0 (94.8)	
HadCattle × Upfront × rd 3	0.004 (0.11)				701.4 (53.2)	
HadCattle × Unfront × rd 4	0.005 (0.10)				21.4 (99.0)	
HadCattle × WithGrace	−0.002 (0.23)				2221.2 (28.2)	
HadCattle × WithGrace × rd 3	−0.000 (0.14)				−2893.1 (9.9)	
HadCattle × WithGrace × rd 4	−0.001 (0.13)				−4285.7 (19.0)	
HadCattle × InKind	−0.006 (0.19)				−1874.9 (24.0)	
HadCattle × InKind × rd 3	−0.001 (0.11)				1463.0 (31.1)	
HadCattle × InKind × rd 4	−0.003 (0.10)				3551.3 (21.3)	
NumCattle0	0.300 (0.66)					90.8 (79.8)
mean of dependent variable		1125	1125	1125	1125	1125
T = 2		20	20	20	17	14

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IV.1.2 Net assets: Assets+Livestock-GUK Debt-Other Debts

Keep households with baseline household asset information. For productive assets, all households have baseline information but ownership is spattered. Net assets = Assets + net saving - debt to GUK - debts to relatives and money lenders. Assets use only items observed for all 4 rounds for household assets *including* radios and cassette players (which have possibly large errors).

```
Number of obs by Arm and attrition
            AttritIn
Arm            2    3    4    9  Sum
  traditional  6    4   20  144  174
  large        5    2    1  191  199
  large grace 22    3    3  170  198
  cattle       5    5   13  176  199
  Sum         38   14   37  681  770


Number of obs by membership status and attrition
                    AttritIn
BStatus              2    3    4    9  Sum
  borrower           8    6    8  575  597
  pure saver         0    0    0    0    0
  individual rejection 9    4    1   75   89
  group rejection    9    4    0   55   68
  rejection by flood 12    0   28    0   40
  Sum               38   14   37  705  794
```

```
NeA1R2
```

```
      NonNA
tee   FALSE  TRUE   Sum
  1      14  1474  1488
  2       7  1391  1398
  3       8  1359  1367
  4       6  1178  1184
  Sum    35  5402  5437
```

```
      NonNA
tee   FALSE  TRUE   Sum
  1     548   940  1488
  2     137  1261  1398
  3      35  1332  1367
  4      12  1172  1184
  Sum   732  4705  5437
```

```
              tee
Arm            2    3    4  Sum
  traditional 58   58   58  174
  large      131  131  131  393
  large grace 118  118  118  354
  cattle     118  118  118  354
  Sum        425  425  425 1275
```

```
              tee
Arm            2    3    4  Sum
  traditional 58   58   58  174
```

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```
   large           131   131   131   393
   large grace     118   118   118   354
   cattle          118   118   118   354
   Sum             425   425   425  1275
```

```
[1] excl
[[1]]
NetValue ~ dummyLarge + dummyLargeGrace + dummyCattle

[[2]]
NetValue ~ dummyLarge + dummyLargeGrace + dummyCattle + NetValue0

[[3]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NetValue0 + dummyHadCows.Large +
    dummyHadCows.LargeGrace + dummyHadCows.Cattle

[[5]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0

[[6]]
NetValue ~ FloodInRd1 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 +
    dummyHadCows.Large + dummyHadCows.LargeGrace + dummyHadCows.Cattle

[1] exclP
[[1]]
NetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[2]]
NetValue ~ dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + NetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor

[[3]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[4]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + NetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyHadCows.LargeSize + dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor

[[6]]
NetValue ~ FloodInRd1 + dummyUltraPoor + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 +
    NetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
```

```
      dummyInKind.UltraPoor + dummyHadCows.LargeSize + dummyHadCows.WithGrace +
      dummyHadCows.InKind

[1] excla
[[1]]
NetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind

[[2]]
NetValue ~ dummyLargeSize + dummyWithGrace + dummyInKind + NetValue0

[[3]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NetValue0 + dummyHadCows.LargeSize +
    dummyHadCows.WithGrace + dummyHadCows.InKind

[[5]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0

[[6]]
NetValue ~ FloodInRd1 + dummyLargeSize + dummyWithGrace + dummyInKind +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 +
    dummyHadCows.LargeSize + dummyHadCows.WithGrace + dummyHadCows.InKind

[1] exclT
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyLarge.Time3 + dummyLargeGrace.Time3 + dummyCattle.Time3 +
    dummyLarge.Time4 + dummyLargeGrace.Time4 + dummyCattle.Time4 +
    NetValue0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NetValue0 + dummyHadCows.Large + dummyHadCows.Time3 + dummyHadCows.Large.Time3 +
    dummyHadCows.Time4 + dummyHadCows.Large.Time4 + dummyHadCows.LargeGrace +
    dummyHadCows.LargeGrace.Time3 + dummyHadCows.LargeGrace.Time4 +
    dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 + dummyHadCows.Cattle.Time4

[[5]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
```

```
    NetValue0

[[6]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyLarge.Time4 + dummyLargeGrace.Time4 +
    dummyCattle.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + NetValue0 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[1] exclTa
[[1]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + NetValue0

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NetValue0

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NetValue0 + dummyHadCows.Time3 + dummyHadCows.Time4 + dummyHadCows.LargeSize +
    dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + HHsize0 + HeadLiteracy0 + NumCows0 +
    NetValue0

[[6]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLargeSize + dummyWithGrace +
    dummyInKind + dummyLargeSize.Time3 + dummyWithGrace.Time3 +
    dummyInKind.Time3 + dummyLargeSize.Time4 + dummyWithGrace.Time4 +
    dummyInKind.Time4 + dummyHadCows + HHsize0 + HeadLiteracy0 +
    NumCows0 + NetValue0 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[1] exclTP
[[1]]
```

```
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyLarge + dummyLargeGrace + dummyCattle +
    dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    NetValue0 + dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor +
    dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + NetValue0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4 + dummyHadCows.Large + dummyHadCows.Time3 +
    dummyHadCows.Large.Time3 + dummyHadCows.Time4 + dummyHadCows.Large.Time4 +
    dummyHadCows.LargeGrace + dummyHadCows.LargeGrace.Time3 +
    dummyHadCows.LargeGrace.Time4 + dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 +
    dummyHadCows.Cattle.Time4

[[5]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
    HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 + dummyLarge.UltraPoor +
    dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor + dummyLarge.UltraPoor.Time3 +
    dummyLarge.UltraPoor.Time4 + dummyLargeGrace.UltraPoor.Time3 +
    dummyLargeGrace.UltraPoor.Time4 + dummyCattle.UltraPoor.Time3 +
    dummyCattle.UltraPoor.Time4

[[6]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyLarge + dummyLargeGrace +
    dummyCattle + dummyUltraPoor + dummyLarge.Time3 + dummyLargeGrace.Time3 +
    dummyCattle.Time3 + dummyUltraPoor.Time3 + dummyLarge.Time4 +
    dummyLargeGrace.Time4 + dummyCattle.Time4 + dummyUltraPoor.Time4 +
```

```
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 +
    dummyLarge.UltraPoor + dummyLargeGrace.UltraPoor + dummyCattle.UltraPoor +
    dummyLarge.UltraPoor.Time3 + dummyLarge.UltraPoor.Time4 +
    dummyLargeGrace.UltraPoor.Time3 + dummyLargeGrace.UltraPoor.Time4 +
    dummyCattle.UltraPoor.Time3 + dummyCattle.UltraPoor.Time4 +
    dummyHadCows.Large + dummyHadCows.Time3 + dummyHadCows.Large.Time3 +
    dummyHadCows.Time4 + dummyHadCows.Large.Time4 + dummyHadCows.LargeGrace +
    dummyHadCows.LargeGrace.Time3 + dummyHadCows.LargeGrace.Time4 +
    dummyHadCows.Cattle + dummyHadCows.Cattle.Time3 + dummyHadCows.Cattle.Time4

[1] exclTPa
[[1]]
NetValue ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4

[[2]]
NetValue ~ Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    NetValue0 + dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor +
    dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[3]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[4]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4 + dummyHadCows.Time3 + dummyHadCows.Time4 +
    dummyHadCows.LargeSize + dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4

[[5]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
```

```
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 + dummyLargeSize.UltraPoor +
    dummyWithGrace.UltraPoor + dummyInKind.UltraPoor + dummyLargeSize.UltraPoor.Time3 +
    dummyLargeSize.UltraPoor.Time4 + dummyWithGrace.UltraPoor.Time3 +
    dummyWithGrace.UltraPoor.Time4 + dummyInKind.UltraPoor.Time3 +
    dummyInKind.UltraPoor.Time4

[[6]]
NetValue ~ FloodInRd1 + Time.3 + Time.4 + dummyUltraPoor + dummyLargeSize +
    dummyWithGrace + dummyInKind + dummyUltraPoor.Time3 + dummyLargeSize.Time3 +
    dummyWithGrace.Time3 + dummyInKind.Time3 + dummyUltraPoor.Time4 +
    dummyLargeSize.Time4 + dummyWithGrace.Time4 + dummyInKind.Time4 +
    dummyHadCows + HHsize0 + HeadLiteracy0 + NumCows0 + NetValue0 +
    dummyLargeSize.UltraPoor + dummyWithGrace.UltraPoor + dummyInKind.UltraPoor +
    dummyLargeSize.UltraPoor.Time3 + dummyLargeSize.UltraPoor.Time4 +
    dummyWithGrace.UltraPoor.Time3 + dummyWithGrace.UltraPoor.Time4 +
    dummyInKind.UltraPoor.Time3 + dummyInKind.UltraPoor.Time4 +
    dummyHadCows.Time3 + dummyHadCows.Time4 + dummyHadCows.LargeSize +
    dummyHadCows.LargeSize.Time3 + dummyHadCows.LargeSize.Time4 +
    dummyHadCows.WithGrace + dummyHadCows.WithGrace.Time3 + dummyHadCows.WithGrace.Time4 +
    dummyHadCows.InKind + dummyHadCows.InKind.Time3 + dummyHadCows.InKind.Time4
```
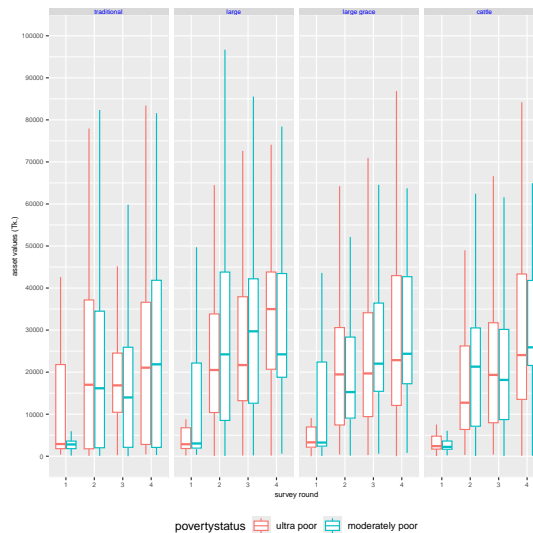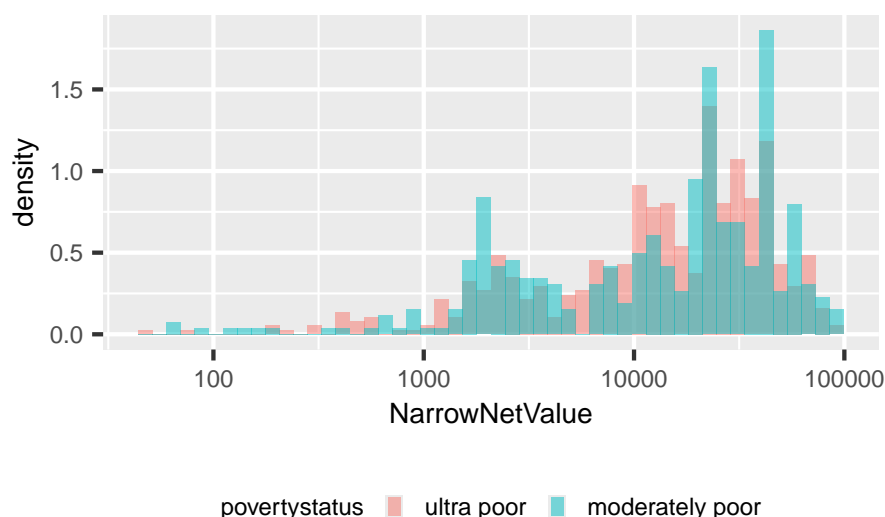
FIGURE 26: NET ASSET VALUES USING ONLY COMPLETE PANEL HOUSEHOLDS

Source: Survey data.

Note: Net asset values = total gross asset values - debt outstanding. Debt outstanding takes the value of the month immediately after the respective survey round interview. Net assets uses only assets observed for all 4 rounds in household assets.

FIGURE 27: NET ASSET VALUES AT ROUND 1 USING ONLY COMPLETE PANEL HOUSEHOLDS

Source: Survey data.

Note: Net asset values = total gross asset values - debt outstanding. Debt outstanding takes the value of the month immediately after the respective survey round interview. Net assets uses only assets observed for all 4 rounds in household assets.

TABLE 129: ANCOVA ESTIMATION OF COMPLETE PANEL NET ASSETS

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		35721.2	29090.5	25209.0	28512.5	25581.7	29233.3
		(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Large	0.047	7700.4	8110.8	7378.2	3455.3	7345.2	3518.6
	(0.46)	(9.5)	(7.4)	(12.7)	(34.4)	(12.9)	(34.1)
LargeGrace	0.035	−2603.3	−2008.7	−1377.9	−3785.0	−1490.0	−3891.9
	(0.45)	(53.5)	(63.2)	(74.3)	(24.4)	(72.0)	(22.5)
Cattle	0.033	−6158.2	−4169.3	−3776.2	−6102.8	−3915.6	−6239.9
	(0.45)	(2.2)	(21.0)	(28.0)	(2.5)	(26.1)	(2.2)
HadCattle	0.322				−9156.3		−10761.6
	(0.47)				(25.8)		(24.4)
FloodInRd1	0.468			5143.7	6185.1	5116.1	6069.4
	(0.50)			(5.4)	(1.3)	(5.3)	(1.2)
Head literate0	0.118			−2608.5	−2498.2	−2595.4	−2455.8
	(0.32)			(38.9)	(38.9)	(39.3)	(39.7)
net asset value₁	12126.558		0.5	0.5	0.6	0.2	0.2
	(16498.30)		(0.1)	(0.1)	(2.8)	(48.5)	(39.0)
HHsize0	4.711			374.4	237.1	453.2	328.1
	(1.40)			(67.3)	(78.8)	(60.5)	(70.3)
HadCattle × Large	0.024				24638.9		24022.7
	(0.27)				(1.7)		(1.8)
HadCattle × LargeGrace	0.009				14114.6		13233.7
	(0.25)				(9.5)		(10.4)
HadCattle × Cattle	−0.001				14692.2		14396.8
	(0.24)				(7.3)		(7.6)
NumCattle0	0.468					5980.9	9274.6
	(0.80)					(38.0)	(35.3)
mean of dependent variable		35662	35662	35662	35662	35662	35662
$\bar{R}^2$		0.038	0.118	0.125	0.144	0.126	0.145
N	1275	1275	1275	1275	1275	1275	1275

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. Net assets use only assets observed for all 4 rounds in household assets. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 130: ANCOVA ESTIMATION OF COMPLETE PANEL NET ASSETS BY ATTRIBUTES

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		35721.2 (0.0)	29090.5 (0.0)	25209.0 (0.0)	28512.5 (0.0)	25581.7 (0.0)	29233.3 (0.0)
Upfront	0.115 (0.34)	7700.4 (9.5)	8110.8 (7.4)	7378.2 (12.7)	3455.3 (34.4)	7345.2 (12.9)	3518.6 (34.1)
WithGrace	0.068 (0.50)	−10303.7 (4.8)	−10119.5 (2.5)	−8756.1 (6.0)	−7240.2 (5.4)	−8835.2 (5.7)	−7410.6 (4.6)
InKind	0.033 (0.45)	−3554.9 (32.7)	−2160.5 (49.2)	−2398.4 (38.5)	−2317.9 (32.7)	−2425.6 (38.0)	−2347.9 (31.5)
HadCattle	0.322 (0.47)				−9156.3 (25.8)		−10761.6 (24.4)
FloodInRd1	0.468 (0.50)			5143.7 (5.4)	6185.1 (1.3)	5116.1 (5.3)	6069.4 (1.2)
Head literate0	0.118 (0.32)			−2608.5 (38.9)	−2498.2 (38.9)	−2595.4 (39.3)	−2455.8 (39.7)
net asset value$_1$	12126.558 (16498.30)		0.5 (0.1)	0.5 (0.1)	0.6 (2.8)	0.2 (48.5)	0.2 (39.0)
HHsize0	4.711 (1.40)			374.4 (67.3)	237.1 (78.8)	453.2 (60.5)	328.1 (70.3)
HadCattle × Upfront	0.032 (0.21)				24638.9 (1.7)		24022.7 (1.8)
HadCattle × WithGrace	0.008 (0.28)				−10524.3 (20.0)		−10789.0 (19.0)
HadCattle × InKind	−0.001 (0.24)				577.6 (91.4)		1163.0 (82.9)
NumCattle0	0.468 (0.80)					5980.9 (38.0)	9274.6 (35.3)
mean of dependent variable		35662	35662	35662	35662	35662	35662
$\bar{R}^2$		0.038	0.118	0.125	0.144	0.126	0.145
N	1275	1275	1275	1275	1275	1275	1275

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. Net assets use only assets observed for all 4 rounds in household assets. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. P values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 131: ANCOVA ESTIMATION OF COMPLETE PANEL NET ASSETS BY PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		32690.8 (0.0)	26060.0 (0.0)	22178.6 (0.0)	25062.9 (0.0)	22551.3 (0.0)	25783.7 (0.0)
Large	0.047 (0.46)	7341.4 (12.2)	7751.8 (9.6)	7019.2 (15.9)	3297.7 (37.2)	6986.2 (16.0)	3361.1 (36.8)
LargeGrace	0.035 (0.45)	−3342.9 (46.8)	−2748.3 (54.2)	−2117.4 (64.0)	−4768.8 (16.2)	−2229.5 (61.8)	−4875.8 (14.7)
Cattle	0.033 (0.45)	−6373.8 (2.6)	−4384.9 (19.9)	−3991.9 (26.8)	−6188.7 (2.2)	−4131.2 (24.9)	−6325.7 (2.0)
rd 3	0.333 (0.47)	1328.6 (45.4)	1328.6 (45.4)	1328.6 (45.5)	1549.2 (33.7)	1328.6 (45.5)	1549.2 (33.7)
Large × rd 3	0.103 (0.30)	3466.4 (55.6)	3466.4 (55.6)	3466.4 (55.6)	1651.4 (75.4)	3466.4 (55.7)	1651.4 (75.4)
LargeGrace × rd 3	0.093 (0.29)	2593.9 (67.7)	2593.9 (67.7)	2593.9 (67.7)	3234.7 (56.0)	2593.9 (67.8)	3234.7 (56.0)
Cattle × rd 3	0.093 (0.29)	377.4 (94.8)	377.4 (94.8)	377.4 (94.8)	−589.7 (91.0)	377.4 (94.8)	−589.7 (91.0)
rd 4	0.333 (0.47)	8740.3 (0.0)	8740.3 (0.0)	8740.3 (0.0)	9316.1 (0.0)	8740.3 (0.0)	9316.1 (0.0)
Large × rd 4	0.103 (0.30)	881.7 (88.8)	881.7 (88.8)	881.7 (88.8)	272.9 (96.1)	881.7 (88.8)	272.9 (96.1)
LargeGrace × rd 4	0.093 (0.29)	5786.1 (31.8)	5786.1 (31.8)	5786.1 (31.8)	7886.5 (13.0)	5786.1 (31.9)	7886.5 (13.0)
Cattle × rd 4	0.093 (0.29)	2017.9 (72.2)	2017.9 (72.3)	2017.9 (72.3)	1449.8 (78.5)	2017.9 (72.3)	1449.8 (78.5)
HadCattle	0.322 (0.47)				−8534.9 (30.1)		−10140.3 (28.1)
HadCattle × rd 3	0.107 (0.31)				−1952.5 (49.8)		−1952.5 (49.8)
HadCattle × rd 4	0.107 (0.31)				−5059.9 (17.4)		−5059.9 (17.4)
FloodInRd1	0.468 (0.50)			5143.7 (5.5)	6185.1 (1.4)	5116.1 (5.4)	6069.4 (1.3)
Head literate0	0.118 (0.32)			−2608.5 (39.1)	−2498.2 (39.2)	−2595.4 (39.4)	−2455.8 (40.0)
net asset value₁	12126.558 (16498.30)		0.5 (0.1)	0.5 (0.1)	0.6 (2.9)	0.2 (48.6)	0.2 (39.3)
HHsize0	4.711 (1.40)			374.4 (67.4)	237.1 (79.0)	453.2 (60.6)	328.1 (70.4)
HadCattle × Large	0.024 (0.27)				23290.5 (3.4)		22674.3 (3.8)
HadCattle × Large × rd 3	0.008 (0.16)				12189.0 (19.7)		12189.0 (19.8)
HadCattle × Large × rd 4	0.008 (0.16)				4037.3 (73.9)		4037.3 (73.9)
HadCattle × LargeGrace	0.009 (0.25)				16681.5 (7.1)		15800.6 (7.8)
HadCattle × LargeGrace × rd 3	0.003 (0.15)				−8267.6 (40.8)		−8267.6 (40.8)
HadCattle × LargeGrace × rd 4	0.003 (0.15)				−20725.4 (5.8)		−20725.4 (5.8)
HadCattle × Cattle	−0.001 (0.24)				13610.2 (13.4)		13314.8 (13.9)
HadCattle × Cattle × rd 3	−0.000 (0.14)				7610.7 (37.6)		7610.7 (37.6)
HadCattle × Cattle × rd 4	−0.000 (0.14)				5133.7 (60.9)		5133.7 (60.9)
NumCattle0	0.468 (0.80)					5980.9 (38.2)	9274.6 (35.6)
mean of dependent variable		35662	35662	35662	35662	35662	35662
$\bar{R}^2$		0.054	0.135	0.142	0.164	0.142	0.165
N	1275	1275	1275	1275	1275	1275	1275

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Large, LargeGrace, Cattle are indicator variables of the large, large grace, and cattle arms, respectively. The default arm category is traditional arm. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets use only assets observed for all 4 rounds in household assets. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. *P* values in percentages in parentheses. Standard errors are clustered at group (village) level.

TABLE 132: ANCOVA ESTIMATION OF COMPLETE PANEL NET ASSETS BY ATTRIBUTES AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		32690.8 (0.0)	26060.0 (0.0)	22178.6 (0.0)	25062.9 (0.0)	22551.3 (0.0)	25783.7 (0.0)
Upfront	0.115 (0.34)	7341.4 (12.2)	7751.8 (9.6)	7019.2 (15.9)	3297.7 (37.2)	6986.2 (16.0)	3361.1 (36.8)
WithGrace	0.068 (0.50)	−10684.3 (5.6)	−10500.1 (3.2)	−9136.6 (6.7)	−8066.6 (4.7)	−9215.8 (6.5)	−8236.9 (4.1)
InKind	0.033 (0.45)	−3031.0 (45.9)	−1636.6 (64.8)	−1874.4 (55.3)	−1419.9 (59.6)	−1901.7 (54.8)	−1449.9 (58.5)
rd 3	0.333 (0.47)	1328.6 (45.4)	1328.6 (45.4)	1328.6 (45.5)	1549.2 (33.7)	1328.6 (45.5)	1549.2 (33.7)
Upfront × rd 3	0.288 (0.45)	3466.4 (55.6)	3466.4 (55.6)	3466.4 (55.6)	1651.4 (75.4)	3466.4 (55.7)	1651.4 (75.4)
WithGrace × rd 3	0.185 (0.39)	−872.5 (83.3)	−872.5 (83.3)	−872.5 (83.3)	1583.3 (67.6)	−872.5 (83.3)	1583.3 (67.6)
InKind × rd 3	0.093 (0.29)	−2216.5 (57.5)	−2216.5 (57.5)	−2216.5 (57.6)	−3824.4 (30.3)	−2216.5 (57.6)	−3824.4 (30.4)
rd 4	0.333 (0.47)	8740.3 (0.0)	8740.3 (0.0)	8740.3 (0.0)	9316.1 (0.0)	8740.3 (0.0)	9316.1 (0.0)
Upfront × rd 4	0.288 (0.45)	881.7 (88.8)	881.7 (88.8)	881.7 (88.8)	272.9 (96.1)	881.7 (88.8)	272.9 (96.1)
WithGrace × rd 4	0.185 (0.39)	4904.5 (29.0)	4904.5 (29.0)	4904.5 (29.1)	7613.6 (4.8)	4904.5 (29.1)	7613.6 (4.8)
InKind × rd 4	0.093 (0.29)	−3768.3 (32.4)	−3768.3 (32.4)	−3768.3 (32.4)	−6436.7 (6.3)	−3768.3 (32.5)	−6436.7 (6.3)
HadCattle	0.322 (0.47)				−8534.9 (30.1)		−10140.3 (28.1)
HadCattle × rd 3	0.107 (0.31)				−1952.5 (49.8)		−1952.5 (49.8)
HadCattle × rd 4	0.107 (0.31)				−5059.9 (17.4)		−5059.9 (17.4)
FloodInRd1	0.468 (0.50)			5143.7 (5.5)	6185.1 (1.4)	5116.1 (5.4)	6069.4 (1.3)
Head literate0	0.118 (0.32)			−2608.5 (39.1)	−2498.2 (39.2)	−2595.4 (39.4)	−2455.8 (40.0)
net asset value₁	12126.558 (16498.30)		0.5 (0.1)	0.5 (0.1)	0.6 (2.9)	0.2 (48.6)	0.2 (39.3)
HHsize0	4.711 (1.40)			374.4 (67.4)	237.1 (79.0)	453.2 (60.6)	328.1 (70.4)
HadCattle × Upfront	0.032 (0.21)				23290.5 (3.4)		22674.3 (3.8)
HadCattle × Upfront × rd 3	0.011 (0.12)				12189.0 (19.7)		12189.0 (19.8)
HadCattle × Upfront × rd 4	0.011 (0.12)				4037.3 (73.9)		4037.3 (73.9)
HadCattle × WithGrace	0.008 (0.28)				−6609.0 (43.1)		−6873.7 (41.5)
HadCattle × WithGrace × rd 3	0.003 (0.16)				−20456.5 (0.7)		−20456.5 (0.7)
HadCattle × WithGrace × rd 4	0.003 (0.16)				−24762.7 (2.2)		−24762.7 (2.2)
HadCattle × InKind	−0.001 (0.24)				−3071.2 (59.0)		−2485.8 (66.7)
HadCattle × InKind × rd 3	−0.000 (0.14)				15878.3 (1.5)		15878.3 (1.5)
HadCattle × InKind × rd 4	−0.000 (0.14)				25859.2 (0.2)		25859.2 (0.2)
NumCattle0	0.468 (0.80)					5980.9 (38.2)	9274.6 (35.6)
mean of dependent variable		35662	35662	35662	35662	35662	35662
$\bar{R}^2$		0.054	0.135	0.142	0.164	0.142	0.165
N	1275	1275	1275	1275	1275	1275	1275

Source: Estimated with GUK administrative and survey data.

Notes: 1. ANCOVA estimates using administrative and survey data. Post treatment regressands are regressed on categorical variables, pre-treatment regressand and other covariates. FloodInRd1 and HeadLiterate0 are indicator variables for the presence of self reported damage by a flood at the baseline, and literacy of household head, respectively. HHsize0 is household size at the baseline. We annotate the number of periods that a household is observed with T. The total number of households is shown for each values of T. T=4 indicates the number of households with complete panel information, T=3 indicates number of households observed three times, T=2 indicates the number of households observed twice. N indicates total number of observations used in ANCOVA estimation, or N=1×(T=2)+2×(T=3)+3×(T=4). Upfront is an indicator variable of the arm with an upfront large disbursement, WithGrace is an indicator variable of the arm with a grace period, InKind is an indicator variable of the arm which lends a heifer. rd2, rd3, rd4 are dummy variables for second, third, and fourth round of survey. Net assets use only assets observed for all 4 rounds in household assets. Household assets do not include livestock. Regressions (1)-(3), (5)-(6) use only arm and calendar information. (4) and (7) use previous six month repayment and saving information which is lacking in rd 1, hence starts from rd 2.

2. *P* values in percentages in parenthesises. Standard errors are clustered at group (village) level.

TABLE 133: ANCOVA ESTIMATION OF COMPLETE PANEL NET ASSETS BY ARM, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		31756.8 (0.0)	24762.5 (0.0)	18945.3 (0.1)	22197.8 (0.0)	19204.9 (0.1)	22794.3 (0.0)
Large	0.047 (0.46)	7833.7 (7.5)	8711.6 (4.0)	8308.0 (7.2)	4595.1 (17.9)	8270.1 (7.2)	4594.8 (18.1)
LargeGrace	0.035 (0.45)	−2556.1 (59.2)	−1582.8 (73.1)	−404.3 (93.1)	−3398.1 (32.5)	−489.9 (91.5)	−3515.6 (30.1)
Cattle	0.033 (0.45)	−5518.2 (8.4)	−3167.2 (37.3)	−2276.0 (54.3)	−4776.4 (9.3)	−2381.7 (52.2)	−4921.6 (8.3)
UltraPoor	0.595 (0.49)	−5705.5 (0.5)	−6017.0 (0.1)	−6556.0 (0.0)	−5553.3 (0.1)	−6524.8 (0.0)	−5483.9 (0.2)
Large × UltraPoor	0.030 (0.36)	−13993.8 (1.9)	−9623.3 (7.0)	−8019.0 (12.5)	−9947.7 (2.7)	−8050.6 (12.2)	−10021.0 (2.8)
LargeGrace × UltraPoor	0.037 (0.36)	7878.6 (19.1)	12027.1 (3.6)	14406.0 (1.7)	12087.4 (2.0)	14142.6 (1.8)	11557.4 (2.0)
Cattle × UltraPoor	0.021 (0.35)	4227.3 (42.8)	4325.6 (35.8)	6919.6 (13.0)	4718.7 (24.6)	6883.1 (13.0)	4629.2 (25.8)
rd 3	0.333 (0.47)	1453.3 (44.3)	1453.3 (44.4)	1453.3 (44.4)	1727.6 (32.3)	1453.3 (44.4)	1727.6 (32.3)
Large × rd 3	0.103 (0.30)	3615.2 (57.3)	3615.2 (57.3)	3615.2 (57.3)	1480.4 (80.0)	3615.2 (57.3)	1480.4 (80.1)
LargeGrace × rd 3	0.093 (0.29)	2727.3 (69.0)	2727.3 (69.0)	2727.3 (69.0)	3264.2 (59.9)	2727.3 (69.0)	3264.2 (59.9)
Cattle × rd 3	0.093 (0.29)	434.2 (94.5)	434.2 (94.5)	434.2 (94.5)	−684.3 (90.7)	434.2 (94.5)	−684.3 (90.7)
UltraPoor × rd 3	0.198 (0.40)	2202.8 (45.7)	2202.8 (45.7)	2202.8 (45.8)	2289.1 (44.1)	2202.8 (45.8)	2289.1 (44.1)
Large × UltraPoor × rd 3	0.010 (0.21)	9191.0 (32.2)	9191.0 (32.2)	9191.0 (32.3)	8959.0 (33.4)	9191.0 (32.3)	8959.0 (33.4)
LargeGrace × UltraPoor × rd 3	0.012 (0.21)	−6092.7 (54.9)	−6092.7 (54.9)	−6092.7 (55.0)	−8144.7 (41.5)	−6092.7 (55.0)	−8144.7 (41.6)
Cattle × UltraPoor × rd 3	0.007 (0.20)	4290.2 (62.3)	4290.2 (62.3)	4290.2 (62.3)	3073.9 (72.1)	4290.2 (62.4)	3073.9 (72.1)
rd 4	0.333 (0.47)	8866.4 (0.0)	8866.4 (0.0)	8866.4 (0.0)	9442.3 (0.0)	8866.4 (0.0)	9442.3 (0.0)
Large × rd 4	0.103 (0.30)	1153.1 (85.4)	1153.1 (85.5)	1153.1 (85.5)	219.4 (97.0)	1153.1 (85.5)	219.4 (97.0)
LargeGrace × rd 4	0.093 (0.29)	5667.8 (36.4)	5667.8 (36.4)	5667.8 (36.4)	7719.4 (17.9)	5667.8 (36.5)	7719.4 (17.9)
Cattle × rd 4	0.093 (0.29)	2094.2 (72.8)	2094.2 (72.8)	2094.2 (72.9)	1498.4 (79.3)	2094.2 (72.9)	1498.4 (79.4)
UltraPoor × rd 4	0.198 (0.40)	6552.4 (4.1)	6552.4 (4.1)	6552.4 (4.1)	6232.5 (5.3)	6552.4 (4.1)	6232.5 (5.3)
Large × UltraPoor × rd 4	0.010 (0.21)	16456.6 (13.3)	16456.6 (13.3)	16456.6 (13.4)	16289.4 (13.9)	16456.6 (13.4)	16289.4 (13.9)
LargeGrace × UltraPoor × rd 4	0.012 (0.21)	1430.3 (87.9)	1430.3 (87.9)	1430.3 (87.9)	−871.3 (92.8)	1430.3 (87.9)	−871.3 (92.8)
Cattle × UltraPoor × rd 4	0.007 (0.20)	6253.8 (42.3)	6253.8 (42.3)	6253.8 (42.4)	5556.5 (48.3)	6253.8 (42.4)	5556.5 (48.3)
HadCattle	0.322 (0.47)				−7780.4 (33.1)		−8969.0 (32.7)
HadCattle × rd 3	0.107 (0.31)				−2089.7 (46.6)		−2089.7 (46.6)
HadCattle × rd 4	0.107 (0.31)				−4962.1 (17.1)		−4962.1 (17.1)
FloodInRd1	0.468 (0.50)			5787.5 (3.5)	6578.5 (1.0)	5764.3 (3.4)	6483.8 (0.9)
Head literate0	0.118 (0.32)			−2795.3 (34.4)	−2757.5 (33.0)	−2782.3 (34.7)	−2716.8 (33.6)
net asset value₁	12126.558 (16498.30)		0.5 (0.1)	0.5 (0.2)	0.6 (3.6)	0.3 (27.0)	0.3 (23.4)
HHsize0	4.711 (1.40)			634.3 (45.6)	488.5 (57.2)	681.8 (42.1)	551.8 (51.2)
HadCattle × Large	0.024 (0.27)				20591.8 (5.1)		20198.1 (5.3)
HadCattle × Large × rd 3	0.008 (0.16)				13344.3 (15.0)		13344.3 (15.0)
HadCattle × Large × rd 4	0.008 (0.16)				5767.9 (62.3)		5767.9 (62.3)
HadCattle × LargeGrace	0.009 (0.25)				16036.0 (7.8)		15410.2 (8.2)
HadCattle × LargeGrace × rd 3	0.003 (0.15)				−8631.0 (39.1)		−8631.0 (39.1)
HadCattle × LargeGrace × rd 4	0.003 (0.15)				−20570.1 (6.5)		−20570.1 (6.5)
HadCattle × Cattle	−0.001 (0.24)				12984.8 (14.0)		12782.6 (14.4)
HadCattle × Cattle × rd 3	−0.000 (0.14)				7096.7 (40.6)		7096.7 (40.6)
HadCattle × Cattle × rd 4	−0.000 (0.14)				4180.5 (68.0)		4180.5 (68.1)
NumCattle0	0.468 (0.80)					3685.6 (58.1)	6757.2 (48.9)
mean of dependent variable		35662	35662	35662	35662	35662	35662
$\bar{R}^2$		0.08	0.158	0.169	0.187	0.169	0.187

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TABLE 134: ANCOVA ESTIMATION OF COMPLETE PANEL NET ASSETS BY ATTRIBUTES, POVERTY STATUS, AND PERIOD

covariates	mean/std	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)		31756.8 (0.0)	24762.5 (0.0)	18945.3 (0.1)	22197.8 (0.0)	19204.9 (0.1)	22794.3 (0.0)
Upfront	0.115 (0.34)	7833.7 (7.5)	8711.6 (4.0)	8308.0 (7.2)	4595.1 (17.9)	8270.1 (7.2)	4594.8 (18.1)
WithGrace	0.068 (0.50)	−10389.8 (4.0)	−10294.4 (1.8)	−8712.3 (5.1)	−7993.3 (2.8)	−8760.0 (5.0)	−8110.4 (2.4)
InKind	0.033 (0.45)	−2962.0 (46.4)	−1584.4 (65.4)	−1871.7 (53.9)	−1378.3 (59.8)	−1891.8 (53.5)	−1406.0 (58.8)
UltraPoor	0.595 (0.49)	−5705.5 (0.5)	−6017.0 (0.1)	−6556.0 (0.0)	−5553.3 (0.1)	−6524.8 (0.0)	−5483.9 (0.2)
Upfront × UltraPoor	0.089 (0.25)	−13993.8 (1.9)	−9623.3 (7.0)	−8019.0 (12.5)	−9947.7 (2.7)	−8050.6 (12.2)	−10021.0 (2.8)
WithGrace × UltraPoor	0.058 (0.38)	21872.4 (0.0)	21650.3 (0.0)	22425.0 (0.0)	22035.1 (0.0)	22193.3 (0.0)	21578.4 (0.0)
InKind × UltraPoor	0.021 (0.35)	−3651.3 (49.9)	−7701.4 (16.1)	−7486.4 (17.2)	−7368.7 (17.9)	−7259.6 (17.7)	−6928.2 (18.7)
rd 3	0.333 (0.47)	1453.3 (44.3)	1453.3 (44.4)	1453.3 (44.4)	1727.6 (32.3)	1453.3 (44.4)	1727.6 (32.3)
UltraPoor × rd 3	0.198 (0.40)	2202.8 (45.7)	2202.8 (45.7)	2202.8 (45.8)	2289.1 (44.1)	2202.8 (45.8)	2289.1 (44.1)
Upfront × rd 3	0.288 (0.45)	3615.2 (57.3)	3615.2 (57.3)	3615.2 (57.3)	1480.4 (80.0)	3615.2 (57.3)	1480.4 (80.1)
WithGrace × rd 3	0.185 (0.39)	−887.9 (83.1)	−887.9 (83.1)	−887.9 (83.1)	1783.8 (63.8)	−887.9 (83.1)	1783.8 (63.8)
InKind × rd 3	0.093 (0.29)	−2293.0 (57.1)	−2293.0 (57.1)	−2293.0 (57.2)	−3948.5 (29.9)	−2293.0 (57.2)	−3948.5 (29.9)
Upfront × UltraPoor × rd 3	0.030 (0.15)	9191.0 (32.2)	9191.0 (32.2)	9191.0 (32.3)	8959.0 (33.4)	9191.0 (32.3)	8959.0 (33.4)
WithGrace × UltraPoor × rd 3	0.019 (0.22)	−15283.7 (5.7)	−15283.7 (5.7)	−15283.7 (5.7)	−17103.7 (3.7)	−15283.7 (5.7)	−17103.7 (3.7)
InKind × UltraPoor × rd 3	0.007 (0.20)	10382.9 (15.9)	10382.9 (15.9)	10382.9 (16.0)	11218.6 (13.1)	10382.9 (16.0)	11218.6 (13.1)
rd 4	0.333 (0.47)	8866.4 (0.0)	8866.4 (0.0)	8866.4 (0.0)	9442.3 (0.0)	8866.4 (0.0)	9442.3 (0.0)
UltraPoor × rd 4	0.198 (0.40)	6552.4 (4.1)	6552.4 (4.1)	6552.4 (4.1)	6232.5 (5.3)	6552.4 (4.1)	6232.5 (5.3)
Upfront × rd 4	0.288 (0.45)	1153.1 (85.4)	1153.1 (85.5)	1153.1 (85.5)	219.4 (97.0)	1153.1 (85.5)	219.4 (97.0)
WithGrace × rd 4	0.185 (0.39)	4514.7 (28.8)	4514.7 (28.8)	4514.7 (28.9)	7500.1 (3.7)	4514.7 (28.9)	7500.1 (3.7)
InKind × rd 4	0.093 (0.29)	−3573.6 (35.4)	−3573.6 (35.4)	−3573.6 (35.5)	−6221.1 (7.7)	−3573.6 (35.5)	−6221.1 (7.7)
Upfront × UltraPoor × rd 4	0.030 (0.15)	16456.6 (13.3)	16456.6 (13.3)	16456.6 (13.4)	16289.4 (13.9)	16456.6 (13.4)	16289.4 (13.9)
WithGrace × UltraPoor × rd 4	0.019 (0.22)	−15026.4 (12.9)	−15026.4 (12.9)	−15026.4 (13.0)	−17160.7 (8.4)	−15026.4 (13.0)	−17160.7 (8.4)
InKind × UltraPoor × rd 4	0.007 (0.20)	4823.5 (43.9)	4823.5 (43.9)	4823.5 (44.0)	6427.9 (31.0)	4823.5 (44.0)	6427.9 (31.0)
HadCattle	0.322 (0.47)				−7780.4 (33.1)		−8969.0 (32.7)
HadCattle × rd 3	0.107 (0.31)				−2089.7 (46.6)		−2089.7 (46.6)
HadCattle × rd 4	0.107 (0.31)				−4962.1 (17.1)		−4962.1 (17.1)
FloodInRd1	0.468 (0.50)			5787.5 (3.5)	6578.5 (1.0)	5764.3 (3.4)	6483.8 (0.9)
Head literate0	0.118 (0.32)			−2795.3 (34.4)	−2757.5 (33.0)	−2782.3 (34.7)	−2716.8 (33.6)
net asset value₁	12126.558 (16498.30)		0.5 (0.1)	0.5 (0.2)	0.6 (3.6)	0.3 (27.0)	0.3 (23.4)
HHsize0	4.711 (1.40)			634.3 (45.6)	488.5 (57.2)	681.8 (42.1)	551.8 (51.2)
HadCattle × Upfront	0.032 (0.21)				20591.8 (5.1)		20198.1 (5.3)
HadCattle × Upfront × rd 3	0.011 (0.12)				13344.3 (15.0)		13344.3 (15.0)
HadCattle × Upfront × rd 4	0.011 (0.12)				5767.9 (62.3)		5767.9 (62.3)
HadCattle × WithGrace	0.008 (0.28)				−4555.9 (57.6)		−4787.8 (55.9)
HadCattle × WithGrace × rd 3	0.003 (0.16)				−21975.3 (0.4)		−21975.3 (0.4)
HadCattle × WithGrace × rd 4	0.003 (0.16)				−26338.0 (1.0)		−26338.0 (1.0)
HadCattle × InKind	−0.001 (0.24)				−3051.1 (60.3)		−2627.6 (65.6)
HadCattle × InKind × rd 3	−0.000 (0.14)				15727.7 (1.9)		15727.7 (1.9)
HadCattle × InKind × rd 4	−0.000 (0.14)				24750.6 (0.3)		24750.6 (0.3)
NumCattle0	0.468 (0.80)		290			3685.6 (58.1)	6757.2 (48.9)
mean of dependent variable		35662	35662	35662	35662	35662	35662
$\bar{R}^2$		0.08	0.158	0.169	0.187	0.169	0.187

V Summarising results

V.1 Counting observations used in ANCOVA estimation

```
     survey        Arm              BStatus   Num      N
     <num>       <fctr>              <fctr> <int>  <int>
 1:       1 traditional           borrower     1    109
 2:       2 traditional           borrower     1    108
 3:       3 traditional           borrower     1    108
 4:       4 traditional           borrower     1    107
 5:       1 traditional individual rejection   1     30
 6:       2 traditional individual rejection   1     26
 7:       3 traditional individual rejection   1     26
 8:       4 traditional individual rejection   1     25
 9:       1 traditional      group rejection   1     40
10:       2 traditional      group rejection   1     39
11:       3 traditional      group rejection   1     36
12:       4 traditional      group rejection   1     36
13:       1 traditional   rejection by flood   1     20
14:       2 traditional   rejection by flood   1     17
15:       3 traditional   rejection by flood   1     18
16:       1       large           borrower     1    170
17:       2       large           borrower     1    162
18:       3       large           borrower     1    164
19:       4       large           borrower     1    163
20:       1       large individual rejection   1      9
21:       2       large individual rejection   1      8
22:       3       large individual rejection   1      9
23:       4       large individual rejection   1      9
24:       1       large      group rejection   1     20
25:       2       large      group rejection   1     20
26:       3       large      group rejection   1     19
27:       4       large      group rejection   1     19
28:       1 large grace           borrower     1    166
29:       2 large grace           borrower     1    162
30:       3 large grace           borrower     1    162
31:       4 large grace           borrower     1    159
32:       1 large grace individual rejection   1     13
33:       2 large grace individual rejection   1      9
34:       3 large grace individual rejection   1     11
35:       4 large grace individual rejection   1     11
36:       1 large grace      group rejection   1     10
37:       1 large grace   rejection by flood   1     10
38:       1      cattle           borrower     1    152
39:       2      cattle           borrower     1    150
40:       3      cattle           borrower     1    149
41:       4      cattle           borrower     1    146
42:       1      cattle individual rejection   1     37
43:       2      cattle individual rejection   1     29
44:       3      cattle individual rejection   1     30
45:       4      cattle individual rejection   1     30
46:       1      cattle   rejection by flood   1     10
47:       2      cattle   rejection by flood   1     10
48:       3      cattle   rejection by flood   1     10
     survey        Arm              BStatus   Num      N
```

```
     Arm    hhid    tee MaxTee AttritIn            BStatus creditstatus
   <fctr>  <num> <int>  <int>   <int>             <fctr>       <fctr>
```

```
1: cattle 7054319     1     3       9 individual rejection          No
      Mgroup
      <fctr>
1: drop outs
```

```
          Arm        TradGroup              BStatus        hhid      survey
 traditional:5  planned:0  borrower           :1  Min.   : 7031513  1:4
 large      :0  twice  :0  pure saver         :0  1st Qu.: 7054408  3:1
 large grace:0  double :0  individual rejection:0  Median : 7054413
 cattle     :0  NA's   :5  group rejection    :0  Mean   :36912148
                           rejection by flood :4  3rd Qu.:81710203
                                                  Max.   :81710203


 NLAssetAmount
 Min.   :1960
 1st Qu.:2780
 Median :3600
 Mean   :4040
 3rd Qu.:5080
 Max.   :6560
 NA's   :2
```

```
          Arm            BStatus      hhid survey NumCows
       <fctr>             <fctr>     <num>  <num>   <int>
1: traditional          borrower  7031513      1       1
2: traditional rejection by flood  7054408      1       0
3: traditional rejection by flood  7054413      1       0
4: traditional rejection by flood 81710203      1       2
5: traditional rejection by flood 81710203      3       2
```

```
Key: <hhid, tee>
Empty data.table (0 rows and 3 cols): BStatus,hhid,tee
```

```
    survey              BStatus  Num    N
    <num>               <fctr> <int> <int>
 1:      1             borrower     1   102
 2:      2             borrower     1   106
 3:      3             borrower     1   108
 4:      4             borrower     1   107
 5:      1 individual rejection     1    28
 6:      2 individual rejection     1    26
 7:      3 individual rejection     1    26
 8:      4 individual rejection     1    25
 9:      1      group rejection     1    35
10:      2      group rejection     1    39
11:      3      group rejection     1    36
12:      4      group rejection     1    36
13:      1   rejection by flood     1    19
14:      2   rejection by flood     1    17
15:      3   rejection by flood     1    18
```

```
          used   (Mb) gc trigger   (Mb) limit (Mb)  max used    (Mb)
Ncells  3211802  171.6    4711329  251.7         NA   4711329   251.7
Vcells 618591514 4719.5  911587133 6954.9      56320 911585152 6954.9
```

```
[1] 1
```

```
[1] 10
```

```
Warning in rbind(c("", "&", rbind(paste0("\\makebox[", hcenter, unit, "]{", : number of co
```

```
Warning in rbind(c("", "&", rbind(paste0("\\makebox[", hcenter, unit, "]{", : number of co
```

```
Warning in rbind(c("", "&", rbind(paste0("\\makebox[", hcenter, unit, "]{", : number of co
```

TABLE 135: NUMBER OF OBSERVATIONS BY BORROWER STATUS AND ARM

		(a)	(c)	(d)	(e)	(f)
File	BStatus	traditional	large	large grace	cattle	sum
Schooling	borrower	101	224	205	183	713
	individual rejection	23	9	16	41	89
	group rejection	54	13	17	0	84
	rejection by flood	27	0	13	11	51
	sum	205	246	251	235	937
AllMeetingsRepayment	borrower	85	170	166	152	573
	individual rejection	30	9	13	37	89
	group rejection	40	20	10	0	70
	rejection by flood	20	0	10	10	40
	sum	175	199	199	199	772
Repayment	borrower	85	170	166	152	573
	individual rejection	30	9	13	37	89
	group rejection	39	20	9	0	68
	rejection by flood	20	0	10	10	40
	sum	174	199	198	199	770
Asset	borrower	85	170	165	152	572
	individual rejection	30	9	13	37	89
	group rejection	40	20	0	0	60
	rejection by flood	20	0	10	10	40
	sum	175	199	188	199	761
Livestock	borrower	85	170	166	152	573
	individual rejection	30	9	13	37	89
	group rejection	40	20	10	0	70
	rejection by flood	20	0	10	10	40
	sum	175	199	199	199	772
LivestockLong	borrower	85	170	166	152	573
	individual rejection	30	9	13	37	89
	group rejection	40	20	10	0	70
	rejection by flood	20	0	10	10	40
	sum	175	199	199	199	772
LivestockProducts	borrower	9	38	24	23	94
	individual rejection	2	0	0	2	4
	group rejection	0	8	0	0	8
	rejection by flood	1	0	0	0	1
	sum	12	46	24	25	107
LabourIncome	borrower	84	165	165	151	565
	individual rejection	27	9	11	33	80
	group rejection	39	19	0	0	58
	rejection by flood	18	0	0	10	28
	sum	168	193	176	194	731
FarmIncome	borrower	169	335	331	303	1138
	individual rejection	57	18	24	70	169
	group rejection	79	40	10	0	129
	rejection by flood	38	0	10	20	68
	sum	343	393	375	393	1504

Source: Survey data.

Note:

		(a)	(c)	(d)	(e)	(f)
			(b			
File	BStatus	traditional	large	large grace	cattle	sum
Schooling	borrower	79	160	156	139	534
Schooling	individual rejection	15	5	4	26	50
Schooling	group rejection	45	10	0	0	55
Schooling	rejection by flood	17	0	0	10	27
Schooling	sum	156	175	160	175	666
Repayment	borrower	76	120	112	91	399
Repayment	individual rejection	0	0	0	0	0
Repayment	group rejection	0	0	0	0	0
Repayment	rejection by flood	0	0	0	0	0
Repayment	sum	76	120	112	91	399
Asset	borrower	84	166	166	152	568
Asset	individual rejection	27	9	11	33	80
Asset	group rejection	39	20	0	0	59
Asset	rejection by flood	18	0	0	10	28
Asset	sum	168	195	177	195	735
AssetRobustness	borrower	39	108	96	78	321
AssetRobustness	individual rejection	12	3	7	23	45
AssetRobustness	group rejection	28	9	0	0	37
AssetRobustness	rejection by flood	10	0	0	6	16
AssetRobustness	sum	89	120	103	107	419
Land	borrower	55	107	103	88	353
Land	individual rejection	14	4	3	11	32
Land	group rejection	15	33	0	0	48
Land	rejection by flood	8	0	0	0	8
Land	sum	92	144	106	99	441
Livestock	borrower	83	165	164	151	563
Livestock	individual rejection	25	9	11	28	73
Livestock	group rejection	36	19	10	0	65
Livestock	rejection by flood	18	0	0	9	27
Livestock	sum	162	193	185	188	728
NumCows	borrower	59	120	126	129	434
NumCows	individual rejection	13	4	6	17	40
NumCows	group rejection	16	18	10	0	44
NumCows	rejection by flood	7	0	0	7	14
NumCows	sum	95	142	142	153	532
AssetLivestock	borrower	73	150	149	147	519
AssetLivestock	individual rejection	21	5	10	25	61
AssetLivestock	group rejection	32	19	0	0	51
AssetLivestock	rejection by flood	16	0	0	8	24
AssetLivestock	sum	142	174	159	180	655
NetAssetGUK	borrower	33	104	90	75	302
NetAssetGUK	individual rejection	10	2	6	17	35
NetAssetGUK	group rejection	24	9	0	0	33
NetAssetGUK	rejection by flood	8	0	0	5	13
NetAssetGUK	sum	75	115	96	97	383
NetAsset	borrower	73	150	149	147	519
NetAsset	individual rejection	21	5	10	25	61
NetAsset	group rejection	32	19	0	0	51
NetAsset	rejection by flood	16	0	0	8	24
NetAsset	sum	142	174	159	180	655
LabourIncome	borrower	99	194	194	177	664
LabourIncome	individual rejection	27	11	12	31	81
LabourIncome	group rejection	47	21	0	0	68
LabourIncome	rejection by flood	19	0	0	14	33
LabourIncome	sum	192	226	206	222	846
FarmIncome	borrower	4	24	13	10	51
FarmIncome	individual rejection	0	0	0	0	0
FarmIncome	group rejection	0	2	0	0	2
FarmIncome	rejection by flood	0	0	0	0	0
FarmIncome	sum	4	26	13	10	53
Consumption	borrower	84	163	162	149	558
Consumption	individual rejection	26	9	11	30	76
Consumption	group rejection	36	18	0	0	54
Consumption	rejection by flood	17	0	0	10	27
Consumption	sum	163	190	173	189	715

Source: Survey data.

Note:

|		(a)	(c)	(d)	(e)	(f)
File	BStatus	(b) traditional	large	large grace	cattle	sum
Schooling	borrower	65	142	134	112	453
Schooling	individual rejection	11	6	2	22	41
Schooling	group rejection	38	9	0	0	47
Schooling	rejection by flood	0	0	0	0	0
Schooling	sum	114	157	136	134	541
Repayment	borrower	85	170	166	152	573
Repayment	individual rejection	0	0	0	0	0
Repayment	group rejection	0	0	0	0	0
Repayment	rejection by flood	0	0	0	0	0
Repayment	sum	85	170	166	152	573
Asset	borrower	83	161	155	145	544
Asset	individual rejection	24	8	9	26	67
Asset	group rejection	36	19	0	0	55
Asset	rejection by flood	0	0	0	0	0
Asset	sum	143	188	164	171	666
AssetRobustness	borrower	38	106	93	75	312
AssetRobustness	individual rejection	10	3	6	17	36
AssetRobustness	group rejection	28	9	0	0	37
AssetRobustness	rejection by flood	0	0	0	0	0
AssetRobustness	sum	76	118	99	92	385
Land	borrower	49	100	93	68	310
Land	individual rejection	9	4	3	9	25
Land	group rejection	15	30	0	0	45
Land	rejection by flood	0	0	0	0	0
Land	sum	73	134	96	77	380
Livestock	borrower	70	144	135	139	488
Livestock	individual rejection	16	4	7	21	48
Livestock	group rejection	28	18	0	0	46
Livestock	rejection by flood	0	0	0	0	0
Livestock	sum	114	166	142	160	582
NumCows	borrower	59	126	116	128	429
NumCows	individual rejection	12	3	4	12	31
NumCows	group rejection	20	16	0	0	36
NumCows	rejection by flood	0	0	0	0	0
NumCows	sum	91	145	120	140	496
AssetLivestock	borrower	70	144	135	139	488
AssetLivestock	individual rejection	16	4	7	21	48
AssetLivestock	group rejection	28	18	0	0	46
AssetLivestock	rejection by flood	0	0	0	0	0
AssetLivestock	sum	114	166	142	160	582
NetAssetGUK	borrower	31	100	85	71	287
NetAssetGUK	individual rejection	7	1	5	14	27
NetAssetGUK	group rejection	21	9	0	0	30
NetAssetGUK	rejection by flood	0	0	0	0	0
NetAssetGUK	sum	59	110	90	85	344
NetAsset	borrower	70	144	135	139	488
NetAsset	individual rejection	16	4	7	21	48
NetAsset	group rejection	28	18	0	0	46
NetAsset	rejection by flood	0	0	0	0	0
NetAsset	sum	114	166	142	160	582
LabourIncome	borrower	103	208	196	172	679
LabourIncome	individual rejection	26	12	13	35	86
LabourIncome	group rejection	46	23	0	0	69
LabourIncome	rejection by flood	0	0	0	0	0
LabourIncome	sum	175	243	209	207	834
FarmIncome	borrower	NA	1	NA	NA	1
FarmIncome	individual rejection	NA	0	NA	NA	0
FarmIncome	group rejection	NA	0	NA	NA	0
FarmIncome	rejection by flood	NA	0	NA	NA	0
FarmIncome	sum	NA	1	NA	NA	1
Consumption	borrower	83	161	155	145	544
Consumption	individual rejection	24	8	9	26	67
Consumption	group rejection	36	18	0	0	54
Consumption	rejection by flood	0	0	0	0	0
Consumption	sum	143	187	164	171	665

Source: Survey data.

Note:

V.2 IGA

IGA info is from c:/data/GUK/received/cleaned_by_RA/GUKAdminstrativeData.dta.

In traditional arm, there are 33 borrowing members who report cattle as their first IGA, and 76 borrowing members (69.72%) who report other than cattle as their first IGA. This contrasts with the non-traditional arms that 466 borrowing members who report cattle as their first IGA and 25 borrowing members (5.09%) other than cattle as their first IGA.
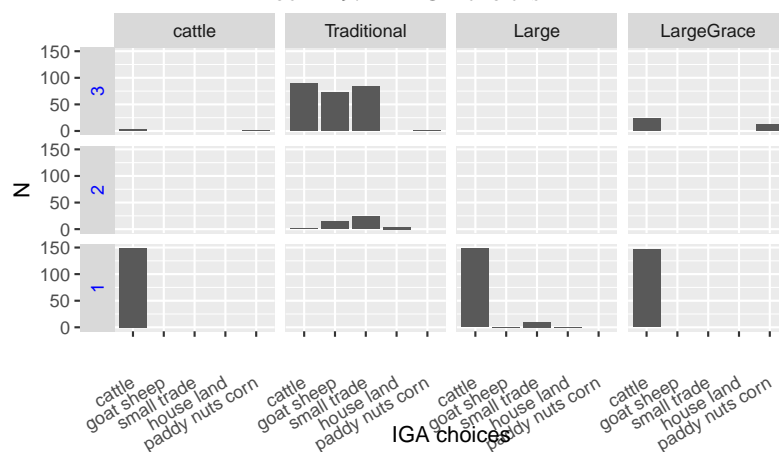
FIGURE 28: FIRST IGA CHOICES
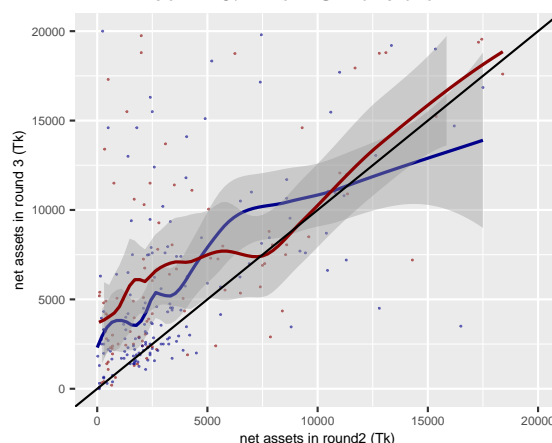
Source: Survey data.

Note: The first income generating activity (IGA) choices are plotted. The rows headed by '$n = 1, 2, 3$' indicate there are n project(s) owned by the household, and displayed type of project on the horizontal axis shows the contents of first project that was invested.

FIGURE 29: ALL IGA CHOICES

Source: Survey data.

Note:

FIGURE 30: ALL IGA CHOICES (COLLAPSED VIEW)
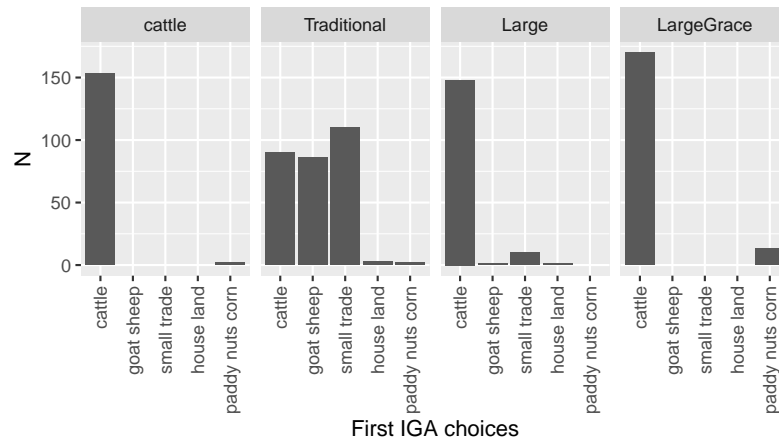
Source: Survey data.

Note:

V.3 Graphs

Cumulative impacts relative to traditional up to t is given by $(\text{Intercept}) + b_{\text{Arm}} + b_t + b_{\text{Arm}*t}$. This is given by Intercept+Arm+TimeX+Arm.TimeX. For the traditional arm, it is given by $(\text{Intercept}) + b_t$.

Need to run construct confi manually and run EstimationMemo.rnw again to draw error bar charts. To compute linear functions of estimated parameters, we use a vector hypvec giving linear combinations, covariance matrix of the regression thisV, and run *Wald* tests with:

```
glht(model=thisreg, linfct = matrix(hypvec, byrow = T, nrow=1),
    alternative="two.sided", vcov.=thisV)
```

Object	What it does	Note
hypvecT0	Picks covariates to test overall change. `"\\(Intercept\\)"`	
hypvecN0	Baseline level for each arm. `"\\(Intercept\\)"`, `"dummyInKind"`	
hypvecN1	Difference of baseline Arm relative to baseline trad. `"dummyInKind"`	
hypvecTinT	Picks covariates to test changes in period t relative to baseline. `"Time.4"`	
hypvec	Collects all coefficients by far to compute cumulative sums. `\\(Intercept\\) + Time.T`	hypvec < − hypvecT0 + hypvecTinT
hypvecNinT	Picks covariates to test changes in period t relative to baseline trad. `"Time.4"`, `"dummyInKind.Time4"`	Use this if baseline trad is the reference.
dhypvecNinT	Difference relative to concurrent trad. `"dummyInKind.Time4"`	Marginal difference between g and trad in period T.
cumNrelativeT	Cumulative difference relative to concurrent trad. `"dummyInKind.Time2"+"dummyInKind.Time3" +"dummyInKind.Time4"`	cumstrings adds dummyInKind.TimeX as period loops goes, with paste(cumstrings, paste0("ˆ", covadd.nontrad[[i]][2], "\$"), sep = "—")
periNrelativeT	Periodwise difference relative to concurrent trad. `"dummyInKind"+"dummyInKind.TimeX"`	Total difference between g and trad in time X. Period X effects relative to trad in perid X. "dummyInKind" is stored in peristrings at hypvecN1
hypvecN2	Nontrad gross mean in period t. `\\(Intercept\\)+TimeX+TimeX.Arm =hypvecT0 + hypvecNinT`	Baseline trad + change relative to baseline trad.

```
                 regressand
attributes     land net non livestock assets net assets cattle
  Large/Upfront   15                        15             15      9
```

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```
LargeGrace        15                          15        15        9
Cattle            15                          15        15        9
WithGrace         15                          15        15        9
InKind            15                          15        15        9
```

```
          OwnCattle
AdiCattle    0    1 <NA> Sum
     0     521  141    0 662
     1     112    0    0 112
   <NA>      0    0    1   1
    Sum    633  141    1 775
```

FIGURE 31: ASSETS BY PERIOD
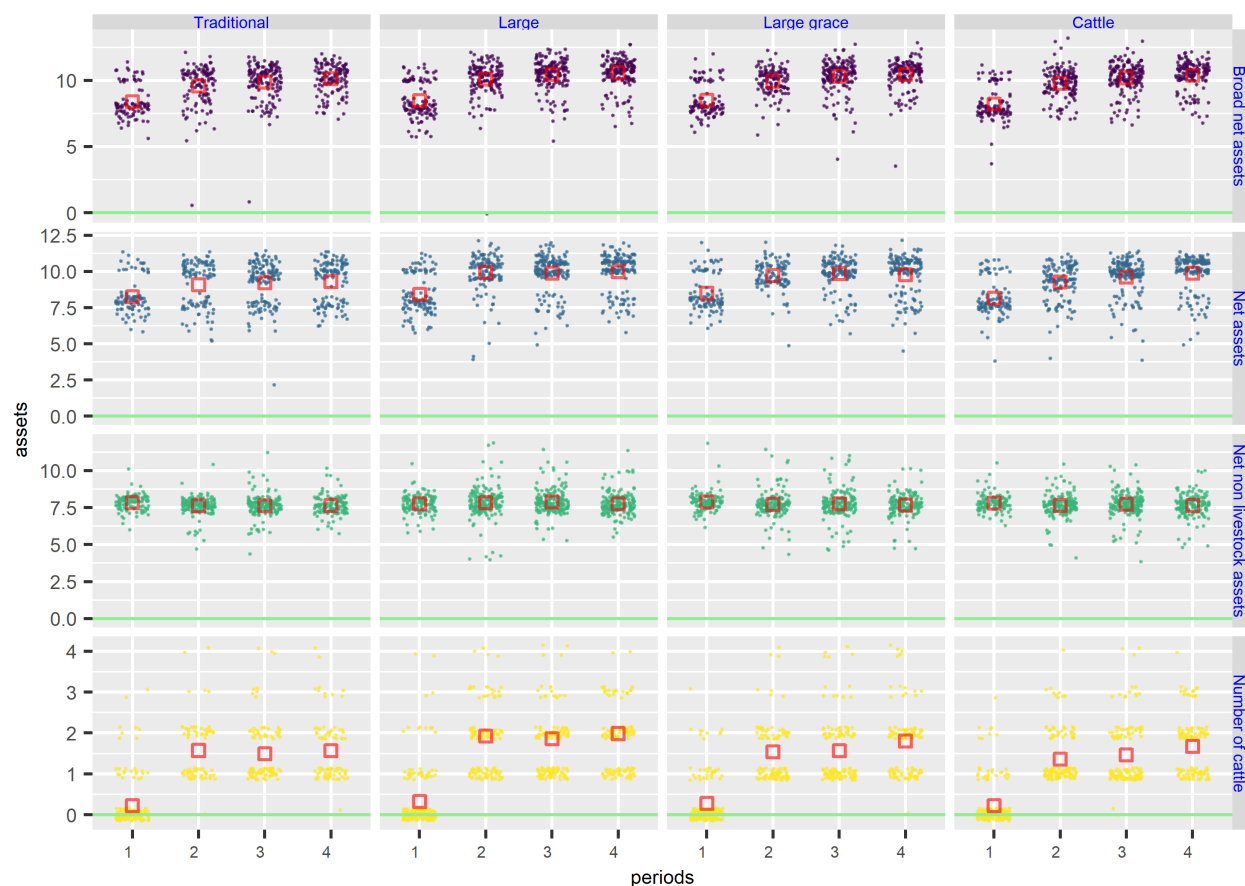
Source: Tabulated with survey data.

Note: Red squares are means of respective data. Asset values are expressed in BDT. Net assets=total assets - debts. Debts include outstanding loaned amount of the experiment. Total assets use items observed in all 4 rounds of household surveys. Net non livestock assets=net assets-livestock asset values. Number of cattle is a headcount of cattle holding. All net assets are in logarithms, number of cattle is in natural numbers.

FIGURE 32: ASSETS BY PERIOD AMONG OUT OF SAMPLE MEMBERS
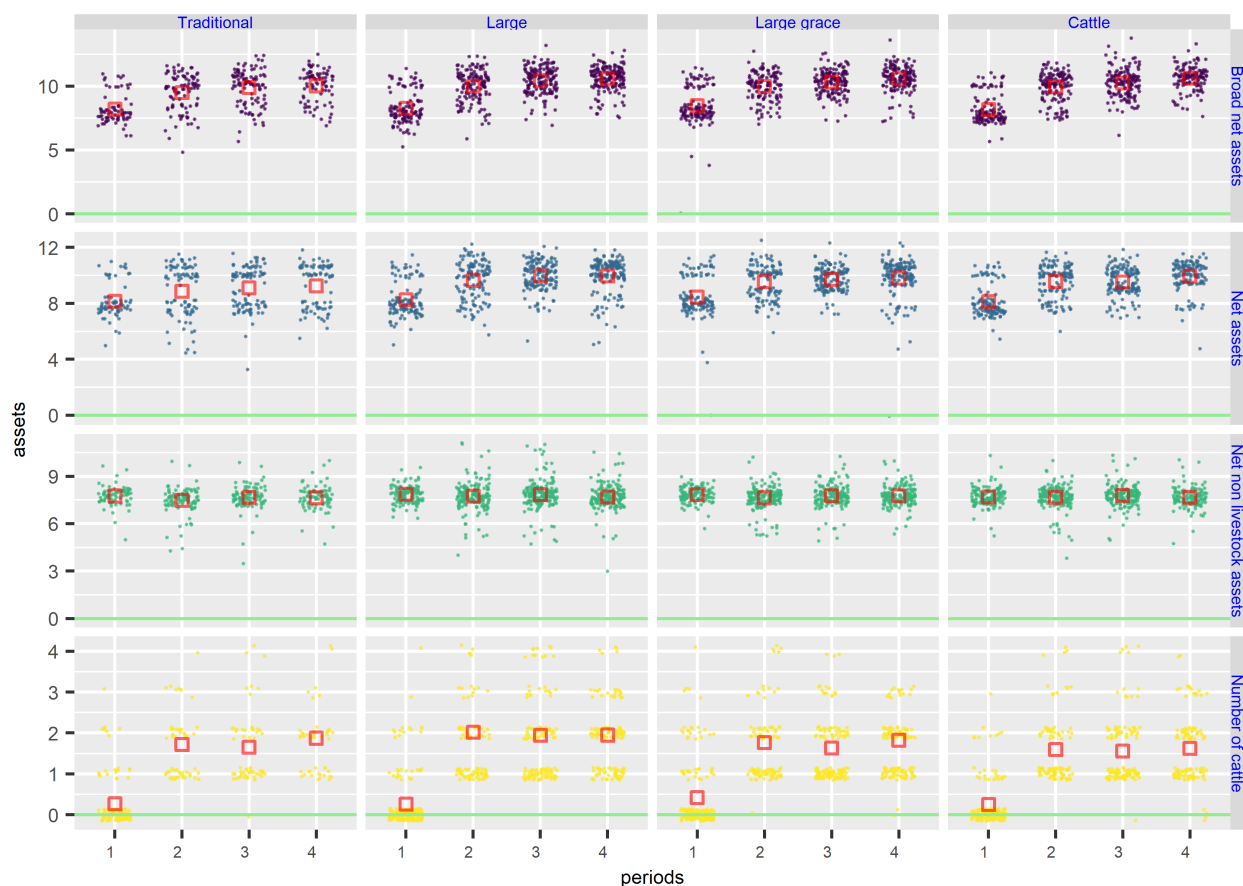
Source: Tabulated with survey data. Out of sample members are households who were not a part of 800 members and treated with the same intervention arms as in our experiment.

Note: Red squares are means of respective data. Asset values are expressed in BDT. Net assets=total assets - debts. Debts include outstanding loaned amount of the experiment. Total assets use items observed in all 4 rounds of household surveys. Net non livestock assets=net assets-livestock asset values. Number of cattle is a headcount of cattle holding. All net assets are in logarithms, number of cattle is in natural numbers.

FIGURE 33: NET ASSETS BY PERIOD
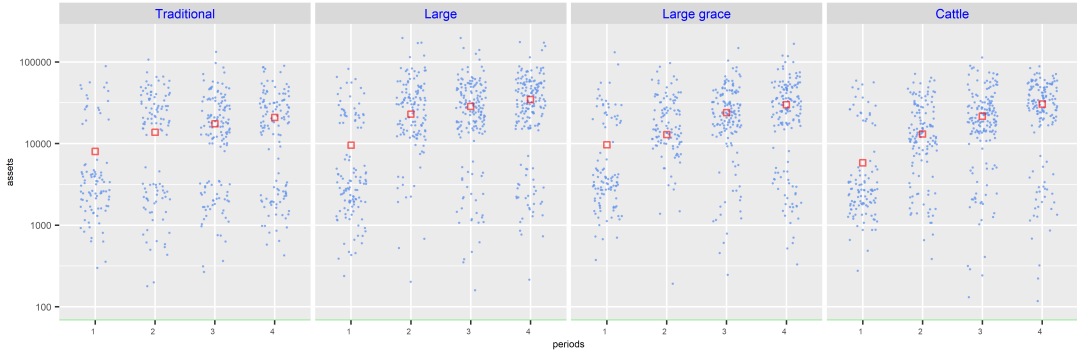
Source: Tabulated with survey data.

Note: Red squares are means of respective data. Net assets are in logarithms.

FIGURE 34: CUMULATIVE IMPACTS ON NET ASSETS RELATIVE TO CONCURRENT TRADITIONAL ARM
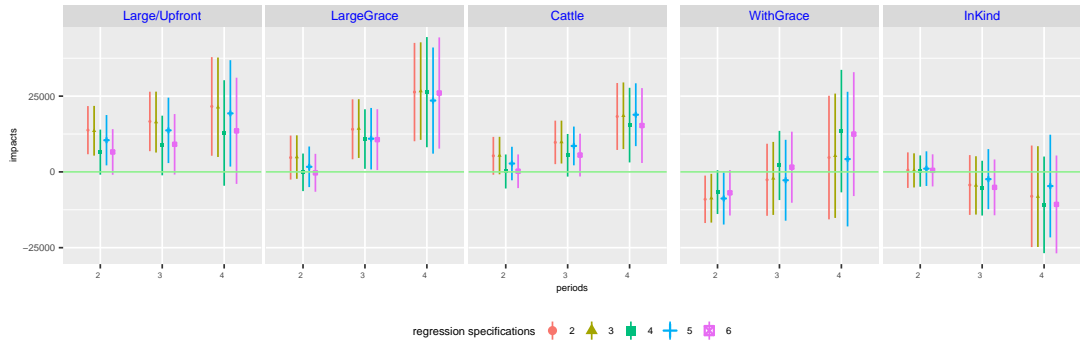
Source: Estimated with survey data.

Note: Cumulative impacts on net assets. Large/Upfront, Large grace, Cattle are impacts relative to Traditional arm. WithGrace
            and InKind are the impacts of respective marginal functional attributes. Panels show cumulative impacts of respective arm
            or attributes k relative to tradiotional arm which are obtained by 2nd period = b_{2k}, 3rd period = $b_{2k} + b_{3k}$, 4th period =
            $b_{2k} + b_{4k}$ in the estimating equation $y_{it} = b_1 y_{i1} + b_2 + \boldsymbol{b}_2' \mathbf{d}_i + b_3 c_{3t} + \boldsymbol{b}_3' \mathbf{d}_i c_{3t} + b_4 c_{4t} + \boldsymbol{b}_4' \mathbf{d}_i c_{4t} + e_{it}$, $t = 2, 3, 4$, where y_{it} is
            the outcome measure of member i in period t, $\mathbf{d}_i$ is a vector of arms or functional attributes, c_{3t}, c_{4t} are indicator variables
            of period 3 and 4. Bars show 95% confidence intervals using cluster robust standard errors. Asset values are expressed in
            Taka. Net assets=total assets - debts. Debts include outstanding loaned amount of the experiment. Total assets use items
            observed in all 4 rounds of household surveys.
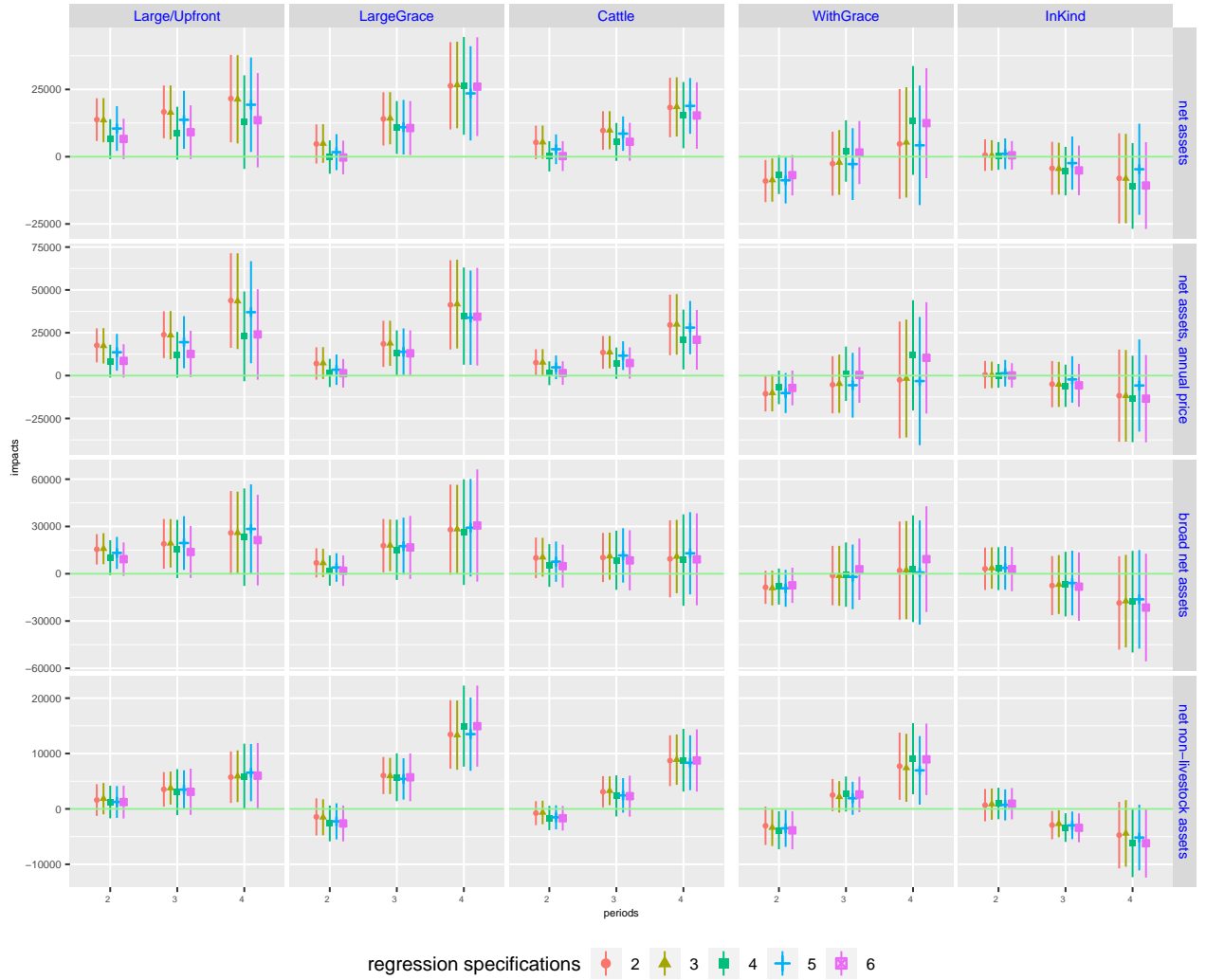
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FIGURE 35: CUMULATIVE IMPACTS ON VARIOUS ASSETS RELATIVE TO CONCURRENT TRADITIONAL ARM
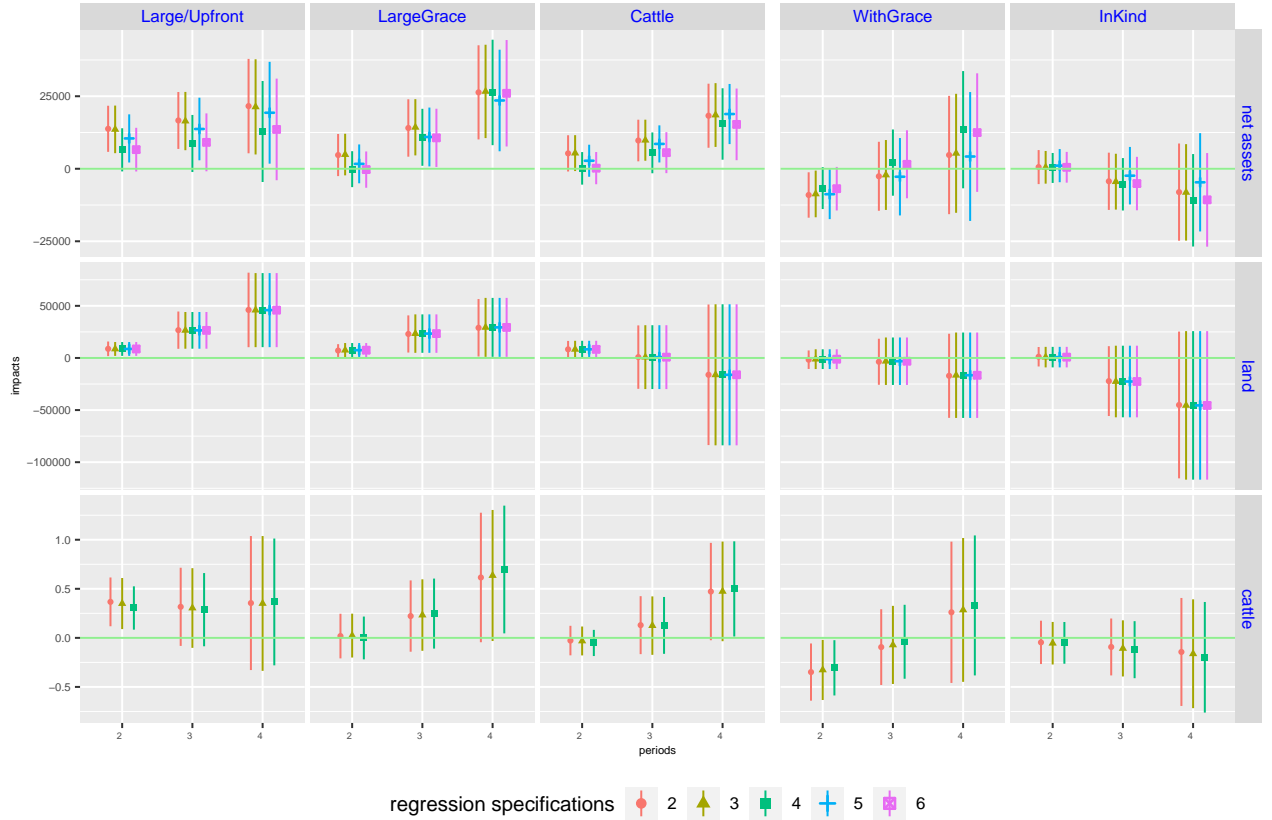
Source: Estimated with survey data.

Note: Cumulative impacts on various asset measures. Large/Upfront, Large grace, Cattle are impacts relative to Traditional arm. WithGrace and InKind are the impacts of respective marginal functional attributes. Panels show cumulative impacts of respective arm or attributes k relative to tradiotional arm which are obtained by 2nd period = b_{2k}, 3rd period = $b_{2k} + b_{3k}$, 4th period = $b_{2k} + b_{4k}$ in the estimating equation $y_{it} = b_1 y_{i1} + b_2 + \boldsymbol{b}_2' \mathbf{d}_i + b_3 c_{3t} + \boldsymbol{b}_3' \mathbf{d}_i c_{3t} + b_4 c_{4t} + \boldsymbol{b}_4' \mathbf{d}_i c_{4t} + e_{it}$, $t = 2, 3, 4$, where y_{it} is the outcome measure of member i in period t, $\mathbf{d}_i$ is a vector of arms or functional attributes, c_{3t}, c_{4t} are indicator variables of period 3 and 4. Bars show 95% confidence intervals using cluster robust standard errors. Asset values are expressed in BDT. Net assets=total assets - debts. Debts include outstanding loaned amount of the experiment. Total assets use items observed in all 4 rounds of household surveys. Net non livestock assets=net assets-livestock asset values. Number of cattle is a headcount of cattle holding.

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FIGURE 36: CUMULATIVE IMPACTS ON ASSETS RELATIVE TO CONCURRENT TRADITIONAL ARM

Source: Estimated with survey data.

Note: Cumulative impacts on various net asset measures. Large/Upfront, Large grace, Cattle are impacts relative to Traditional arm. WithGrace and InKind are the impacts of respective marginal functional attributes. Panels show cumulative impacts of respective arm or attributes k relative to tradiotional arm which are obtained by 2nd period = b_{2k}, 3rd period = $b_{2k} + b_{3k}$, 4th period = $b_{2k} + b_{4k}$ in the estimating equation $y_{it} = b_1 y_{i1} + b_2 + \boldsymbol{b}_2' \mathbf{d}_i + b_3 c_{3t} + \boldsymbol{b}_3' \mathbf{d}_i c_{3t} + b_4 c_{4t} + \boldsymbol{b}_4' \mathbf{d}_i c_{4t} + e_{it}$, $t = 2, 3, 4$, where y_{it} is the outcome measure of member i in period t, $\mathbf{d}_i$ is a vector of arms or functional attributes, c_{3t}, c_{4t} are indicator variables of period 3 and 4. Bars show 95% confidence intervals using cluster robust standard errors., Asset values are expressed in BDT. Net assets=total assets - debts. Debts include outstanding loaned amount of the experiment. Total assets use items observed in all 4 rounds of household surveys. Net non livestock assets=net assets-livestock asset values. Number of cattle is a headcount of cattle holding.

Results of land holding is similar to net assets, as it is a part of net assets, but the gap widens as period progresses. This is seen in the point estimates of non-traditional arms that are positive, yet most of estimates are imprecise and have their 95% confidence intervals crossing zero. Among all three assets, land holding may be most reliable indicator of wealth for fewer missingness. Net assets are defined as total assets less debt outstanding, yet we have smaller coverage of asset items in the first period which inflates the increasing trend.[†]

[†] This change in coverage is common to all arms, and given randomisation, this should not affect identification of imapcts by ANCOVA estimator as it is captured in the estimates of traditional arm, although it adds an extra noise.

FIGURE 37: CUMULATIVE IMPACTS ON NET ASSETS RELATIVE TO TRADITIONAL ARM BY EXPERIENCE
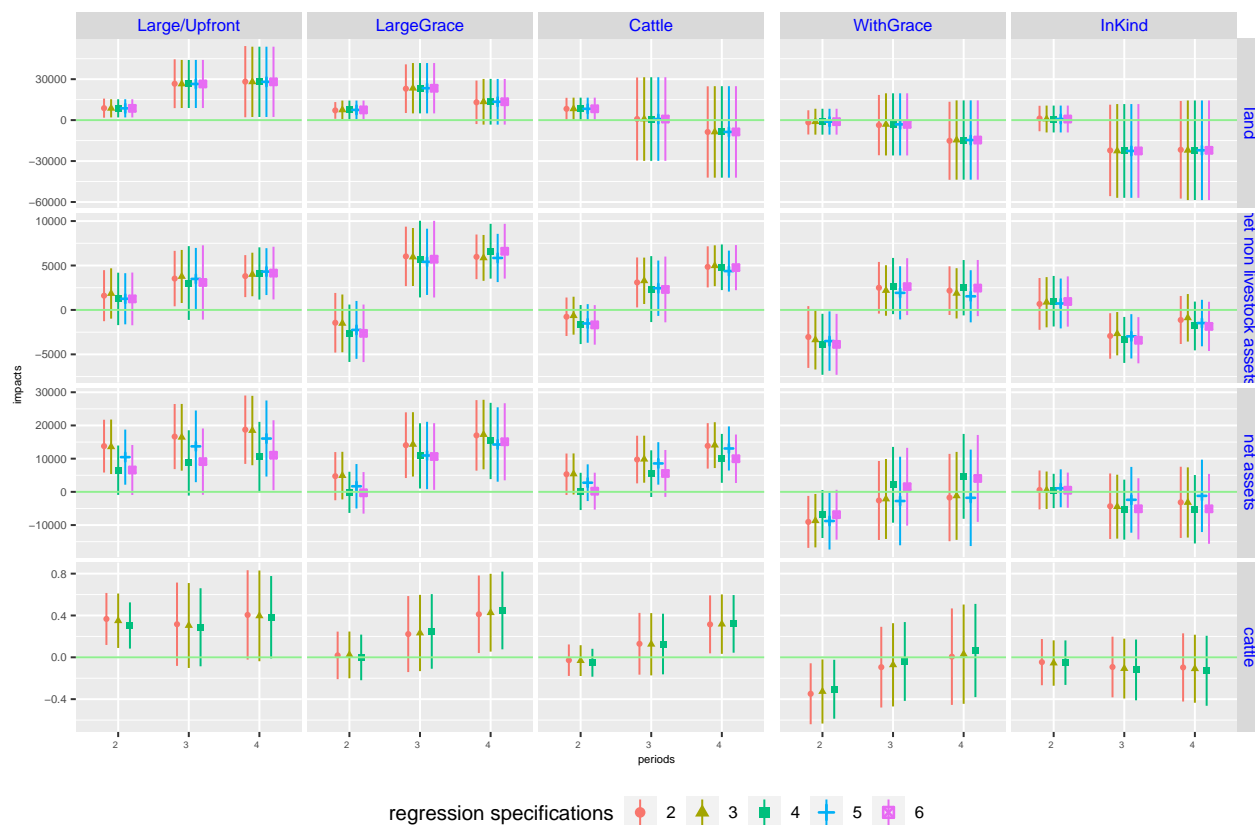
Source: Estimated with survey data.

Note: Asset values are expressed in BDT. Net assets=total assets - debts. Debts include outstanding loaned amount of the experiment. Total assets use items observed in all 4 rounds of household surveys. Net non livestock assets=net assets-livestock asset values. Number of cattle is a headcount of cattle holding. Adi is a group who has an experience of lease-in cattle contract at the baseline, Own is a group who holds cattle at the baseline, and None are all other individuals. There are 141 members who owned cattle at the baseline, 112 members who ever practiced Adi at the baseline, and 523 members who have no experience in cattle rearing.