Measuring the impact of microfinance on poor rural women in Mongolia

A randomised field experiment on group-lending versus individual lending

Baseline report

September 2008

1. Introduction

This report provides an in-depth description of the first wave of household data collected for a randomised field experiment to measure the impact of microcredit on poverty reduction among poor rural women in Mongolia. The experiment consists of two 'treatments': a group lending product with group responsibility (so-called 'joint liability') and an individual loan product. In a previous report (Attanasio et al, 2008) we detailed the background information to the project, the partner institutions involved, the randomisation methodology, loan products, and outcome variables of interest.[1] In this report, we analyse the data collected from the first wave (the baseline). We provide descriptive statistics relating to our sample along a wide range of dimensions such as education choices, assets, savings, debt, income, enterprises, consumption and transfers. The analysis of this population is of interest in its own right and gives a first snapshot of the target population which is not available from existing data sources. We show formal comparisons of these characteristics between treatment and control groups, an important test of how well the randomisation actually worked, and thus a crucial pre-requisite against which the program will be evaluated in around a year's time.

Ultimately, the results of this randomised impact assessment will not only yield information on whether microcredit is able to alleviate poverty, but also on what type of microcredit is best suited to this task in terms of the profitability and sustainability of the microfinance provider involved. XacBank, the participating bank in the experiment, aims to learn whether the provision of microcredit to poor and remote clients can be a profitable − and thus sustainable − line of business and, if so, what the most appropriate lending methodology/the best microfinance product is. The results will also be of relevance to other microfinance providers, to the donor community and to IFIs. Ultimately, the results can support EBRD to further refine its microfinance strategy in Mongolia and other early transition countries (ETCs).

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[1] Orazio Attanasio, Ralph de Haas, Emla Fitzsimons and Heike Harmgart "*Measuring the impact of microfinance on poor rural women in Mongolia*", mimeo, EBRD.

The remainder of this report is structured as follows. Section 2 provides a summary of some background information on the project. Section 3 then provides an in-depth description of the baseline data in individual treatment, group treatment and control soums. Finally, section 4 concludes.

2. Background to the project

This section contains information on some background aspects of the program. We refer the reader to the methodology report (Attanasio et al, 2008) for a more complete description.

2.1 Description of the project

The project consists of an experimental set up in which some households will gain access to group loans ('treatment 1'), some households will receive individual loans ('treatment 2') and some households will not receive any loans for the period of approximately one year ('control group'). In the group loan program, the group is liable ('joint liability') whereas in the individual loan program the individual is liable.[2] The purpose of the loans is to provide finance for working capital or fixed assets for women's micro-entrepreneurial activities. A more detailed description of the loan products is contained in Attanasio et al, 2008.

The ongoing experiment is taking place in 40 *soums* across the following five *aimags* in Mongolia: Uvs, Khovsgol, Bulgan, Arkhangai and Hentii. Of these 40 soums, there are 15 individual loan treatment soums, 15 group loan treatment groups, and 10 control soums. An essential element of the experimental design is that the allocation of the two treatments (group lending and individual lending) over the participants is done in a random fashion (a so-called controlled randomised trial). Randomisation has taken place across soums, so only chance decides whether a soum is assigned to the group treatment, the individual treatment or the control. So in a group treatment soum, all the participating households will only have access to the group lending product, in the individual treatment

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[2] Since randomisation, group formation has been proceeding in the soums that were chosen to be group-lending soums. However, at the time of writing there are concerns that this is taking place more slowly than expected.

soums only to the individual loan product, and in the control soums households they will not have access to either XacBank loan product for the period of one year.

The decision to randomise the program across soums was taken because first, it is administratively and politically much easier to manage the randomisation across soums, and second, the loans in a soum could have effects on individuals living in that soum who do not receive them (spillover effects), invalidating the comparison between treatment and controls.

The focus of the study is ultimately on how the provision of microcredit affects household poverty. The key outcome variables relate to consumption (food and non-food), the income of household members, the labour supply of household members, financial and other assets, children's education and the financial impact of unexpected adverse events. We are also specifically interested in household enterprises, including turnover and profits.

2.2 Data

A key component of the project is to collect detailed individual- and household-level data both before the program starts and after it finishes. A total of 1,148 individuals across 40 soums were interviewed before the program started. The data from this 'baseline survey', conducted in March 2008, is the topic of this report. We will return to the field around September 2009 (though the precise date is yet to be confirmed) to collect the same type of data from the same households. Having access to this rich panel data (i.e. data for the same households at two or more points in time) combined with the randomised nature of the experiment, will put us in an excellent position to estimate impacts of this program on poverty, enterprises, and other dimensions of behaviour, after the next survey.

The baseline survey was conducted with respondents at a central location, and interviews lasted approximately one hour. This survey was conducted *before* the individual knew whether or not she would receive a loan, thus ensuring that responses are not in any way dependent on whether the respondent even knows whether or not she will receive a loan.

2.3 Target population

Participating households are mostly located in or near the centres of their respective soums. The soum centres are on average 1 kilometre in diameter. The women are thus mostly chosen from the sedentary, not the nomadic population. Initially, potential participants were chosen from the very poor part of population and belonged to vulnerable groups mainly living on various state benefits. However, the data collection time (March) coincided with the livestock birthing season which starts at the end of February and lasts until the end April, and which provides one of the few employment opportunities for poor people living in rural areas. For this reason, there was a high number of missing respondents during the survey. Interview replacement individuals were incorporated where possible. Although the replacements are still poor, they are relatively better off than the initial respondents we had planned to interview, and many are already operators of small and micro businesses such as sewing shops, small scale cropping farms, traders, bakeries, furniture repairing shop, ice-cream shops, etc. Moreover, many already have some form of loan.

This was not part of the original design plan, and it means that our sample includes not only the poorest women who have no access to banking, but also more entrepreneurial women, many of whom who do indeed already have access to loans. Ultimately, we will therefore be considering the effects of microfinance provision on this relatively more entrepreneurial, yet still poor, sample of individuals. As one important intended use of the loans is for setting up and funding enterprises, this may in fact turn out to be the more interesting target population to consider, as they already show entrepreneurial initiative whereas the very poorest households are less likely to set up enterprises and more likely to use loans to fund short-term consumption needs. In any case we will be able to investigate whether there are heterogeneous effects of the program on both types of individual.

3. Comparison between treatment and control units

The evaluation methodology will be based on the comparison of outcomes between soums in which the program operates and soums where the program does not operate. The potential impact of microfinance on poverty will be estimated by comparing the outcomes of individuals receiving loans with those not receiving loans. We will estimate the effects separately for each of the two treatments. In other words, we will compare the outcomes of individuals living in individual treatment soums with those living in control soums. Separately, we will compare the outcomes of individuals living in group treatment soums with those living in control soums.

In order to be able to attribute any effects to the microfinance program, it is imperative that the two groups being compared are similar. Randomisation is the gold-standard in this respect, as if conducted properly, it ensures that treatment and control individuals are, on average, statistically the same in terms of observable *and unobservable* characteristics. In other words, randomisation removes selection bias (i.e. pre-existing differences between the treatment and control groups, such as different levels of education, that might make one household more likely to repay a loan than another). In theory, this should ensure that when we compare the outcomes of treatment and control individuals the only difference is due to the receipt of the loan and not due to any unobserved differences between them. It allows one to obtain unbiased effects of the treatment (provision of loans) on poverty.

However, it is important to check just how successful randomisation has been. This is done by comparing treatment and control individuals along a range of dimensions before the program started. Such dimensions include outcome variables such as consumption, enterprise, assets and savings, as well as background characteristics that cannot be changed by the program such as age, sex, adult education, and so on. This is what we formally test in this report. We present tables showing the average values of different variables for control, individual treatment, and group treatment households. We then conduct two-way comparisons between control and individual treatment households, and control and group treatment households (as ultimately these will be the comparisons

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made in the impact evaluation), to see if any observed differences between the means are statistically significant at conventional levels.[3]

Whilst this descriptive analysis gives a flavour of what our sample looks like, more importantly it provides a formal statistical comparison between treatment and control units. As discussed already, testing that treatment and control groups that are very similar is very important for the impact evaluation that will follow in just over one year's time.

Before proceeding, note that in all of the tables that follow, we use the following format. We show the means of the variables for control soums, individual treatment soums, and group treatment soums in columns (1) through (3), respectively. We then show two-way comparisons between treatment and control areas in columns (4) and (5): column (4) shows the p-value of the test of statistical differences between control and individual treatment means, and column (5) shows the p-value of the test of the statistical differences between control and group treatment means. The null hypothesis being tested in column (4), for example, is that the mean of the variable in control soums is equal to the mean of the variable in individual treatment soums. A p-value below 0.05 leads us to reject this null hypothesis. Where this is the case, the p-value is highlighted in bold in the table. Note that throughout, the tests account for clustering of the standard errors at the soum level.

3.1 Overview of the sample

In total, 1,148 households were surveyed in the first round of data collection. Of these, 299 live in control soums, 438 in individual treatment soums, and 411 in group treatment soums. There are 10 control soums, and 15 of each of the treatment soums. One person acted as respondent in each household, and answered a range of questions relating to household-level information as well as basic information about each individual in the household. In 1,124 households this respondent is female.

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[3] By a 'statistically significant difference' we mean there is statistical evidence that there is a difference between the average values of the two variables. We use a significance level of 0.05, which means that the average values we are comparing are only 5% likely to be different, given that the null hypothesis that the means are equal is true. A p-value below 0.05 leads us to reject the null hypothesis that the means are equal.

3.2 Individual characteristics

In this section, we take a first look at some characteristics of our sample of individuals, such as age, education levels and so on. As discussed already, we show these separately for each of the three soum types (control, individual treatment, group treatment), and we then test how alike the control and individual treatment soums are, and the control and group treatment soums.

We see from Table 1 that just over half of all individuals in our sample are female, and the average age of individuals is around 24. Neither of these is statistically different across treatment and control groups, as indicated by the p-values in the last two columns of the table.

Table 1 Characteristics of whole sample

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Female (%)	55	54	54	0.55	0.52
Age	25	25	24	0.96	0.78

We next compare some household characteristics across treatment and control groups: religion, ethnicity and number of children (below age 16) in a household, shown in Table 2. Over two thirds of our sample is Buddhist. The majority of our sample is of Halh ethnic origin, with the next most common ethnicities being Bayaad and Dorvod. The average number of children below the age of 16 per household is just under 2.[4] Again, there are no statistical differences across either of the treatment and control areas, as shown in columns (4) and (5) of the table.

Table 2 Characteristics of households

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Buddhism (%)	73.99	64.79	72.93	0.194	0.85
Ethnicity					
Halh (%)	68.36	70.42	75.86	0.907	0.668
Dorvod (%)	8.58	9.3	8.94	0.947	0.975
Bayaad (%)	12.01	0.05	12.02	0.205	0.999
Number of children <16	1.73	1.8	1.76	0.689	0.871

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[4] This refers to own children, i.e. excludes other children in the household of that age. When these are included, the number increases slightly but remains below 2.

In the remaining tables, we show characteristics of female adults, male adults and children. Female adults in our sample are 33 years old on average, and around two fifths of them are married. Literacy rates are very high and average years of education is over 9. A similar picture emerges for male adults in our sample, though they are more likely to be married (around half are married) and have slightly less years of education, at just below 9.

Table 3 Characteristics of female adults (aged 16+)

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Age	33.7	33.86	33.14	0.829	0.356
Married (%)	38.73	43.52	43.73	0.344	0.333
Literate (%)	97.58	97.09	97.48	0.613	0.911
Years of education	9.47	9.41	9.74	0.833	0.354

Table 4 Characteristics of male adults (aged 16+)

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Age	32.95	32.27	32.31	0.49	0.485
Married (%)	51.62	50.91	53.71	0.889	0.658
Literate (%)	97.5	97.84	97.75	0.681	0.792
Years of education	8.7	8.66	8.99	0.898	0.385

Finally, we take a look at gender, age and education of children aged 5-15, shown in Table 5. Around half of these children are female. Literacy rates are high, and attendance at school is also very high. Average years of education amongst children of this age are just below 4. Again, we observe no statistically significant differences across treatment and control areas.

Table 5 Characteristics of children aged 5-15

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Female (%)	49.15	51.1	49.74	0.642	0.874
Age	10.33	10.6	10.51	0.25	0.374
Literate (%)	91.26	89.06	91.52	0.329	0.901
Currently attending school (%)	96.36	94.9	94.97	0.386	0.257
Years of education	3.48	3.77	3.75	0.238	0.189

Taken together, this first look at the sample is very encouraging: comparing treatment (whether individual or group) and control soums we see that none of the characteristics are statistically different from each other at conventional levels. In the remainder of this report, we provide a more in-depth look at our sample of households, and compare them across treatment and control areas along a much wider range of characteristics.

3.3 Characteristics of household dwellings

In this section we describe the characteristics of the dwellings that our sample resides in. Again, we show average values in all control, individual treatment and group treatment soums, along with p-values for differences between the means. These are shown in Table 6 below.

Table 6 Characteristics relating to household dwellings

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Owns (%)	92.98	92.92	94.65	0.975	0.345
Value of dwelling (tugrik)	1,432,045	1,515,424	1,574,228	0.705	0.547
Owns fence (%)	67.22	73.97	74.15	0.276	0.376
Years living in dwelling	14.25	13.26	14.76	0.269	0.629
Ger (%)	65.55	60.96	62.77	0.482	0.736
House (%)	30.77	36.99	30.66	0.357	0.989
Electricity (%)	94.98	77.63	94.4	**0.043**	0.793
Owns other dwelling (conditional on current dwelling a ger) (%)	47.18	39.7	49.61	0.444	0.797
Owns other ger (%)	6.45	4.72	7.03	0.645	0.903
Owns house (%)	69.89	78.3	79.69	0.381	0.219
Other ger and house (%)	11.83	7.55	7.81	0.388	0.302
DK other dwelling type (%)	11.83	9.43	5.47	0.797	0.401
Owns other dwelling (conditional on current dwelling a house) (%)	58.7	49.38	49.21	0.222	0.211
Owns ger (%)	62.96	75	69.35	0.245	0.502
Owns other house (%)	14.81	13.75	12.9	0.877	0.766
Other house and ger (%)	18.52	10	17.74	0.170	0.906
DK other dwelling type (%)	3.7	1.25	0	0.389	0.155

We see that the vast majority, over 90%, of households own the dwelling in which they are currently living. The percentage of households owning the fence that surrounds their dwelling, which is an indicator of well-being, is around 70%. The average household has lived in this dwelling for around 14 years. Around two thirds currently live in a ger, and one third in a house. The majority of households use electricity for lighting, though note that this percentage is smaller in individual treatment soums compared to control soums,

and this difference is significant at the 5% level. Finally, around one half of households own another dwelling. We see that amongst those currently living in a ger and that have a secondary dwelling, upwards of 70% of these other dwellings are houses. Of those currently living in a house and that have a secondary dwelling, around 70% of these other dwellings are gers.

With the exception of electricity, the availability of which is quite a bit lower in individual treatment areas, treatment and control areas look very similar along dimensions relating to dwelling.

3.4 Household consumption

Our consumption data are very detailed and include information both on expenditure and on consumption of various commodities (which may not have been purchased). In the case of food consumption, we have information both on quantities and values.

3.4.1 Food consumption in the past week

We start off by describing consumption of food in the past week amongst our sample of households. Table 7 below shows a list of food goods in the left hand column. It then shows the proportion of households reporting positive consumption of that good in the past week, in columns (1) through (3).

Table 7 Percentage of households reporting positive consumption of various foods in the past week

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
	%	%	%	I v C	G v C
Milk	76.59	76.94	71.53	0.955	0.398
Butter	26.42	32.65	29.76	0.368	0.574
Other dairy	51.84	59.82	44.53	0.387	0.399
Eggs	6.02	7.31	8.03	0.719	0.596
Red meat	99.33	99.31	100	0.975	0.133
Chicken	0	0	0.24	n/a	0.319
Fish	1.00	1.60	0.73	0.536	0.732
Bread	54.18	61.64	52.07	0.243	0.76
Flour	100	99.54	99.03	0.147	0.032
Rice	80.54	82.42	80.73	0.67	0.964
Vegetables	62.88	59.36	59.12	0.583	0.616
Fruit	15.72	13.7	13.87	0.588	0.692
Chocolate	42.14	44.06	43.55	0.784	0.822
Non alcoholic drinks	34.45	36.3	34.31	0.668	0.976
Alcoholic drinks	10.03	12.56	11.92	0.38	0.596

The most widely consumed items are red meat and flour, consumed in the past week by practically all households in our sample. Milk, rice and vegetables are also widely consumed, whereas chicken, fish and eggs have been rarely consumed by the average household in the past week. We note that consumption of food goods is very similar across individual treatment areas and control areas (column (4)) and across group treatment areas and control areas (column (5)).

We next show the quantity of goods consumed, in Table 8 below. Flour, red meat, milk, rice and vegetables are consumed in large quantities. Again, we note that these are very similar across treatment and control areas.

Table 8 Quantity of goods consumed in the past week

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Milk (millilitres)	3352	3961	3233	0.315	0.858
Butter (grams)	225	289	214	0.446	0.801
Other dairy (grams)	823	1054	713	0.293	0.58
Eggs (units)	34	2	1	0.326	0.312
Red meat (grams)	5409	5234	5029	0.781	0.543
Chicken (grams)	0	0	5	n/a	0.319
Fish (grams)	22	34	12	0.581	0.566
Bread (grams)	921	1012	937	0.684	0.944
Flour (grams)	7111	7970	7445	0.127	0.494
Rice (grams)	2061	1872	1835	0.377	0.326
Vegetables (grams)	2194	2040	1956	0.573	0.452
Fruit (grams)	272	214	224	0.49	0.602
Chocolate (grams)	414	426	404	0.922	0.928
Non alcoholic drinks (millilitres)	781	803	743	0.872	0.803
Alcoholic drinks (millilitres)	109	134	159	0.41	0.398

Notes: Households that report consuming none of a particular good are assigned the value zero for that good.

We also obtained information on the quantity of goods purchased in the past week, shown in Table 9 below. Again, we detect no statistical differences across either of our treatment groups, and the controls. Comparing Table 8 and Table 9 we see that for practically all goods, the average amount purchased of a product is less than the average amount consumed. This is either due to consumption from storage (red meat and vegetables), or self-production (bread), or a combination of both (dairy products). Note that more rice and flour, both which can easily be stored, have been purchased more than they have been consumed across all soum types.

Table 9 Quantity of goods purchased in the past week

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Milk (millilitres)	1872	1340	1530	0.249	0.483
Butter (grams)	144	146	180	0.975	0.488
Other dairy (grams)	130	177	253	0.449	0.211
Eggs (units)	34	1	0	0.327	0.313
Red meat (grams)	1256	821	2687	0.351	0.325
Chicken (grams)	0	0	5	n/a	0.319
Fish (grams)	3	36	11	0.079	0.487
Bread (grams)	673	655	675	0.907	0.989
Flour (grams)	14057	10622	12524	0.629	0.833
Rice (grams)	2219	2613	2749	0.709	0.56
Vegetables (grams)	1943	1934	1812	0.981	0.654
Fruit (grams)	234	201	223	0.689	0.91
Chocolate (grams)	437	403	378	0.809	0.684
Non alcoholic drinks (millilitres)	676	738	774	0.637	0.514
Alcoholic drinks (millilitres)	94	119	148	0.4	0.34

Notes: Households that report purchasing none of a particular good are assigned the value zero for that good.

Finally, we show the expenditure on goods purchased in Table 10 below. The bulk of the expenditure is on red meat and flour. None of the expenditure values are significantly different across treatment and control units.

Table 10 Value of goods purchased in the past week

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
	tugrik	tugrik	tugrik		
Milk	2760	1999	2154	0.432	0.525
Butter	496	415	525	0.553	0.835
Other dairy	316	443	639	0.459	0.215
Eggs	87	89	108	0.968	0.703
Red meat	18343	15739	27368	0.684	0.515
Chicken	0	0	12	n/a	0.319
Fish	3	42	6	0.078	0.65
Bread	1146	1502	1080	0.449	0.814
Flour	24333	21336	19551	0.613	0.43
Rice	2310	2464	2520	0.872	0.803
Vegetables	1196	1170	1239	0.885	0.846
Fruit	302	268	286	0.754	0.891
Chocolate	1396	1165	1103	0.498	0.407
Non alcoholic drinks	590	636	650	0.673	0.619
Alcoholic drinks	527	689	804	0.367	0.351

Notes: Households that report purchasing none of a particular good are assigned the value zero for that good.
Note the exchange rate at the time of writing is 1 US$=1,151.29 Mongolian tugrik.

3.4.2 Consumption of other non-durables in the past month

In this section we take a look at consumption of non-durables in the past month. We start off by showing the percentage of households reporting positive consumption of a list of different durables in the past month, in Table 11 below. We see that fuel has been consumed by practically the whole sample. Around half of the sample reports positive consumption of recreation, transport services, and loan repayments/interest. Cigarettes are also widely consumed, and note that smoking appears to be significantly lower in control areas than in individual treatment areas (and also than in group treatment areas at the 10% level of significance). None of the others are significantly different across treatment and control areas, though we note that non-fuel combustibles are more widely consumed in individual treatment than in control areas, and this difference is marginally statistically significant.

Table 11 Percentage of households reporting positive consumption in the past month

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
	%	%	%		
Fuel	99.33	99.77	96.11	0.373	0.378
Other combustibles	27.42	38.58	35.04	0.061	0.149
Cigarettes	37.46	47.95	45.74	**0.05**	0.103
Felt for ger	0.67	1.14	0.73	0.446	0.917
Transport services	49.5	40.64	44.28	0.115	0.35
Magazines, newspapers etc.	25.17	26.71	20.92	0.754	0.442
Recreation	49.83	47.49	48.66	0.7	0.865
Dwelling rent	2.68	1.6	2.19	0.467	0.762
Loan repayments and interest	42.14	48.63	44.77	0.35	0.722

We next show expenditures by the household on these items in the past month. The bulk of the expenditure is going on fuel, transport services, and loan repayments/interest. None of these expenditures are statistically different across treatment and control areas at conventional levels, though expenditure on cigarettes is quite a bit higher in group treatment than in control areas, and this difference is significant at the 10 per cent level. We note also that loan repayments are higher in individual treatment areas, with the difference between control areas statistically significant at the 10 per cent level.

Table 12 Value of items purchased in the past month

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
				I v C	G v C
	tugrik	tugrik	tugrik		
Fuel	22827	18880	23304	0.422	0.931
Other combustibles	7315	11669	10299	0.151	0.219
Cigarettes	2713	3292	3829	0.208	0.086
Felt for ger	1678	106	146	0.343	0.356
Transport services	23738	15526	16756	0.131	0.266
Magazines, newspapers etc	991	1432	1018	0.175	0.931
Recreation	1366	1344	1619	0.961	0.632
Dwelling rent	755	205	743	0.295	0.987
Loan repayments and interest	31723	45110	40576	0.07	0.293

Notes: Households that report purchasing none of a particular good are assigned the value zero for that good.
Note the exchange rate at the time of writing is 1 US$=1,151.29 Mongolian tugrik.

3.4.3 Consumption of durables in the past year

We next show household consumption of durables in the past year. Again, we first show the percentage of households reporting positive consumption of goods in Table 13 below. Practically all households have purchased some adult clothes/shoes in the past year. Over four fifths have consumed children's clothes/shoes and have incurred school expenses. The next most commonly consumed items are household textiles, household appliances, and furniture and other flooring.

Table 13 Percentage of households reporting positive consumption in the past year

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
				I v C	G v C
	%	%	%		
Adult clothes/shoes	96.98	98.63	98.78	0.101	0.075
Children's clothes/shoes	87.58	88.33	84.67	0.806	0.326
School expenses	84.56	84.4	83.94	0.966	0.875
Furniture, carpets etc	39.93	43.02	44.53	0.585	0.452
Repairs (home, vehicle etc)	32.21	28.38	29.2	0.459	0.539
Household appliances	46.64	45.54	46.72	0.751	0.987
Household textiles	51.01	55.61	52.8	0.493	0.799
Books	26.85	26.77	25.06	0.985	0.652
Vehicles	10.74	15.1	13.38	0.198	0.409

We note that consumption of these goods is very similar across treatment and control areas. Though a higher percentage of households report positive consumption of adult clothes/shoes in both types of treatment than in control areas, we note that the differences

are only marginally significant, and moreover the percentages are very similar across the different types of areas, at between 97 per cent and 99 per cent.

In Table 14 we show household expenditure on these items in the past year. The highest expenditures are on adult clothes/shoes and school expenses (note expenditure on adult clothes/shoes is not statistically different across treatment and control areas). Households also spend large sums on vehicles, children's clothes/shoes, and household appliances. None of these expenditures are statistically different across treatment and control areas.

Table 14 Value of item purchased in the past year

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
	tugrik	tugrik	tugrik		
Adult clothes/shoes	178,000	202,071	202,902	0.309	0.287
Children's clothes/shoes	112,418	116,709	104,169	0.711	0.356
School expenses	221,120	183,132	216,955	0.433	0.934
Furniture, carpets etc	41,740	48,269	52,124	0.578	0.377
Repairs (home, vehicle etc)	46,882	33,068	42,177	0.368	0.775
Household appliances	81,408	81,272	96,055	0.989	0.491
Household textiles	25,612	28,148	31,603	0.685	0.33
Books	5,562	5,837	3,742	0.893	0.292
Vehicles	123,013	249,108	234,303	0.116	0.129

Notes: Households that report purchasing none of a particular good are assigned the value zero for that good.
Note the exchange rate at the time of writing is 1 US$=1,151.29 Mongolian tugrik.

3.5 Household enterprises

A very important aspect of this project is to understand the types of enterprises that households are engaged in, and from the follow-up survey, to see whether the loans affect the range and profitability of these activities. In the baseline survey, we obtained detailed information on up to four household enterprises. The four enterprises are joint enterprise (i.e. those owned and run by a couple; we obtained information on up to two), respondent's own enterprise, and partner's own enterprise. In this section we take a look at the data relating to these enterprises.

We start off by showing the proportion of households with different enterprise types, in Table 15 below. We see that just under two thirds of the sample owns at least one enterprise. Amongst households that own at least one enterprise, just under two fifths of

have a joint enterprise, around two thirds have a respondent-owned enterprise, and in just under one fifth of households the partner of the respondents has his own enterprise. Note the percentage of households having a joint or partner enterprise may include respondents who are in fact not married or co-habiting. When we condition on households in which the respondent is married/co-habiting, we see that just over one half report owning a joint enterprise, and around one quarter report that their partner owns an enterprise.

Finally, in terms of the number of enterprises that households own and run, we see that around two fifths of our sample have none (as seen already), around one half have one enterprise, around one tenth have two, and a very small proportion have more than two.

None of these variables are statistically different from each other across treatment and control areas. The fact that the samples look remarkably similar at baseline is reassuring as it is a key dimension on which we will measure the impacts of loans.

Table 15 Enterprise ownership

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
	%	%	%	I v C	G v C
At least 1 enterprise	58.86	59.82	60.34	0.878	0.801
Joint enterprise *conditional on owning at least 1*	35.80	40.84	38.96	0.422	0.551
Own enterprise *conditional on owning at least 1*	64.77	62.60	59.27	0.709	0.31
Partner enterprise *conditional on owning at least 1*	17.51	17.94	18.15	0.916	0.896
Joint enterprise *conditional on owning at least 1 and on being married/cohabiting**	53.39	54.87	49.74	0.822	0.553
Partner enterprise *conditional on owning at least 1 and on being married/cohabiting**	25.83	24.1	23.08	0.672	0.591
% of households with no enterprise	41.14	40.18	39.66	0.878	0.801
% of households with 1 enterprise	47.49	45.43	48.18	0.673	0.887
% of households with 2 enterprises	10.7	12.79	10.71	0.525	0.999
% of households with 3 enterprise	0.33	1.14	1.22	0.145	0.121
% of households with 4+ enterprises	0.33	0.46	0.24	0.827	0.822

Notes: *Approximately 84% of the sample of respondents who own at least one enterprise is not married/co-habiting.

3.5.1 Main joint enterprise

We now take a more in-depth look at the main joint enterprise of the household, shown in Table 16 and Table 17 below. Note that this analysis pertains to the main joint enterprise of those 267 households that report owning and running a joint enterprise.

Table 16 shows that amongst households with a joint enterprise, the average number owned is just over one, the enterprise has been in existence for just under 9 years, in just over half of them the main activity is farming, and almost all of them fully own the joint enterprise. The average number of hours worked per week on the enterprise by non-householders in the peak (off-peak) season is between 30 and 47 (12 and 25).[5] The peak season lasts around 3 months on average. We also asked respondents to what purpose they would put a loan from XacBank, were they to receive one. Just over 70% of respondents with a joint enterprise state that they would use at least part of the loan for this joint enterprise. Amongst this 70 per cent of respondents, the majority would use the loan to purchase inputs. We note again that none of these characteristics are statistically different across treatment and control areas.

<div align="center">Table 16 Characteristics of main joint enterprise</div>

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Number of joint enterprises	1.08	1.16	1.16	0.073	0.187
Years in existence	8.86	8.98	8.72	0.928	0.925
Main activity farming (%)	54.84	61.9	51.58	0.501	0.741
Fully own enterprise (%)	90.48	95.33	92.78	0.544	0.777
Hours worked per week by non householders in peak season	28.81	34.62	47.23	0.761	0.366
Hours worked per week by non householders in off-peak season	12.32	16.77	25.44	0.565	0.125
Length of peak season (months)	3.3	3	3.43	0.399	0.726
Would use at least part of loan from XacBank for enterprise (%)	84.13	80.37	84.54	0.525	0.94
Percentage of loan from XacBank that would be used for enterprise (%)	70.66	70.47	72.07	0.974	0.78
Would use loan to buy machinery/tools (%)	13.21	16.47	13.41	0.615	0.972
Would use loan to buy goods for resale (%)	5.66	7.06	10.98	0.704	0.302
Would use loan to buy inputs (%)	60.38	50.59	45.12	0.445	0.162
Would use loan for other purpose (%)	20.75	25.88	30.49	0.637	0.311

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[5] This is the *total* number of hours worked by all non-household members, i.e. the number of hours each employee works per week, all added together.

In Table 17 we show the expenses and revenues of this main joint enterprise, again for those households that report owning a joint enterprise. The largest expenditures are on raw materials and interest plus down-payments on loans. Large expenditures are also incurred on transport, articles for resale, employee wages, and machinery and other assets (though marginally significantly lower in control areas). Expenditure on maintenance and repairs is significantly lower amongst those living in individual treatment areas compared to those in control areas, and expenditure on raw materials is marginally statistically lower in individual treatment than in control areas.

Table 17 Main joint enterprise: expenses and revenue

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Expenses	tugrik	tugrik	tugrik		
Employee wages	38387	47865	73247	0.751	0.324
Raw materials	487130	229095	413461	0.079	0.654
Articles for resale	52419	51651	201579	0.983	0.073
Machinery, tools, other assets	16885	65660	80657	0.065	0.011
Rental of buildings, equipment etc	7778	4864	8113	0.593	0.952
Maintenance and repairs	68581	11434	40814	**0.034**	0.4
Transport	75880	63467	69160	0.648	0.8
Fuel etc	39370	33535	43491	0.727	0.809
Taxes	18663	14180	14269	0.527	0.494
Interest/loan deposits	141919	184432	98294	0.558	0.511
Other	3226	25318	6427	0.380	0.489
Revenue					
Cash payment for goods/services	1766520	1201293	1461812	0.220	0.511
In-kind payment for goods/services	77081	20514	99990	0.106	0.592
Sale of business assets	84762	17196	130095	0.302	0.619
Rental of business assets	0	234	0	0.332	n/a
Other	0	94	0	0.297	n/a

Notes: Top 1% of expenses and revenue have been trimmed.

Note, as only 36 households report owning a secondary joint enterprise, we do not repeat the analysis for these, as sample sizes would be too small as to allow for any robust comparison across treatment and controls. However summary statistics of the data are contained in Appendix B.

3.5.2 Female own enterprise

In this section we describe the enterprise of female respondents, i.e. that she is solely responsible for running.[6] A total of 411 female respondents report that they run their own enterprise, so the descriptive statistics that follow relate to those enterprises.

We see from

Table 18 that the enterprises have been in existence for an average of just over 8 years. Just over half of the enterprises are involved in sewing or a shop. Almost all of these enterprises are owned entirely by the female. Non-householders work on these enterprises on average, between 35 and 55 hours in total in the peak season, and between around 20 and 30 in the off-peak season. The length of the peak season is around 3 months. Around 90 per cent of females report that were they to receive a loan from XacBank, they would use at least part of it on this enterprise. Around three quarters of the loan amount would be used for the enterprise. The majority, around three fifths, of respondents would use the loan to buy inputs for the enterprise. None of these characteristics are statistically different across treatment and control respondents.

Table 18 Characteristics of female's own enterprise

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Years in existence	8.07	8.3	8.59	0.845	0.513
Main activity sewing/shop (%)	53.57	55	55.4	0.834	0.811
Fully own enterprise (%)	89.29	91.88	94.24	0.467	0.119
Hours worked per week by non householders in peak season	40.92	54.09	35.11	0.4	0.74
Hours worked per week by non householders in off-peak season	24.6	28.6	21.67	0.593	0.729
Length of peak season (months)	3.12	2.63	3.2	0.098	0.794
Would use at least part of loan from Xac bank on enterprise (%)	91.07	91.88	90.65	0.781	0.9
Percentage of loan from Xac bank that would be used on enterprise (%)	74.41	73.48	73.1	0.855	0.754
Would use loan to buy machinery/tools (%)	15.69	19.73	13.71	0.42	0.707
Would use loan to buy goods for resale (%)	9.8	12.93	16.94	0.486	0.159
Would use loan to buy inputs (%)	57.84	59.18	58.06	0.833	0.975
Would use loan for other purpose (%)	16.67	8.16	11.29	0.061	0.279

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[6] We therefore drop the 24 male respondents and here describe female-run enterprises.

We next show the expenses and revenues of this enterprise. The largest expenditures are on raw materials, articles for resale, and interest/loan deposits. Transport also takes up a significant portion of the budget. With the exception of employee wages, which are statistically lower in both types of treatment area compared to control area, expenditures are similar across treatment and control areas.

The largest revenues are cash payments for goods/services. In-kind payments for goods/services, and sale of business assets also bring in revenue. Note that in-kind payments are statistically lower in individual treatment areas compared to control areas.

Table 19 Female's own enterprise: expenses and revenue

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Expenses	tugrik	tugrik	tugrik		
Employee wages	55968	13038	22077	**0.008**	**0.041**
Raw materials	385190	253571	338843	0.217	0.707
Articles for resale	154537	125774	240148	0.616	0.355
Machinery, tools, other assets	13954	10604	12518	0.428	0.786
Rental of buildings, equipment etc	3850	6731	4196	0.469	0.931
Maintenance and repairs	8951	6874	7363	0.581	0.688
Transport	73754	45019	62137	0.12	0.651
Fuel etc	17424	10899	11093	0.316	0.333
Taxes	11237	6760	8620	0.119	0.409
Interest/loan deposits	136071	114750	112635	0.608	0.639
Other	945	0	489	0.152	0.553
Revenue					
Cash payment for goods/services	939901	1078238	1287004	0.439	0.16
In-kind payment for goods/services	80796	28854	42406	**0.037**	0.225
Sale of business assets	26818	14519	33732	0.503	0.775
Rental of business assets	0	0	0	n/a	n/a
Other	0	0	0	n/a	n/a

Notes: Top 1% of expenses and revenue have been trimmed.

3.5.3 Partner enterprise

In this section we describe the enterprises of the partners of the female respondents analysed in the previous section. Note that just 118 respondents report that their partner has his own enterprise, so sample sizes in each of the three groups below are very low.

Looking first at the characteristics of the partner's enterprise, shown in

Table 20 below, we see that the enterprise has been in existence for around 7 years, the most commonly reported main activity is craft[7], and almost all are fully owned by the partner. Similar to the previous sections, non household members tend to work more in the peak than in the off-peak season, and the peak season lasts between 2 and 3 months. Around half of partners would use a loan from Xac Bank on the enterprise, and of these, they would use half of that loan on the enterprise. Over one half of respondents report that they would use it to buy inputs, though a considerable proportion report that they would use it to buy machinery/tools. Throughout, none of the variables are statistically different from each other across treatment and control respondents.

Table 20 Characteristics of partner's enterprise

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
				I v C	G v C
Years in existence	6.43	7.03	6.86	0.747	0.776
Main activity craft (%)	20	34.78	18.18	0.165	0.834
Fully own enterprise (%)	93.33	91.3	93.18	0.792	0.985
Hours worked per week by non householders in peak season	48.86	30	60.5	0.502	0.7
Hours worked per week by non householders in off-peak season	29	42.4	20.56	0.479	0.612
Length of peak season (months)	2.69	2.6	2.27	0.907	0.537
Would use at least part of loan from Xac bank on enterprise (%)	53.33	67.39	47.73	0.26	0.597
Percentage of loan from Xac bank that would be used on enterprise (%)	51.25	50.32	50	0.936	0.91
Would use loan to buy machinery/tools (%)	37.5	25.81	25	0.36	0.376
Would use loan to buy goods for resale (%)	6.25	6.45	15	0.976	0.353
Would use loan to buy inputs (%)	56.25	54.84	50	0.93	0.72
Would use loan for other purpose (%)	0	12.9	10	0.075	0.275

We next show the expenses and revenues associated with these enterprises, in Table 21 below. There is a good deal of variation in expenditures and revenues across treatment and control areas, likely reflecting the low sample sizes. However, we note that none of these differences are statistically different from each other at conventional levels of significance.

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[7] We do not know the main activity for just under 60% of partners.

Table 21 Partner's enterprise: expenses and revenue

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
				I v C	G v C
Expenses	tugrik	tugrik	tugrik		
Employee wages	21552	27511	25000	0.843	0.892
Raw materials	79854	145049	96648	0.157	0.603
Articles for resale	46552	163043	115385	0.267	0.443
Machinery, tools, other assets	14793	72652	166829	0.107	0.109
Rental of buildings, equipment etc	172	0	0	0.222	0.223
Maintenance and repairs	11638	14091	39024	0.788	0.135
Transport	21793	45636	35986	0.182	0.361
Fuel etc	82047	131255	153685	0.369	0.201
Taxes	8775	5868	12840	0.461	0.489
Interest/loan deposits	28500	32842	108244	0.869	0.146
Other	0	2174	0	0.296	n/a
Revenue					
Cash payment for goods/services	958259	1054547	1172538	0.773	0.531
In-kind payment for goods/services	92593	41957	18537	0.437	0.228
Sale of business assets	5385	0	4651	0.228	0.91
Rental of business assets	0	0	0	n/a	n/a
Other	0	0	0	n/a	n/a

Notes: Top 1% of expenses and revenue have been trimmed.

3.6 Debts

In this section we take a look at outstanding debts that the household has, as well as debts paid off in the past five years. For outstanding debts, we elicited detailed information from respondents on up to three loans that their household may currently have. In Table 22 we show the proportion of households with outstanding debts. Around two fifths of respondents currently have no outstanding debt, around one half have one loan, around one tenth have two loans, and the remainder have three loans. These numbers show that, contrary to what we expected, penetration of microfinance products in rural areas is currently quite high already. The proportion of households with two outstanding loans is significantly higher in the treatment soums than in the control soums.

Table 22 Number of outstanding loans

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
				I v C	G v C
	%	%	%		
No outstanding loan	44.15	32.88	38.44	0.071	0.378
One outstanding loan	46.49	51.37	46.47	0.25	0.997
Two outstanding loans	6.35	12.56	12.41	**0.02**	**0.033**
Three outstanding loans	3.01	3.2	2.68	0.914	0.845

In Table 23 we show detailed information on the first of these debts, for households that have at least one outstanding debt. First of all, the original value of the loan is just under 1 million tugrik in treatment areas, and just under 700,000 tugrik in control areas. Note that these differences in original debt levels are statistically significant. Most (between 70% and 80%) of the debt is for private use. This is an important finding, since it shows that, while microfinance in rural Mongolian areas has advanced in recent years, by far the most of these loans are used for consumption purposes rather than income-generating purposes. The focus of this study is on the latter, and not the former type of loans.

Table 23 Characteristics of the main loan

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Original value of loan (tugrik)	637,766	996,761	901,887	**0.025**	**0.036**
% of loan for private use	**71.54**	**72.87**	**78.26**	**0.78**	**0.133**
% of loan for business use	**28.46**	**27.13**	**21.74**	**0.78**	**0.133**
Monthly interest rate	2.182	2.041	2.262	0.425	0.704
% of households that do not know (DK) interest rate	11.38	9.184	10.28	0.596	0.807
Loan was taken out in 2007 (%)	62.28	55.59	58.1	0.358	0.528
Loan was taken out in 2008 (%)	35.93	40.34	38.34	0.482	0.68
Outstanding balance on loan (tugrik)	423,729	687,131	663,912	0.026	0.011
% of households that DK outstanding balance	7.186	5.442	6.324	0.6	0.811
Loan owed to a bank (%)	83.23	83.67	83	0.934	0.969
Loan owed to Khan Bank (%)	56.29	61.69	59.92	0.329	0.554
Loan owed to Mongol Post Bank (%)	13.77	9.83	12.3	0.464	0.81
Loan owed to Xac Bank (%)	13.17	10.51	8.73	0.597	0.401
Pledged collateral to secure loan (%)	74.25	78.64	74.31	0.503	0.993
Value of collateral to secure loan (tugrik)	3,000,255	2,826,700	2,669,638	0.817	0.666
% of households that DK value of collateral to secure loan	24.19	21.12	26.6	0.646	0.731

The monthly interest rate on this debt is just over 2% (though around 10% of households do not know the monthly interest rate). In around two thirds of households the loan was taken out in 2007, and in most of the remainder it was taken out in 2008. This reflects the fact that competition for rural customers has increased only very recently, mainly between Khan Bank, XacBank and Mongol Postbank, with Khan Bank having by far the largest share of the market: we see from Table 23 that just over one half of those with an outstanding debt owe it to Khan Bank, around one tenth owe it to Mongol Post Bank, and around one tenth to Xac Bank (the remainder owe it to someone else other than a bank).

Households still have to repay on average around two thirds of the loan. Over four fifths of the loans are from a bank. Around three quarters of households have pledged collateral to secure the loan, the value of which is very high at between three to five times the value of the loan (note that around one quarter of households do not know the value of the collateral to secure the loan).

In Table 24 we show detailed information on the second of these debts, for households that have at least two outstanding debts (125 households in total).[8] The original value of the loan is around 400,000 tugrik, substantially lower than the first loan. Again, most of the debt is for private use. The monthly interest rate on this debt is slightly lower than for the first loan, at just under 2 per cent, most likely reflecting that only around two thirds of these second loans are from a bank. Compared to the first loan, slightly more households report than the loan was taken out in 2007 as opposed to 2008. Between 60 per cent and 85 per cent of the debt is still outstanding. Approximately two thirds is owed to a bank, of which Khan Bank is by far the most common lender, followed by Mongol Post Bank and then Xac Bank. Between two fifths and two thirds of households have pledged collateral to secure the loan, the value of which is very high at between around three and five times the value of the loan.

Table 24 Characteristics of the second loan

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Original value of loan (tugrik)	360171	441174	393242	0.547	0.781
% of loan for private use	**91.38**	**85.8**	**86.37**	**0.391**	**0.444**
% of loan for business use	**8.621**	**14.2**	**13.63**	**0.391**	**0.444**
Monthly interest rate	1.468	1.28	1.857	0.559	0.413
% of households that DK interest rate	21.43	11.59	9.677	0.171	0.165
Loan was taken out in 2007 (%)	60.71	53.62	49.18	0.575	0.345
Loan was taken out in 2008 (%)	39.29	46.38	49.18	0.575	0.427
Outstanding balance on loan (tugrik)	218772	371575	293503	0.252	0.385
% of households that DK outstanding balance	10.71	0	3.226	0.038	0.172
Loan owed to a bank (%)	71.43	60.87	61.29	0.364	0.485
Loan owed to Khan Bank (%)	55.17	52.17	40.0	0.839	0.354
Loan owed to Mongol Post Bank (%)	13.79	5.79	15.0	0.452	0.92
Loan owed to XacBank (%)	3.45	2.89	8.33	0.894	0.295
Pledged collateral to secure loan (%)	65.52	39.13	51.61	**0.025**	0.223
Value of collateral to secure loan (tugrik)	1,297,733	2,449,000	1,176,880	0.208	0.845
% of households that DK value of collateral to secure loan	21.05	33.33	21.88	0.532	0.966

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[8] We do not show descriptive statistics for the third loan, as only 34 households report having a third outstanding loan. The appendix contains complete summary statistics, however.

Note that with the exception of the percentage of households that pledged collateral to secure the loan, which is significantly lower in individual treatment than in control areas, none of the other variables are significantly different across treatment and controls.

Finally, in Table 25 we show the proportion of households with other debts, by now fully repaid, in the past five years. Just under one half of all households had a loan in the past five years that has by now been repaid; just under 20 per cent had one such loan; between 10 per cent and 16 per cent had two such loans; between 8 per cent and 12 per cent had three such loans; and the remainder had four or more such loans. None of these are statistically different across treatment and control households. The total value of the other loans (for those households that had at least one other loan) is around 2 million tugrik.

Table 25 Other debts in past 5 years that have been fully repaid

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
	%	%	%		
No other loans in past 5 years	47.16	47.72	50.36	0.933	0.665
1 other loan in past 5 years	17.06	17.35	16.79	0.934	0.943
2 other loans in past 5 years	16.05	10.27	11.19	0.084	0.176
3 other loans in past 5 years	8.7	12.33	9.00	0.214	0.909
4+ other loans in past 5 years	11.04	12.33	12.65	0.56	0.582
Total value of loans in past 5 years (tugrik)	1,730,032	2,034,445	1,952,422	0.455	0.614

3.7 Savings

In this section we examine the savings of female respondents (we thus again drop the 24 male respondents), those of her spouse/partner, and their joint savings. These are shown in Table 26 below. Interestingly, where respondents have savings, they are mostly their own savings. Less than 3% of married/cohabiting respondents report having joint savings with their spouse/partner. The average value of savings for those who report having positive savings is between 130,000 tugrik (group treatment) and 206,000 tugrik (individual treatment). The majority (between 63 per cent and 85 per cent) of savings are for education. None of these variables are significantly different across treatment and control areas.

Table 26 Percentage with savings, and savings values, for married/cohabiting respondents

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Respondent alone (%)	31.03	41.87	37	0.136	0.431
Respondent & spouse/ partner jointly (%)	0.57	2.42	1.47	0.07	0.299
Spouse/partner alone (%)	4.02	1.73	1.83	0.122	0.144
Value of respondent savings (tugrik)	165,980	206,278	132,444	0.551	0.435
Value of respondent savings for education (tugrik)	140,598	130,094	96,455	0.736	0.065

Notes: conditional on married/cohabiting. Last 2 rows conditional on married/cohabiting and on having positive savings

We repeat the above exercise in

Table 27, but for single respondents. Around one third of them report having positive savings. The average value of the savings is between around 140,000 and 175,000 tugrik. Interestingly, a large proportion of savings of single respondents are for education.

Table 27 Percentage with savings, and savings values, for single/non-cohabiting respondents

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Respondent alone (%)	28.93	35.92	30.4	0.217	0.748
Value of respondent savings (tugrik)	174,706	143,800	140,286	0.562	0.559
Value of respondent savings for education (tugrik)	98,382	111,362	93,639	0.688	0.9

Notes: conditional on not married/not cohabiting; values conditional on having positive savings

3.8 Household adverse events

We obtained detailed information on adverse events in the household in the past year, which we summarise in Table 28 below. These adverse events, or shocks, are likely to result in a reduction in income for the household. One hypothesis that will be interesting to test after the follow-up survey is whether households with loans are better cushioned against shocks compared to households without loans.

We see from Table 28 that around 6 per cent of households report the death of at least one household member in the past year. Though low, this figure is by no means negligible and results in an important income loss for a household. Around one quarter of households report a serious illness of a household member, whilst almost three quarters report that a household member had to visit a doctor/health centre/hospital. Job loss is rare. The proportion of households reporting a serious robbery or theft is just under 10 per cent, fairly similar to the proportion reporting a natural disaster. Frequency of a bad

harvest or other loss is slightly lower, at around 5% on average. In no cases are these proportions significantly different across treatment and control households.

Table 28 Percentage of households reporting a shock in the past year

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
	%	%	%		
Death of household member	6.02	6.39	5.12	0.843	0.583
Serious illness of household member	26.76	28.08	26.83	0.753	0.987
Visit to a doctor/health centre/hospital of household member	69.57	71.23	74.63	0.77	0.311
Job loss of household member	1.67	0.91	2.2	0.361	0.608
Serious robbery/theft	9.36	9.82	8.78	0.829	0.774
Natural disaster	12.71	6.16	8.78	0.275	0.558
Bad harvest	5.35	9.36	4.15	0.298	0.56
Other loss	4.35	5.02	5.61	0.731	0.529

To get some more insight into the monetary cost associated with these shocks, in Table 29 we show how much the visits to the doctor/hospital cost, for those who reported having to make a visit in the past year. We show this for up to three visits. The average cost of the first visit is between 20,000 tugrik and 35,000 tugrik, whilst the other two visits are substantially cheaper than this.

Table 29 Cost of shock if doctor

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
	tugrik	tugrik	tugrik		
Cost of 1st visit to doctor/hospital	26178	35186	20517	0.393	0.501
Cost of 2nd visit to doctor/hospital	6033	6727	5462	0.854	0.906
Cost of 3rd visit to doctor/hospital	1500	4582	1583	0.458	0.956

To gain some insight into the importance of a natural disaster, in Table 30 we show the average number of animals lost due to the natural disaster. They are not insubstantial: between 3 and 7 sheep were lost, between 5 and 10 goats (marginally significantly higher in control than in group areas), and between 1 and 2 cows. Again, none of these are significantly different across treatment and control units.

Table 30 Number of animals lost if natural disaster

28

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
				I v C	G v C
Sheep	7.03	4.38	3	0.32	0.132
Goats	9.59	5.04	4.94	0.085	0.057
Cows	1.14	1.78	2	0.437	0.422
Yaks	0	0.11	0.03	0.119	0.369
Horses	0.65	2.44	0.39	0.273	0.646

3.9 Purpose of the loan

We asked respondents about their main use of a loan from XacBank, were they to receive one. In Table 31 we show that around one quarter of respondents in individual treatment areas would use it to set up an enterprise, compared to around two fifths in control areas. This difference is statistically significant. Around one third of respondents in group treatment areas would use it to set up an enterprise, again lower than in control areas and marginally significantly different. None of the remainder of the uses of a loan differ across treatment and control areas however: just under one third report that they would use it to fund an existing enterprise owned solely by them; just below one fifths state that they would use it on a joint enterprise, and only around 3% would use it on their partner's enterprise (note these proportions are all irrespective of whether there is an enterprise or not). On average, less than one in ten households would use it to fund consumption.

Table 31 Purpose of potential XacBank

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
				I v C	G v C
	%	%	%		
Set up own enterprise	38.8	26.77	32.93	**0.002**	0.06
Fund existing own enterprise	29.77	30.66	30	0.849	0.961
Set up/fund joint enterprise	17.06	19.22	17.8	0.621	0.855
Set up/fund partner enterprise	2.01	3.2	2.68	0.322	0.517
Fund consumption	6.02	10.3	9.02	0.285	0.386
Other	6.35	9.84	7.56	0.215	0.56

We asked those respondents who said that they would use the loan on an enterprise, to state how much gross revenue/total sales they would expect to make over the next year if the enterprise turned out to be extremely successful, and if it turned out to be extremely unsuccessful. These are shown in Table 32 below. The average expected revenue in the case of a very successful enterprise is between 2 and 4 million tugrik, whilst that of a

very unsuccessful enterprise is between 1.3 and 2 million tugrik. Comparing these figures to actual revenues reported in Table 17 and Table 21, which are all below 2 million tugrik, suggests that respondents are very optimistic about the future – and such optimism is equally prevalent in treatment and control areas.

Table 32 Expected revenue

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
				I v C	G v C
	tugrik	tugrik	tugrik		
Expected revenue if successful	3,194,811	3,159,798	3,720,307	0.952	0.422
Expected revenue if unsuccessful	1,806,730	1,553,993	2,001,451	0.505	0.609

Notes: Figures are conditional on the respondent stating that she would use the loan for an enterprise.

3.10 Transfers between non-related people

In this section we describe the transfers received from and given to non-related people in the last 12 months. Note that transfers relate to both monetary and in-kind transfers. We see from Table 33 that around one tenth of households report receiving transfers from non-related persons in the last 12 months. On average, transfers are received from just one other person, and this number is significantly higher in individual treatment than in control areas – though the magnitude of the difference is low (it is also marginally significantly higher in group treatment areas than in control areas, though again the magnitude is low). The average transfer value received ranges from around 155,000 tugrik to around 200,000 tugrik.

Table 33 Transfers received from non-related people in the past 12 months

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
				I v C	G v C
Received transfers from non-related person(s) in last 12 months (%)	9.7	10.07	7.06	0.877	0.249
Number of non-related people from who received transfers (conditional on receipt)	1.07	1.31	1.38	**0.028**	0.08
Total value of transfers received in last 12 months (tugrik) (conditional on receipt)	155,052	173,889	196,241	0.727	0.727

A higher proportion of households have given transfers to non-related people in the past 12 months, at between 12 per cent and 17 per cent, as shown in Table 34. On average, transfers are given to just under two people, and the average value of the transfer given is between 155,000 and 240,000 tugrik. We observe no significant differences in these variables across treatment and control areas. The last row of Table 34 shows that taking

transfers in and transfers out together, the majority of households give more transfers than then receive (households that give or receive nothing are not included).

Table 34 Transfers given to non-related people in the past 12 months

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Gave transfers to non-related person(s) in last 12 months (%)	16.39	12.36	17.03	0.257	0.884
Nr of non-related people to whom gave transfers (conditional on having given)	1.796	1.618	1.514	0.5	0.091
Total value of transfers given in last 12 months (tugrik) (conditional on having given)	240,837	153,155	158,221	0.173	0.212
% of households that are net recipients of transfers	32.79	44.87	21.25	0.162	0.135

3.11 Transfers between relatives

We next show transfers to and from family/relatives in the last 12 months. In Table 35 we show transfers received from relatives. The proportion of households reporting having received transfers from relatives is between around 22 per cent (in individual treatment areas) and 32 per cent (in group treatment areas). Differences are statistically significant between control (at 30 per cent) and individual treatment areas. Note that these proportions are considerably higher than transfers from non-related people, shown in Table 33 above, suggesting that ties and links amongst relatives are stronger than amongst non-relatives. It will be interesting to see if this is affected by the existence of the program in a year's time. Conditional on receipt, the total value of transfers received is between 221,000 tugrik (individual treatment areas) and 350,000 tugrik (group treatment areas). Note again, these values are higher on average than those from non-related people. Finally, transfers come fairly equally from the same soum and urban cities.

Table 35 Transfers received from related people in the past 12 months

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Received transfers from related person(s) in last 12 months (%)	30.87	22.37	31.63	**0.026**	0.885
Total value of transfers received in last 12 months (tugrik) (conditional on receipt)	285,496	221,490	349,399	0.171	0.517
Source of transfers: same soum (%)	34.06	40.62	31.53	0.388	0.742
Source of transfers: Ulaanbaatar, Darhan, Erdenet (%)	31.86	35.41	40.76	0.652	0.197

Looking next at transfers given to relatives in the last 12 months, we see that around four fifths of households report giving transfers to at least one relative in this period. Again, it is worth noting that this proportion is quite a bit higher than the proportion giving transfers to non-related people, as can be seen by comparing with Table 34. Average values of transfers given are also considerably higher, at around 400,000 tugrik. Interestingly, cities are the most common destination for transfers, with around half of the sample reporting this destination. The proportion of households making transfers to relatives in the same soum is around 20% on the other hand. We also note that none of these variables are significantly different from each other across treatment and control areas. Finally, the last row of the table shows that households are less likely to be net transfer recipients, or in other words the value of transfers out are generally larger than the value of transfers in (conditional on making at least one transfer).

Table 36 Transfers given to related people in the past 12 months

	(1) Control	(2) Individual	(3) Group	(4) p-value I v C	(5) p-value G v C
Gave transfers to related person(s) in last 12 months (%)	45.81	36.75	43.30	0.136	0.678
Total value of transfers given in last 12 months (tugrik) (conditional on having given)	404,401	380,529	423,983	0.703	0.749
Destination of transfers: same soum (%)	20.58	22.36	16.29	0.71	0.332
Destination of transfers: Ulaanbaatar, Darhan, Erdenet (%)	49.26	59.62	62.35	0.172	0.082
% of households that are net recipients of transfers	35.51	33.80	40.24	0.821	0.524

3.12 Employment

In this section we take a look at labour supply of individuals aged 16 and above. We distinguish between working for a wage/regular income and self-employment. In Table 37 we show the proportions engaged in wage activity and self-employment. Around one fifth of respondents are employed in wage activity, and around one third in self-employment. Conditioning on households that report that they have at least one enterprise, we see that participation in self-employment amongst respondents from these households is just over 50 per cent. None of these are significantly different across treatment and control areas.

Table 37 Proportions in wage employment and self-employment

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
				I v C	G v C
	%	%	%		
Employed in wage activity	18.33	18.15	20.2	0.96	0.586
Self-employed	32.37	33.41	33.46	0.783	0.76
Self-employed amongst those with an enterprise	54.11	55.57	54.73	0.728	0.889

In Table 38 we show information on hours worked, weekly wages (for wage earners), and other benefits received by respondents. First of all, we see that amongst those who work for a wage, the average number of hours worked per week is around 50. Amongst those who work in self-employment, the average number of hours worked per week is around 25. Comparing this with Table 36, this suggests that participation in self-employment is more prevalent at the extensive margin, whereas it is less prevalent at the intensive margin compared to wage employment. The weekly wage for those in wage work is around 30,000 tugrik.[9] We also obtained information from respondents on benefits received. Just over one quarter of respondents receive some form of benefit (such as child allowances, school subsidies, unemployment benefits, disability allowances etc.). The average value of the benefit received is around 150,000 tugrik. Throughout, we note that none of the variables are significantly different across treatment and control respondents.

Table 38 Labour supply, earnings and benefits

	(1) Control	(2) Individual	(3) Group	(4) p-value	(5) p-value
				I v C	G v C
Hours worked in a normal week for wage earners	53.97	49.6	48.78	0.351	0.256
Hours worked in a normal week for self-employed	26.84	26.72	25.66	0.967	0.655
Weekly earnings for wage earners	29,002	31,330	29,941	0.438	0.752
Receives benefit such as child allowance, school subsidy etc (%)	29.49	24.72	26.37	0.072	0.208
Value of benefit (conditional on receipt) (tugrik)	172,835	148,692	152,645	0.387	0.525

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[9] We did not ask each respondent for income earned in self-employment, due to the difficulties in obtaining reliable and accurate measures of this. We did obtain detailed information on enterprise revenue and expenses however, as described already.

4. Conclusions

This report provided an in-depth look at the baseline data collected for the Mongolian randomised field experiment on group-lending versus individual lending. It carried out formal tests comparing a wide range of characteristics across individuals living in individual treatment and control soums, and across group treatment and control soums. This is an important exercise because it allows us to see just how successful the randomisation has been: though in principle randomisation ensures that treatment and control units are similar in expectation, baseline data on 'pre-treatment' variables provides the opportunity to check that the randomisation has indeed been conducted appropriately. The results from this exercise are very encouraging: we find very few significant differences in variables across treatment and control units, despite considering a large range of detailed variables. In the few cases where differences do exist, they are generally small and do not provide any evidence of systematic differences between treatment and control units along any particular dimension. We are therefore confident that the randomisation has removed selection bias, which means that we will be able to attribute any differences in outcomes between treatment and control units after the follow-up survey to the existence of the program.

Lastly, new power calculations on the basis of the actual baseline survey data (rather than LiTS data), show that the minimum detectable effects (MDEs) can be expected to be much larger (around 40 per cent) than originally anticipated (around 15 per cent, cf. Appendix A). Increases in expenditures/profits as a result of the availability of microfinance would thus have to be very large in order to be able to detect them with sufficient statistical confidence.

Appendix A. Power calculations

In this appendix, we use the Mongolian baseline survey data to calculate minimum detectable effects for three outcomes of interest: weekly food expenditure, monthly non-durable expenditure, and total household profit/loss from enterprises (taking all of its enterprises together).

A minimum detectable effect (MDE) is the smallest true treatment effect that a research design can detect with confidence. Formally, it is the smallest true treatment effect that has a specified level of statistical power for a particular level of statistical significance, given a specific statistical test. We follow common convention for calculating minimum detectable effects by setting statistical significance (α) at 0.05 and statistical power (1-B) at 80%. The minimum detectable effect size given our sample design in which we randomise at the soum (cluster) level is given by (see Bloom, 2006[10])

$$MDE(\hat{\beta}) = M_{J-2}\sqrt{\frac{\rho}{P(1-P)J} + \frac{1-\rho}{P(1-P)Jn}}$$

where
r   = intra-cluster correlation

P   = the proportion of the sample that is randomised to treatment

J   = total number of clusters

n   = average number of individuals per cluster

M   = $t_{\alpha/2} + t_{(1-B)}$, with j-2 degrees of freedom

The above formula gives the minimum detectable effect of an impact estimator as a multiple of its standard error. In Table A1 below we express it as a percentage of the mean value of the outcome of interest, which gives us by what percentage the mean would need to change in order for us to be able to detect it.

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[10] Bloom, Howard. 2006. 'The core analytics of randomized experiments for social research', MDRC working paper.

Table 1 shows the MDE for four outcome variables: weekly food expenditure, monthly non-durable expenditure, annual durable expenditure and household annual profit/loss from enterprises. The first two rows of the table show the mean and standard deviation of the variables of interest. The third and fourth rows show the intra-cluster correlation. This is a way of expressing similarity among individuals within clusters (mathematically, it is the between-cluster variability divided by the sum of the within-cluster and between-cluster variabilities). The higher is the intra-cluster correlation, the lower is the power to detect true differences between treatment and control areas. 'Unadjusted' means that covariates are not used to reduce the unexplained variation in the outcome of interest, whereas 'adjusted' means that they have been used (see note 1 to the table). The last row of Table A1 shows the MDE in terms of a percentage of the mean value of the variable of interest. Note that in calculating this, we use the standard deviation of the *residual* of each of the four outcome measures, after controlling for the variables listed in note 1 to the table.

Table A1

	Weekly food expenditure	**Monthly non-durable expenditure**	**Annual durable expenditure**	**Annual household profit from enterprises**
Mean (tugrik)	18,011	94,422	915,114	464,769
Standard deviation (tugrik)	20,308	131,585	1,331,494	1,588,867
Intra-cluster correlation, unadjusted	*0.40*	*0.10*	*0.09*	*0.05*
Intra-cluster correlation, adjusted	*0.10*	*0.05*	*0.05*	*0.045*
Minimum detectable effect as % of mean	**44.8%**	**38.0%**	**31.4%**	**40.8%**

Notes to table: **1.** To obtain the adjusted intra-cluster correlation, the *log* of the variable of interest (listed in the top row) is regressed on a set of household characteristics, and the intra-cluster correlation is calculated using the residual from this regression. The regressors include years of education of the respondent, religion of the household (1 if Buddhism, 0 otherwise), whether the respondent is married, number of children below the age of 16 in the household, number of male and female adults in the household (aged 16 or above), ethnicity of the household (1 if Halh, 0 otherwise), whether the household owns the dwelling, whether the household lives in a ger or a house, whether the dwelling has electricity, and whether the household owns another dwelling. **2.** Non-durables include fuel for the stove, other combustibles, cigarettes/ tobacco, felt for ger, transport services, magazines etc, recreation, dwelling rent, and repayment and interest on loans. **3.** Durables include clothes and shoes for adults and children, school expenses, furniture and floor coverings for the dwelling, repairs, household appliances, household textiles,

books/music, and vehicles. **4.** Annual profit from household enterprises includes the sum of all profits obtained from joint, respondent, and partner enterprises. Note it may be negative. **5.** Exchange rate at the time of writing is $US1=1,152 Mongolian tugrik.

We see from Table A1 that total weekly food expenditure would need to increase by around 45% in order for it to be statistically detectable; monthly non-durable expenditure would need to increase by 38%, and annual durable expenditure by 31%. So the increases in these expenditures would have to be very large in order for us to be able to detect them with confidence. Annual household profit from enterprises would have to increase by just over 40% in order to be statistically detectable.

In Attanasio et al (2008) we reported preliminary power calculations for food expenditure and total household annual expenditure based on data from the EBRD Life in Transition Survey (LiTS). The MDEs for food expenditure reported in Attanasio et al (*op. cit.*) is just over 15 per cent for an assumed intra-cluster correlation of 0.1, compared to the figure of around 45 per cent obtained here with a similar intra-cluster correlation. The difference between the two sets of calculations is the source of the expenditure data used. Indeed, the values of expenditure are markedly different across surveys: average weekly food expenditure in the LiTS survey is around 7,200 tugrik (converted from monthly to weekly for comparative purposes), whereas in the baseline survey used here it is around 18,000 tugrik. Note that differences in measurement tools in the two surveys may explain some of the difference between them; seasonal effects may also play a role. More importantly, the standard deviation is significantly higher in the baseline survey: whilst it is around one third of mean expenditure in the LiTS survey, it is around 10 per cent higher than mean expenditure in the baseline survey used here. This underlies the discrepancy in the MDEs: as the standard deviation increases, the MDE increases as well (as the MDE is a multiple of the standard deviation).

Appendix B. Summary of all variables collected in the baseline survey

SECTIONS A, B. HOUSEHOLD ROSTER AND EDUCATION

Variable	Obs	Mean	Std. Dev.	Min	Max
male	5594	0.461	0.4985	0	1
rship	5595	1.798	1.596	0	10
birthdate	5355	30606	5744	7673	39504
age	5587	24.51	16.3	0	99
marital	5594	1.533	0.9358	1	5
religion	5562	1.826	1.312	1	4
ethn	5587	2.351	2.549	1	11
above5	5583	0.9377	0.2418	0	1
literate	5229	0.9516	0.2146	0	1
hgrade	5196	26.29	14.8	0	71
schllastyr	5223	0.4718	0.4992	0	1
schlnow	5224	0.4594	0.4984	0	1
schl0why	2807	3.558	2.728	1	9

SECTION C. CHARACTERISTICS OF DWELLING WHERE HOUSEHOLD IS CURRENTLY LIVING

Variable	Obs	Mean	Std. Dev.	Min	Max
ownsdwelling	1147	1.126	0.4907	1	4
dwellingvalue	1025	1514874	1941222	100000	25000000
ownsfence	1147	0.7228	0.4478	0	1
yearsliving	1138	14.06	10.41	0	80
monthsliving	1130	1.424	2.712	0	11
dwellingtype	1148	1.415	0.5761	1	4
nrofshells	720	5.407	1.027	3	10
wlayers	720	1.943	0.8244	1	8
rlayers	721	1.831	0.5861	1	3
floor	719	1.853	1.381	1	5
rooms	426	2.155	1.174	1	10
dwellingsize	411	44.82	49.12	6	900
walltype	427	3.393	1.561	1	6
rooftype	426	2.455	1.959	1	6
floor2	427	1.04	0.3437	1	6
fuel	1148	1.327	0.9488	1	5
otherdwelling	1147	0.4682	0.4992	0	1
otherger	537	0.4302	0.5284	0	2

SECTION D. HOUSEHOLD CONSUMPTION - FOOD CONSUMPTION IN THE PAST WEEK

Variable	Obs	Mean	Std. Dev.	Min	Max
milk1	1148	0.7491	0.4337	0	1
milk2	858	4730	4928	200	70000
milk3	858	2066	4266	0	80000
milk4	393	3930	4528	140	37500
milk5	1148	3.965	1.487	1	7
milk6	1148	2.984	0.1243	2	3
butter1	1147	0.2999	0.4584	0	1
butter2	342	821.9	743.5	100	5000
butter3	342	527.8	1059	0	15000
butter4	180	2608	2996	99	30000
butter5	1148	4.729	0.8208	1	7
butter6	1148	2.975	0.157	2	3
othdair1	1148	0.5226	0.4997	0	1
othdair2	587	1684	1927	50	30000
othdair3	599	367.8	1249	0	10000
othdair4	100	3194	6073	150	60000
othdair5	1148	4.301	1.18	1	7
othdair6	1148	2.997	0.05895	2	3
eggs1	1148	0.0723	0.2591	0	1
eggs2	83	133	1098	1	10000
eggs3	83	131.7	1098	0	10000
eggs4	76	1428	839	250	3500
eggs5	1148	4.981	0.2601	1	5
eggs6	1148	3	0	3	3
redmeat1	1147	0.9956	0.06591	0	1
redmeat2	1134	5229	4931	500	70000
redmeat3	1137	1610	13401	0	240000
redmeat4	132	22097	47265	99	350000
redmeat5	1148	4.134	0.8211	1	8
redmeat6	1148	2.974	0.1596	2	3
chicken1	1148	0.000871	0.02951	0	1
chicken2	1	2000	.	2000	2000
chicken3	1	2000	.	2000	2000
chicken4	1	5000	.	5000	5000
chicken5	1148	5	0	5	5
chicken6	1148	3	0	3	3
fish1	1148	0.01132	0.1059	0	1
fish2	13	2019	1894	300	7000
fish3	13	1635	1997	0	7000
fish4	9	2444	1357	500	5000
fish5	1148	4.997	0.1446	1	7
fish6	1148	2.999	0.02951	2	3
bread1	1148	0.5627	0.4963	0	1
bread2	644	1711	1654	175	15000
bread3	644	1187	1343	0	14000
bread4	494	2518	3655	99	70000
bread5	1148	4.491	1.32	1	5
bread6	1148	2.997	0.06597	1	3
flour1	1148	0.9948	0.07214	0	1
flour2	1135	7598	5752	100	100000
flour3	1138	12264	19975	0	150000

flour4	448	21714	14234	0	108000
flour5	1148	4.381	0.5561	1	5
flour6	1148	2.756	0.4296	2	3
rice1	1146	0.8133	0.3899	0	1
rice2	932	2346	1976	99	40000
rice3	933	3146	5728	0	40000
rice4	716	3178	4893	0	30000
rice5	1148	4.787	0.4557	1	5
rice6	1148	2.92	0.2716	2	3
vegetab1	1148	0.6019	0.4897	0	1
vegetab2	686	3416	2873	100	40000
vegetab3	688	3150	4584	0	50000
vegetab4	540	2219	2998	41	40000
vegetab5	1148	4.809	0.6477	1	7
vegetab6	1148	2.952	0.2177	1	3
fruit1	1148	0.1429	0.3501	0	1
fruit2	162	1648	1472	200	10000
fruit3	162	1539	1454	0	10000
fruit4	152	2118	1825	200	15000
fruit5	1148	4.986	0.144	3	5
fruit6	1148	2.999	0.02951	2	3
choco1	1148	0.4338	0.4958	0	1
choco2	479	978.1	939.2	80	6000
choco3	480	948.7	1179	0	15000
choco4	441	2978	2925	300	30000
choco5	1148	4.907	0.433	1	5
choco6	1148	2.991	0.09296	2	3
nonalco1	1148	0.351	0.4775	0	1
nonalco2	402	2213	1964	100	21000
nonalco3	402	2096	2152	0	21000
nonalco4	382	1855	1637	500	14400
nonalco5	1148	4.96	0.3369	1	5
nonalco6	1148	2.999	0.02951	2	3
alcohol1	1148	0.1167	0.3212	0	1
alcohol2	134	1169	873.8	200	6000
alcohol3	134	1051	887.8	0	6000
alcohol4	121	6459	4149	1000	23800
alcohol5	1148	4.972	0.2525	1	5
alcohol6	1148	3	0	3	3

SECTION D. HOUSEHOLD CONSUMPTION IN THE PAST MONTH

Variable	Obs	Mean	Std. Dev.	Min	Max
fuel7	1148	0.9834	0.1276	0	1
fuel8	1036	21850	36385	0	800000
fuel9	53	25071	45919	0	300000
fuel10	21	8701	8785	1420	35000
othecom7	1148	0.3441	0.4753	0	1
othecom8	390	29443	46251	600	516950
othecom9	3	8333	7638	0	15000
cigaret7	1148	0.4443	0.4971	0	1
cigaret8	504	7552	8660	300	84000
cigaret9	60	4073	3377	500	15000
cigare10	1	20000	.	20000	20000
feltger7	1148	0.008711	0.09296	0	1
feltger8	6	101000	195611	12000	500000
feltger9	3	83333	144338	0	250000
transer7	1148	0.4425	0.4969	0	1
transer8	502	41183	64421	1500	800000
transer9	22	19682	26013	0	120000
transe10	2	8500	4950	5000	12000
magaz7	1147	0.2424	0.4287	0	1
magaz8	268	4962	6436	0	60000
magaz9	7	6771	10397	100	30000
recreat7	1148	0.4852	0.5	0	1
recreat8	462	3300	6767	0	125000
recreat9	115	1051	1963	0	10000
dwellre7	1148	0.02091	0.1431	0	1
dwellre8	22	28182	26004	3500	120000
repayme7	1148	0.4556	0.4982	0	1
repayme8	518	88257	131055	0	1535000

SECTION D. HOUSEHOLD CONSUMPTION IN THE PAST YEAR

Variable	Obs	Mean	Std. Dev.	Min	Max
cladul11	1146	0.9825	0.131	0	1
cladul12	1090	199722	220172	6500	3000000
cladul13	215	56466	74141	1	700000
cladul15	25	183400	588279	18000	3000000
clchil11	1146	0.8682	0.3384	0	1
clchil12	972	128352	142502	3000	2500000
clchil13	184	35477	34988	1000	200000
clchil15	16	66688	106198	3000	450000
schoo11	1145	0.8428	0.3642	0	1
schoo12	949	244039	466723	0	7000000
schoo13	153	75908	143258	1000	1100100
schoo15	8	85250	79914	10000	200000
furnit11	1146	0.4276	0.4949	0	1
furnit12	479	113615	146437	3000	1200000
furnit13	11	249909	367402	7000	1250000
furnit14	5	70000	74078	15000	200000
repair11	1146	0.2967	0.457	0	1
repair12	331	137032	286556	0	3000000
repair13	5	24900	27264	3500	70000
repair14	3	15167	8372	5500	20000
happli11	1146	0.4625	0.4988	0	1
happli12	515	190158	300337	6500	5900000
happli13	25	103680	186541	11000	910000
happli14	3	213333	55076	150000	250000
textil11	1146	0.534	0.4991	0	1
textil12	604	54124	59700	750	600000
textil13	31	34903	39360	2500	200000
textil14	4	48000	37842	10000	100000
books11	1146	0.2618	0.4398	0	1
books12	275	20448	37356	1000	399000
books13	23	8891	6369	0	20000
books14	2	12500	10607	5000	20000
vehicl11	1146	0.1335	0.3403	0	1
vehicl12	147	1635905	2515423	15000	20000000.00
vehicl15	7	676429	657436	35000	2000000

SECTION F JOINT ENTERPRISE -1

Variable	Obs	Mean	Std. Dev.	Min	Max
maleresp	1148	0.02091	0.1431	0	1
enterprise	1148	0.5976	0.4906	0	1
jointent	687	0.9098	0.7772	0	2
nrjointent	267	1.142	0.3606	1	3
years_j1	267	8.697	7.182	0	37
months_j1	263	1.605	2.96	0	11
fullyown_j1	267	0.9326	0.2512	0	1
percown_j1	18	52.22	12.63	30	80
othermown_j1	18	0.5	0.5145	0	1
permemown_j1	9	45.56	12.36	20	60
otheroutown_j1	18	0.3333	0.4851	0	1
peroutown_j1	6	50	16.73	20	70
empl_j1	267	2.873	1.422	1	10
hoursnmemb_j1	264	37.82	99.17	0	672
hoursnmemn_j1	264	18.86	50.98	0	420
busyslen_j1	266	3.229	2.028	0	12
exponwag_j1	265	74049	302004	0	3000000
exponraw_j1	259	397475	848696	0	6300000
exponres_j1	262	151603	705712	0	6000000
exponmach_j1	266	77683	323586	0	2500000
exponequip_j1	267	6732	36713	0	300000
exponmain_j1	267	61135	330852	0	3900000
expontransp1	267	84468	239013	0	2400000
exponfuel_j1	266	45604	130009	0	1000000
expontax_j1	262	18006	42733	0	500000
exponint_j1	264	177225	554294	0	6000000
exponother_j1	267	54921	506552	0	6138000
revcash_j1	257	1427526	2030077	0	11000000
revkind_j1	267	86713	339110	0	4000000
revsale_j1	267	125614	690548	0	8000000
revrent_j1	267	6528	101408	0	1656000
revother_j1	266	1692	19126	0	240000
useloan_j1	267	0.8277	0.3783	0	1
perloan_j1	221	71.11	27.09	10	100
whatuseloan_j1	220	3.323	1.585	1	6
activity_j1	262	4.466	4.152	1	12

SECTION F JOINT ENTERPRISE -2

years_j2	37	5.405	6.866	0	40
months_j2	36	1.694	2.936	0	10
fullyown_j2	37	0.9189	0.2767	0	1
percown_j2	3	60	17.32	40	70
othermown_j2	3	0.6667	0.5774	0	1
permemown_j2	2	30	0	30	30
otheroutow_j2	3	0.3333	0.5774	0	1
peroutown_j2	1	60	.	60	60
empl_j2	37	3.865	6.25	2	40
hoursnmemb_j2	37	28.46	72.08	0	336
hoursnmemn_j2	37	21.41	41.61	0	140
busyslen_j2	37	2.595	2.254	0	12
exponwag_j2	37	39730	127290	0	630000
exponraw_j2	37	343986	559745	0	2250000
exponres_j2	37	378378	1401415	0	6000000
exponmach_j2	37	51405	183719	0	1000000
exponequip_j2	37	8027	35553	0	192000
exponmain_j2	37	18324	55101	0	250000
expontrans_j2	37	30730	71394	0	300000
exponfuel_j2	37	19742	41887	0	200000
expontax_j2	36	10289	19804	0	72000
exponint_j2	37	54158	175519	0	712000
exponother_j2	37	27027	164399	0	1000000
revcash_j2	37	1536638	2150657	20000	7200000
revkind_j2	36	75417	197308	0	1000000
revsale_j2	37	107297	358815	0	2000000
revrent_j2	37	0	0	0	0
revother_j2	37	0	0	0	0
useloan_j2	37	0.8108	0.3971	0	1
perloan_j2	30	40.5	27.24	5	100
whatuseloan_j2	30	2.833	1.234	1	5
activity_j2	37	6.784	4.541	1	12

SECTION G OWN ENTERPRISE

soleent	686	0.6195	0.4859	0	1
years_r	425	8.327	7.963	0	50
months_r	417	1.604	2.786	0	11
fullyown_r	425	0.92	0.2716	0	1
percown_r	34	45.51	22.34	0	99
othermown_r	36	0.3333	0.4781	0	1
permemown_r	12	48.33	9.374	20	60
otheroutow_r	36	0.5833	0.5	0	1
peroutown_r	21	60.09	23.79	20	100
empl_r	425	1.616	1.168	1	10
hoursnmemb_r	143	44.37	81.73	0	504
hoursnmemn_r	144	24.59	47.44	0	336
busyslen_r	421	2.962	2.17	0	12
exponwag_r	425	41739	173540	0	1608000
exponraw_r	419	378432	899430	0	6900000
exponres_r	416	219724	788640	0	6000000
exponmach_r	423	33152	229137	0	3800000
exponequip_r	424	9335	49307	0	600000
exponmain_r	424	13293	63798	0	700000
expontrans_r	423	87866	363696	0	4800000
exponfuel_r	421	20392	90056	0	1600000
expontax_r	422	10623	33985	0	500000
exponint_r	420	141259	421464	0	3864000
exponother_r	425	9734	147378	0	3000000
revcash_r	409	1190161	1766567	0	11000000.00
revkind_r	421	69209	302037	0	4500000
revsale_r	424	46932	289941	0	4500000
revrent_r	424	0	0	0	0
revother_r	423	5508	78161	0	1500000
useloan_r	425	0.9129	0.2823	0	1
perloan_r	387	73.19	26.97	2	100
whatuseloan_r	386	2.782	1.212	1	6
activity_r	425	6.111	3.216	1	12

SECTION H SPOUSE/PARTNER ENTERPRISE

partnent	510	0.2412	0.4282	0	1
years_p	122	6.984	6.825	0	30
months_p	120	1.142	2.182	0	9
fullyown_p	123	0.9268	0.2615	0	1
percown_p	9	44.44	13.33	10	50
othermown_p	10	0.4	0.5164	0	1
permemown_p	4	47.5	5	40	50
otheroutow_p	10	0.6	0.5164	0	1
peroutown_p	6	51.67	25.63	10	90
empl_p	123	1.439	0.9334	1	5
hoursnmemb_p	30	50.67	67.06	0	252
hoursnmemn_p	28	26.57	37.52	0	160
busyslen_p	121	2.471	2.157	0	12
exponwag_p	120	34275	156720	0	1200000
exponraw_p	113	124475	236857	0	1400000
exponres_p	118	169322	785544	0	6330000
exponmach_p	120	130092	580012	0	5000000
exponequip_p	121	867.8	9098	0	100000
exponmain_p	118	28030	105125	0	750000
expontrans_p	119	41407	109278	0	676000
exponfuel_p	111	155016	420827	0	3612000
expontax_p	118	10095	23188	0	148000
exponint_p	120	80087	332434	0	2680000
exponother_p	121	2479	20260	0	200000
revcash_p	115	1107414	1359634	0	7440000
revkind_p	118	53305	169198	0	1000000
revsale_p	119	14202	105288	0	1100000
revrent_p	121	0	0	0	0
revother_p	121	0	0	0	0
useloan_p	123	0.5772	0.496	0	1
perloan_p	71	49.93	27.47	5	100
whatuseloan_p	70	2.543	1.2	1	6
activity_p	123	10.25	3.306	1	12

SECTION F, G, H – EMPLOYMENT ON OWN, JOINT, PARTNER ENTERPRISE

Variable	Obs	Mean	Std. Dev.	Min	Max
emplown	1862	0.3077	0.4617	0	1
emplprimjo	1228	0.5301	0.4993	0	1
emplsecjo	186	0.5	0.5013	0	1
emplpartn	545	0.2642	0.4413	0	1
hoursown	564	41.51	24.66	2	147
hoursprimjo	645	47.9	25.3	1	140
hourssecjo	93	35.67	21.74	1	98
hourspartn	140	42.71	24.33	1	140

SECTION J – WAGE EMPLOYMENT AND INCOME

Variable	Obs	Mean	Std. Dev.	Min	Max
empl	4994	0.1366	0.3434	0	1
typeofempl	682	6.727	2.773	1	10
hourswork	653	52.87	23.2	4	168
grossearn	663	170112	196059	1000	3000000
periodearn	679	4.035	0.5083	2	5
benefit	5584	0.5249	0.4994	0	1
benefitval	2930	156033	153644	8000	1792000
periodben	2927	2.854	0.3569	1	3

SECTION K. DEBT

Variable	Obs	Mean	Std. Dev.	Min	Max
loan	1148	0.6228	0.4849	0	1
otherloan	1146	0.5157	0.5	0	1
nrofloans	591	2.788	2.516	1	30
totalvalue	584	1924378	3675990	10000	53000000
valueloan_1	714	879176	1354803	8000	15000000
privateuse_1	715	74.47	39.75	0	100
busiuse_1	715	25.53	39.75	0	100
entpr_1	230	2.222	1.109	1	4
irate_1	643	2.152	1.291	0	15
year_1	715	2007	0.786	1997	2008
month_1	709	5.81	3.926	1	12
balance_1	670	617981	995595	1	12000000
whomowned_1	714	1.689	1.779	1	7
collateral_1	715	0.7608	0.4269	0	1
valuecol_1	415	2813783	3908204	0	30000000
typeofcol_1	544	3.853	2.505	1	7
loan	1148	0.6228	0.4849	0	1
otherloan	1146	0.5157	0.5	0	1
nrofloans	591	2.788	2.516	1	30
totalvalue	584	1924378	3675990	10000	53000000
valueloan_1	714	879176	1354803	8000	15000000
typeofcol_1	544	3.853	2.505	1	7
valueloan_2	159	408219	629793	2000	5000000
privateuse_2	160	87.03	31.81	0	100
busiuse_2	160	12.97	31.81	0	100
entpr_2	25	2.16	1.143	1	4
irate_2	139	1.542	1.716	0	15
year_2	158	2007	0.5122	2006	2008
month_2	157	5.268	3.827	1	12
balance_2	154	316352	696420	2000	7000000
whomowned_2	157	2.395	2.32	1	7
collateral_2	160	0.4875	0.5014	0	1
valuecol_2	58	1602931	2051532	39000	10000000
typeofcol_2	77	4.766	2.373	1	7
valueloan_3	34	370187	653956	850	3000000
privateuse_3	34	92.65	25.02	0	100
busiuse_3	34	7.353	25.02	0	100
entpr_3	3	2.333	1.155	1	3
irate_3	33	1.318	1.277	0	3
year_3	34	2008	0.4996	2007	2008
month_3	34	5.118	3.859	1	12
balance_3	31	283299	586890	850	3000000
whomowned_3	33	2.606	2.41	1	7
collateral_3	34	0.4412	0.504	0	1
valuecol_3	11	1150182	1220246	46007	3420000
typeofcol_3	15	5.067	2.712	1	7

SECTION L. HOUSEHOLD ASSETS

Variable	Obs	Mean	Std. Dev.	Min	Max
house1	1148	0.3258	0.4689	0	1
house2	352	1645909	2282099	10000	16500000
house3	373	4.686	0.9508	1	5
ger1	1148	0.1951	0.3965	0	1
ger2	211	720474	666875	100000	6000000
ger3	222	4.788	0.8322	1	5
land1	1147	0.3976	0.4896	0	1
land2	202	1084086	1462313	0	14000000
land3	455	4.6	1.112	1	5
wellin1	1148	0.05226	0.2227	0	1
wellin3	60	4.533	1.171	1	5
car1	1147	0.0837	0.2771	0	1
car2	93	3948925	3038932	350000	21000000
car3	96	4.229	1.41	1	5
lorry1	1148	0.05836	0.2345	0	1
lorry2	62	2550000	1828082	0	8000000
lorry3	67	3.851	1.51	1	5
motobi1	1148	0.223	0.4164	0	1
motobi2	243	788165	645166	50000	9000000
motobi3	256	4.656	1.04	1	5
comput1	1148	0.0331	0.179	0	1
comput3	38	4.895	0.6489	1	5
telepho1	1148	0.06272	0.2426	0	1
telepho3	72	4.944	0.4714	1	5
mobile1	1148	0.5557	0.4971	0	1
mobile3	636	4.937	0.4301	1	5
tools1	1146	0.5611	0.4965	0	1
tools2	576	332461	853680	0	15000000
tools3	643	3.571	1.486	1	5
satelit1	1148	0.1002	0.3004	0	1
satelit3	115	4.991	0.09325	4	5
tv1	1148	0.9242	0.2648	0	1
tv3	1061	4.992	0.1762	1	5
battv1	1148	0.08972	0.2859	0	1
battv3	101	4.901	0.4797	1	5
videoka1	1148	0.2927	0.4552	0	1
videoka3	335	5	0	5	5
radio1	1148	0.3301	0.4705	0	1
radio3	379	4.979	0.2902	1	5
smalle1	1148	0.7744	0.4182	0	1
smalle3	888	4.966	0.3059	1	5
elgener1	1148	0.08537	0.2795	0	1
elgener3	98	4.949	0.4155	1	5
refrig1	1148	0.3807	0.4858	0	1
refrig3	436	4.805	0.7737	1	5
stove1	1148	0.98	0.1402	0	1
stove3	1123	4.965	0.3293	1	5
washma1	1148	0.284	0.4511	0	1
washma3	326	4.969	0.2919	1	5
redieqi1	1148	0.4904	0.5001	0	1
redieqi2	467	348278	553807	0	5000000

redieqi3	563	4.43	1.311	1	5
jewelry1	211	0.5782	0.495	0	1
jewelry2	94	418394	897281	5	6000000
jewelry3	121	4.967	0.3636	1	5
unsold1	1148	0.2047	0.4037	0	1
unsold2	231	416057	689857	600	6000000
unsold3	234	2.688	1.261	1	5
otheras1	1148	0.2439	0.4296	0	1
otheras2	275	506533	920818	500	7000000
otheras3	280	4.964	0.3574	1	5
sheep1	1142	19.66	43.09	0	800
sheep2	603	1345557	1765809	30000	14000000
sheep3	608	4.242	1.471	1	5
goats1	1144	22.31	33.35	0	400
goats2	708	1079464	1127817	15000	8580000
goats3	715	4.305	1.427	1	5
cattle1	1144	3.817	6.772	0	80
cattle2	542	1597520	1661102	40000	16000000
cattle3	549	4.299	1.429	1	5
horses1	1146	2.609	7.156	0	100
horses2	433	1348961	2385018	100000	31200000
horses3	440	4.091	1.579	1	5
camel1	1147	0.00959	0.1214	0	2
camel2	8	292500	180139	40000	600000
camel3	8	3.75	1.832	1	5
other1	1147	0.3705	1.65	0	37
other2	117	83824	366822	0	3700000
other3	242	4.446	1.307	1	5

SECTION M. SAVINGS

Variable	Obs	Mean	Std. Dev.	Min	Max
savings_1	1148	0.351	0.4775	0	1
valuesav_1	392	164274	443438	0	6500000
edusav_1	389	113589	203114	0	2000000
wheresav_1	402	1.072	0.4145	1	5
savings_2	755	0.01589	0.1251	0	1
valuesav_2	11	383636	565067	5000	1500000
edusav_2	12	32083	73282	0	250000
wheresav_2	12	1	0	1	1
savings_3	755	0.02781	0.1646	0	1
valuesav_3	21	267048	498265	0	2000000
edusav_3	20	34150	46512	0	150000
wheresav_3	21	1.095	0.3008	1	2

SECTION N. HOUSEHOLD ECONOMIC SHOCKS

Variable	Obs	Mean	Std. Dev.	Min	Max
death_y	1147	0.05841	0.2346	0	1
deadmale1_y	67	0.7612	0.4296	0	1
deadmale2_y	2	1	0	1	1
deadmale3_y	1	1	.	1	1
agedead1_y	67	51.09	21.31	0	92
agedead2_y	2	47	22.63	31	63
agedead3_y	1	29	.	29	29
death_m	1148	0.003484	0.05895	0	1
deadmale1_m	1148	0.001742	0.04172	0	1
agedead1_m	1148	0.2012	3.496	0	73
ill_y	1147	0.2729	0.4456	0	1
illmale1_y	313	0.4792	0.5004	0	1
illmale2_y	26	0.3462	0.4852	0	1
illmale3_y	4	0.5	0.5774	0	1
ageill1_y	310	34.75	18.33	0.2	78
ageill2_y	26	32.69	23.4	2	90
ageill3_y	4	8	5.598	3	15
ill_m	1148	0.1124	0.316	0	1
illmale1_m	1148	0.0453	0.208	0	1
illmale2_m	1148	0.002613	0.05108	0	1
illmale3_m	1148	0.000871	0.02951	0	1
ageill1_m	1147	3.419	11.52	0	78
ageill2_m	1148	0.4443	4.667	0	67
ageill3_m	1148	0.0122	0.3178	0	10
doctor_y	1147	0.7201	0.4491	0	1
costdoc1_y	815	27460	88716	0	1000000
costdoc2_y	212	6085	25757	0	300000
costdoc3_y	109	2917	19484	0	200000
doctor_m	1148	0.3232	0.4679	0	1
costdoc1_m	1143	5874	46052	0	1000000
costdoc2_m	1148	352.4	8992	0	300000
costdoc3_m	1148	20.91	474.3	0	15000
jobloss_y	1147	0.01569	0.1243	0	1
lostmale_y	18	0.6111	0.5016	0	1
agejloss1_y	18	39.39	7.979	29	58
lostjob_m	1148	0.002613	0.05108	0	1
lostmale_m	1148	0.002613	0.05108	0	1
robbery_y	1147	0.09329	0.291	0	1
robberyloss_y	104	573948	1242864	3600	12000000
robbery_m	1148	0.01132	0.1059	0	1
robberyloss_m	104	38442	124404	0	600000
disaster_y	1147	0.08806	0.2835	0	1
sheep_y	99	4.869	8.205	0	40
goats_y	99	6.707	9.114	0	40
cows_y	100	1.62	3.117	0	20
yaks_y	100	0.04	0.2429	0	2
horse_y	100	1.04	4.383	0	40
camel_y	101	0	0	0	0
other_y	101	0	0	0	0
sheep_m	99	1.889	5.27	0	40
goats_m	99	2.808	5.554	0	40
cows_m	99	0.3939	1.067	0	6

yaks_m	99	0.0202	0.201	0	2
horse_m	99	0.07071	0.3847	0	3
camel_m	100	0	0	0	0
other_m	100	0	0	0	0
harvest_y	1147	0.06452	0.2458	0	1
harvestloss_y	70	153211	239121	0	1000000
harvestloss_m	74	2338	12981	0	100000
otherloss_y	1147	0.05057	0.2192	0	1
otherlosst_y	1148	0.05226	0.3378	0	3
otherlosst_m	53	0.2453	0.4344	0	1

SECTION P. RATES OF RETURN AND PERCEPTIONS OF RISK

Variable	Obs	Mean	Std. Dev.	Min	Max
useofloan	1146	2.623	1.891	1	9
rev_s	892	3368098	6081862	50000	63800000
rev_u	894	1782766	3482792	10000	36500000
rev_a	893	2595195	4801748	40000	54800000
av_rev	891	2550948	4449411	40000	36500000
prob_ab	897	72.53	18.23	0	100
prob_bel	895	52.9	32.14	0	100

SECTION Q. TRANSFERS AND RELATIONSHIPS BETWEEN NON-RELATED PEOPLE

Variable	Obs	Mean	Std. Dev.	Min	Max
rectrans	1147	0.08893	0.2848	0	1
recfrom_1	102	1.735	0.6437	1	3
recfrom_2	20	1.6	0.5982	1	3
recfrom_3	7	1.857	0.6901	1	3
recfrom_4	1	2	.	2	2
valuerec_1	100	148805	205125	3000	1000000
valuerec_2	20	145850	337963	10000	1500000
valuerec_3	7	27857	16293	10000	50000
valuerec_4	1	20000	.	20000	20000
gavetrans	1147	0.1508	0.358	0	1
gaveto_1	173	1.844	0.6938	1	3
gaveto_2	66	1.955	0.6185	1	3
gaveto_3	27	1.889	0.698	1	3
gaveto_4	17	1.882	0.6966	1	3
gaveto_5	12	1.833	0.7177	1	3
valuegave_1	173	116659	195471	2000	2000000
valuegave_2	66	127439	224238	1000	1500000
valuegave_3	27	80611	129084	1500	500000
valuegave_4	17	31206	31728	1500	125000
valuegave_5	12	25600	18829	3000	50000

SECTION R. TRANSFERS FROM AND TO FAMILY/RELATIVES

Variable	Obs	Mean	Std. Dev.	Min	Max
rectrans_m	1148	0.128	0.3343	0	1
valuerec_m	147	145173	304345	1000	2500000
rec_m	146	2.5	1.391	1	6
rectrans_y	1147	0.279	0.4487	0	1
valuerec_y	319	291474	479150	99	5000000
rec_y	317	2.555	1.408	1	6
gavetrans_m	1148	0.2683	0.4433	0	1
valuegave_m	308	126575	222926	5000	2500000
gave_m	308	2.669	0.9856	1	6
gavetrans_y	1148	0.4146	0.4929	0	1
valuegave_y	471	403618	530945	4000	4500000
gave_y	475	2.806	1.194	1	6