

# Innovative Finance for Social Justice

2014



Microfinance and job creation: A social performance assessment of a new loan delivery mechanism, Bai Tushum Kyrgyzstan

## Microfinance for Decent Work

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Social Finance Programme & Robin Gravesteijn

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#### **Preface**

Entrepreneurs in the informal economy, and the employees that work in those businesses, are often exposed to difficult and dangerous working conditions. The tools used to identify, prevent and rectify such conditions in the formal economy – including social dialogue between employers and employees, labour inspection and other applications of labour law – generally do not apply to the unregistered enterprises that proliferate in many emerging economies. Consequently, alternative approaches are required. But how can one reach these enterprises and influence their conditions?

Microfinance institutions (MFIs) are a potential conduit. In many emerging markets, they have significant outreach, providing financial services to thousands of small and micro enterprises. Since their primary relationship with these entrepreneurs often involves an enterprise loan, they could theoretically use that leverage to encourage improvements to conditions in the business.

Why would microfinance institutions be interested in doing that? Many MFIs have a social agenda, or a double bottom line approach that strives to combine social and commercial objectives. These organizations are often looking for new tools and approaches that allow them to efficiently enhance their social impact, especially since recent research has raised serious questions about the welfare benefits derived from microfinance. It is also possible that such interventions could also enhance business objectives, which would be of interest even to MFIs without a social agenda.

With this concept in mind, and with the generous support from the German Ministry of Labour and Social Affairs, the International Labour Organization (ILO) launched an action research programme to assess if MFIs could use their relationship with entrepreneurs to target decent work deficits and improve the plight of workers in the informal economy.

This Working Paper presents the results of an intervention of Bai Tushum, Kyrgyzstan and is part of a series of impact reports that present the outcomes of this action research programme. The primary target audiences are MFI managers who will hopefully be inspired by their colleagues' ingenuity, educated about the impact of innovative approaches, and informed about the challenges of conducting action research (but not scared off). Other microfinance actors, including networks and associations, investors and funders, regulators and policymakers, academics and anyone interested in the social performance of microfinance will also find this paper informative.

For the ILO's constituents – employers' and workers' organizations and Ministries of Labour – the findings of this research present them with a new instrument in their policy toolkit to improve the circumstances of entrepreneurs and workers in the informal economy.

Through this initiative, the ILO wishes to promote its "Decent Work Agenda" among MFIs and also to demonstrate that MFIs can improve livelihoods of their clients through more comprehensive approaches, often including the provision of both financial and non-financial services.

For anyone interested in reading the other impact studies and the synthesis report, click on the MF4DW button on the Social Finance website (<a href="www.ilo.org/socialfinance">www.ilo.org/socialfinance</a>).

Craig Churchill Chief Social Finance Programme

## Microfinance and job creation:

# A social performance assessment of a new loan delivery mechanism, Bai Tushum Kyrgyzstan

Robin Gravesteijn<sup>1</sup>

#### **Executive Summary**

Bai Tushum of Kyrgyzstan participated in the ILO's Microfinance for Decent Work (MF4DW): Action Research project from 2008-2012. As part of this research project, Bai Tushum launched and tested a Small-and-Medium-Sized Enterprise (SME) loan delivery mechanism to see if such targeted mechanism would have a positive impact on the number of jobs created by its clients and their enterprises. The social performance assessment compared several clients groups namely those who received loans under new delivery channels and those who did not.

- We find a small weak effect of increases in loan size on job creation, the effect is not always significant
- We find a negative effect of client exit on job creation
- Other factors such as type of sector (production activities) are influencing job creation

Limitation of the study is that we only have data for 12 month period and this may be too short for the innovation to capture effects. During the survey period the political crises occurred in Kyrgyzstan affecting the clients of Bai Tushum. Moreover, in absence of a control group, it is difficult to link the social performance outcomes to the changes in loan size and delivery.

## Acknowledgement

The ILO would like to acknowledge the partnership with Oikocredit (<u>www.oikocredit.com</u>) in conducting the Action Research on Microfinance for Decent Work with Bai Tushum.

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## **List of Acronyms**

Baseline Survey BS FS1 First follow-up Survey FS2 Final follow-up Survey International Labour organization ILO Microfinance for Decent Work MF4DW Microfinance Institution MFI OLS Ordinary Least Squares SFP Social Finance Programme Small and medium-sized Enterprise **SME** 

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#### 1. Background: ILO microfinance for decent work action research

The Microfinance for Decent Work (MF4DW) action research aims to build knowledge on the effects of innovations on microfinance clients' livelihoods. Launched by the ILO's Social Finance Programme (SFP) in 2008, the MF4DW action research began by identifying specific work-related challenges among microfinance clients and, to address them, implemented tailor-made innovations with 16 microfinance institutions (MFIs) worldwide. The MF4DW action research set out to apply an experimental research design to measure the impact of these innovations overtime. The MF4DW action research concludes in June, 2012.

At the outset of the MF4DW action research, each participating MFI conducted a diagnostic survey among 200 of its clients to determine their most pressing work-related challenge. The analysis was guided by ILO's vision of decent work for all and its goal to promote opportunities for women and men to obtain decent and productive work, in conditions of freedom, equity, security and human dignity. Within this framework, the diagnostic determined child labour, working conditions, formalisation, job creation and productive employment, risk management/over-indebtedness, and women's empowerment, as key challenges keeping microfinance clients from obtaining decent work.

Informed by the diagnostic results, each MFI developed an innovation to address the work-related challenge that most affected its clients and began implementing the innovations from 2009 onwards. The innovations included new or upgraded:

- financial services (loan, savings, insurance, leasing);
- non-financial services (training, awareness campaign); or
- mechanisms for delivering services (organisational restructuring).

The MF4DW action research used an experimental research design, meaning that one group of clients received the innovation (target group) while another group of clients did not (control group). Ideally, clients of each group were selected randomly. Before the introduction of the innovations, all clients of the target and control groups were interviewed to establish a baseline against which changes could be compared. Depending on the implementation timeline, up to four follow-up surveys were conducted once the innovation was launched. The last follow-up surveys were completed in February 2012.

This report presents final results of the decent work innovation implemented by Bai Tushum in Kyrgyzstan. The company is the third largest MFI in Kyrgyzstan. It has branches in all provinces and, as of December 2011, serves over 35.833 clients of which 82 per cent live in rural areas. Bai Tushum provides lending services such as group and individual loans.

Initially Bai Tushum's innovation used the same methodology as other ILO partners. However, due to external factors, in particular the political crises, Bai Tushum could not take the experimental research design up to its completion. Implementation of certain product features were delayed and only moderately trickled down to the level of the clients. The innovation was implemented in both control and treatment group branches making it impossible to measure its impact. Nonetheless data compiled on changes in loan size for clients and employment could provide basis for social performance analysis using 12 months period data.

Figure 1. Bai Tushum network in Kyrgyzstan



### 1. The decent work innovation: SME loan delivery mechanism

The initial diagnostic conducted in 2008 identified job creation as the most pressing challenge for Bai Tushum's clients. The main findings from the diagnostic tool:

- Seventy eight per cent of the clients of Bai Tushum were self-employed most of them (89 per cent) had one or more workers in their enterprise.
- On average the number of workers per self-employed client was 2.4.
- The majority of workers are family workers (87 per cent) only 12 per cent were wage workers.
- Six per cent of the workers were children the majority working for family members (80 per cent). All of the children were reported to attend schooling of which 2/3rd full time schooling.
- Most family workers (95 per cent) did not receive salary and where paid in kind (e.g. food, clothes and other coverage of costs).
- Businesses of clients were relatively formalized with high percentages of business registration (91 per cent), paying taxes (93 per cent).
- Few clients (23 per cent) offered social benefits to their workers

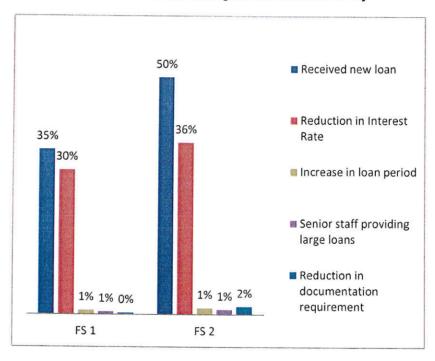
The quantitative findings from the diagnostics study outlined for Bai Tushum a need to promote job creation through the enterprises of clients. In this context, job creation means not only assessing the number of workers in client enterprises, but also the quality of employment with focus on wage employment. The MFI aimed to formalize employment related goals into their social performance management. The company believed that easier access to loans and larger loan amounts would induce

more jobs and better serve small medium enterprises (SMEs). Bai Tushum had estimated that for every US\$250 of loan fund one job position was created. Through the project the company wanted to identify factors that contribute to job creation. The MFI wanted to improve loan delivery for microfinance and SME borrowers with the ultimate aim of creating jobs through their enterprises.

The innovation consisted of a reorganization of the credit delivery system by establishing a separate department for SME and micro lending. ILO conducted a training workshop in surveying on employment indicators in September 2009. The innovation was implemented after the first survey in all branches. The reorganization included hiring of credit managers and underwriters, decentralization of decision-making in loan approval for small loans and division of staff into a micro and SME department. Product delivery changes included reduction in collateral for productive loans up to kilograms 100,000, reduction in documentation requirements for smaller loans, lengthening of the maximum loan period to 3 years for productive loans and division of interest rates into micro and SME loans. Microloans were considered loans below \$5,000, while SME loans were higher than \$5,000.

Due to the Kyrgyz political crises and declining marketing conditions such as reduction in loan demand, increased restructuring of loans and cost of funds, Bai Tushum could not implement all aspects of the innovation.<sup>2</sup> Changes in product features trickled down moderately to the level of the clients. Since the baseline 50 per cent of the clients in the sample received a new loan and 36 per cent received a lower interest rate. The innovation entailed a small increase in average loan amount (kilograms 8,838) and small decrease in interest rates (-2 per cent). Changes such as lengthening loan period, delivery of loans by senior staff, and reduction in documentation were observed for only a very small percentage of the sample. With small modifications to the products observed in the delivery of loans to clients as well as absence of a control group it is difficult to relate the innovation to social performance outcomes.

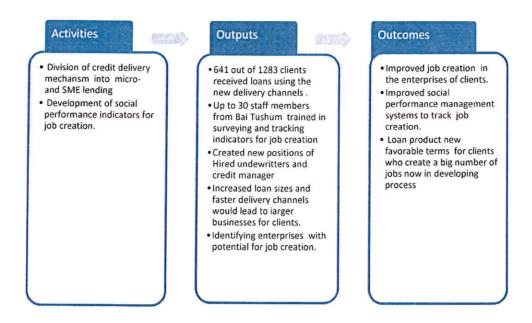
Figure 2. Product modification for new loans given after baseline survey



The Kyrgyz political crises occurred from May to June 2010. The authorities estimated "the number of dead victims exceeding 2000. Hundreds of thousands of people, mainly ethnic Uzbeks, fled their homes in the wake of the conflict". (Central Asian Times Dec 2010:2-3) The overall economy was also affected. There was an increase of inflation, reduction in employment - in particular for tourism and agriculture. Trade flows were distorted because of closures of borders with Kazakhstan and Uzbekistan. One of the largest banks went bankrupt due to a run on deposits. (ADB, IMF, World Bank, 2010 July:19)

#### 2. Intended outcomes

Figure 3. Results chain of the Bai Tushum change in credit delivery system, source: ILO



Bai Tushum's innovation ultimately intended to improve job creation for micro-enterprises.

It is expected that the new delivery system may lead to larger loan sizes that are more tailor-made to SME and microenterprise sector needs and this in turn generates increased employment for workers of clients, specifically job creation. (See section 5 for results). This study will focus on changes in the number of wage work positions created by the enterprises of clients.

## 3. Surveys, data and evaluation methodology

#### 4.1. Surveys and data

Sampling and Survey Instrument

The sample at the baseline survey (BS) consisted of 1,440 clients in all regions of Kyrgyzstan. 40 clients were randomly sampled for each sub office so that it could represent the entire portfolio of the company. Only clients with individual and productive loans were included in the sample as the job potential may be greater for these types of clients. This sample covered most of Bai Tushum's portfolio outstanding (77 per cent) and clients (45 per cent).

At the same time the ideal model that a microcredit client with a small and often family owned enterprise upgrades through financial services into an SME that generates wage employment has not yet been verified empirically (Emran et al. 2006:3 Balkenhol 2007:10) Studies found small positive impacts of microfinance on job creation, but mainly for a small proportion of the borrowers. Microfinance created family employment, but not always wage employment (Hulme and Mosley 1996; Sebstad and Chen 1996; Khander 2003)

#### Dates of Data Collection

Three surveys were undertaken to collect client data. The baseline survey was conducted in November 2009, the first follow-up survey (FS1) in June 2010 and the final follow-up survey in November 2010 (FS2).

#### Drop-outs and Data Quality

Because of the Kyrgyz political crises four sub-offices were excluded from the sample leaving 1,283 clients. A correction was made to the baseline data for the four excluded sub-offices. The table shows compliance rate for FS1 was low because exit clients were not interviewed. For FS2 almost all clients were interviewed. For the econometric model we will use only data from Baseline and FS2 as these are stronger datasets.

Table 1. Sample details

	BS 1	FS 1	F\$ 2
Interviews complete	1283	992	1226
Total sample	1283	1283	1283
% response rate	100	77	96
(Excluding four cancelled sub	o-offices)		

#### 4.2. Evaluation strategy

We use several quantitative analyses such as correlations, associations and regressions.

For the regression analysis we focus on BS and FS2 data as the sample is stronger with fewer drop outs. First, we explore whether extra loan amount correlates with changes of number of wage workers in the client's enterprise. Then we run several regressions to analyse whether the effect still holds when trying to control for other factors that may influence job creation. (See Appendix I for specification of the model.)

An important limitation of the research is that there is only data for a 12 month period. During this period the Kyrgyz economy suffered from political crises in June. Second, results do not show causal relationships as for this a control group is needed. The lack of control group and short period makes it hard to link the innovation to the social outcomes.

#### 4.3. Characteristics of the sample

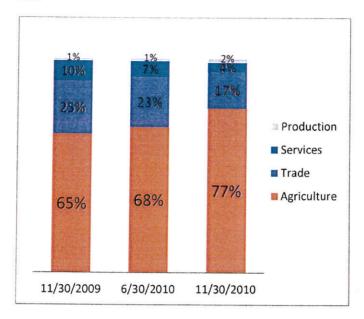
At Baseline survey the majority of the sample was male (72 per cent), lived in rural areas (82 per cent). Most worked in agriculture (65 per cent), followed by trade (25 per cent), services (ten per cent) and production (one per cent).

Interviews in Karasuu, Osh center, Jalalabad center and Bazar Kurgan were cancelled because it was too dangerous for staff to conduct interviews.

A small number of clients could not be interviewed for FS2 because they migrated.

Over the 12 month period microfinance clients moved from trade into agricultural activities.<sup>6</sup> Assets have increased specifically agricultural related purchases such as land, sheds and dwelling houses. (See BS, FS1 and FS2 reports for detailed analysis of other indicators.)

Figure 1. Work activity of client



Bai Tushum has defined SME as companies that receive loans above \$5000; this entails 14 per cent of the sample. An alternative classification for SME based on national legislation uses number of wage workers and asset turnover (sales) and segments this by sector. Table 2 shows the percentage of clients in the sample complying with these criteria.

Table 2. Loan turnover and employment

		Per cent loan amount classification	Per cent turnover classification*	Per cent employment classification**
Micro	loan	86	83	99
SMEI	oan	14	17	2
Grand	Total	100	100	100%

SSME based on turnover (sales of assets) above kilograms 150,000 for production and agriculture and kilc 230,000 for trade and services.

\*\* SME are companies with more than seven wage workers for production and services and more than 15 v workers for trade and services.

## 4. Employment outcomes

An increasing percentage of the Bai Tushum clients employ workers namely 92 per cent at BS to almost 100 per cent at FS2. However not all them are paid, less than half of the clients employ wage workers and over time there is a reduction in this indicator. While 43 per cent of the interviewees hired wage workers at baseline this is only 28 per cent for FS2.

It is likely that this is a result of the distortion of trade flows because of closures of the borders with Kazakstan and Uzbekistan. (ADB, IMF, World Bank, 2010 July: 19) as well as increased meat prices which made it attractive for clients to move into livestock activities.

Figure 2. Percentage clients with workers and wage workers

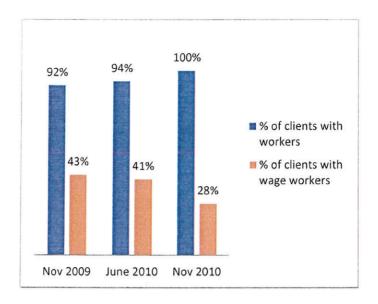


Figure 6 shows there is a reduction in the average number of workers per client from 4.7 at BS to 3.6 at FS2. The decline differed per type of employment; while there was a reduction in wage workers and daily labourers the number of family workers remained stable. There is a reduction in the percentage of clients that employ more than five workers from 33 per cent at BS to 18 per cent at FS2.

Figure 6. Average number of workers

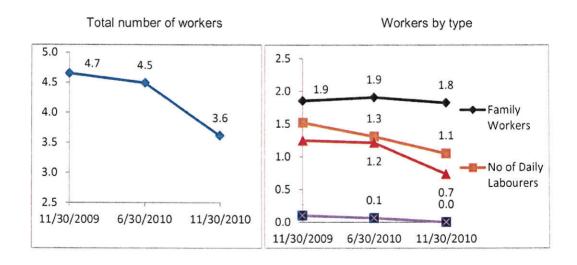
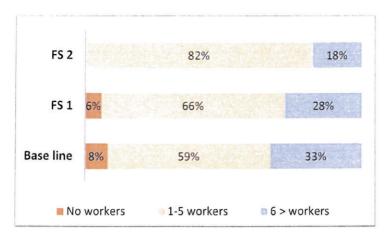


Figure 3. Distribution of number of workers



Declines in wage employment were observed for most branches with exception of Bishkek branch. For agriculture, trade and services there were declines in job creation, while for production activities there was a strong increase.

Figure 4. Average number of wage workers

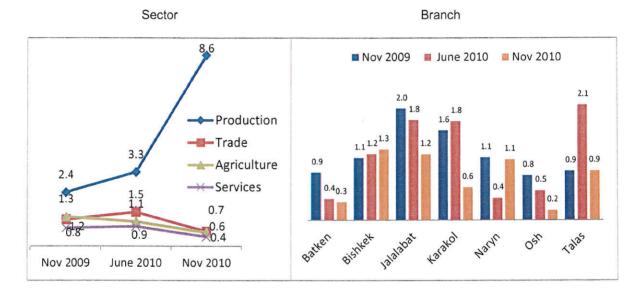
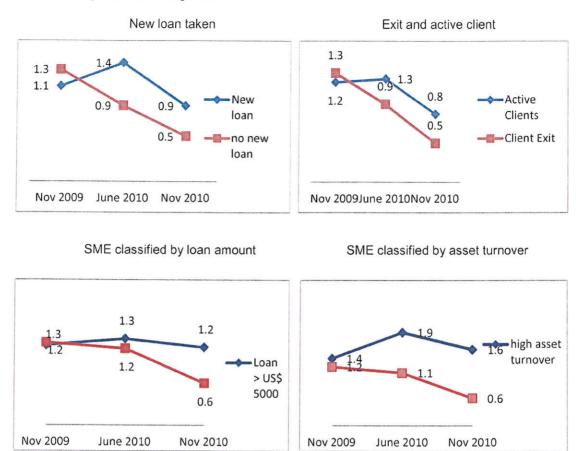


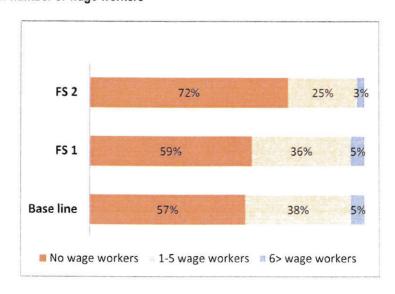
Figure 9 shows the decline in number of wage workers is less strong for those clients that received a new loan when compared to those who did not. There was an increase from 1.1 to 1.4 for those who received a loan in the first half year and a decline to 0.9 in the second half year. Furthermore there was a stronger decrease in jobs for clients that exited the Bai Tushum program (from 1.2 to 0.5) when compared to clients that remained active (1.2 to 0.8). Using the SME classifications of Bai Tushum (loan size) and national legislation (turnover), changes in number of people employed were more stable for larger enterprises.

Figure 9. Average number of wage workers



While about 18-33 per cent of the clients employ more than five workers (see Figure 7), these workers are rarely wage workers (only 3-5 per cent of the sample clients have wage workers) (see Figure 10).

Figure 10. Distribution number of wage workers



We will now look at the changes of number of wage workers over the periods November 2009 and November 2010. As shown in the below table, 14 per cent of the microfinance clients were "job creators" while 34 per cent of the clients saw a reduction in number of wage workers.

Table 3. Job creation, stability and reduction

	N	N%
Job creation	162	14%
Job stability	606	53%
Job reduction	385	33%
Grand total	1,153	100%

Table 4 shows there was more job creators amongst active clients when compared to exit clients. There were also more job creators for microenterprises that engaged in production activities compared to other sectors.

Table 3. Job creation, stability and reduction by client activity

	Active Clients	Exit Clients
Job creation	16%	7%
Job stability	52%	53%
Job reduction	31%	40%
Grand Total	100%	100%

Table 4. Job creation, stability and reduction by sector

% of clients with	Agriculture	Trade	Services	Production
Job creation	13%	17%	11%	33%
Job stability	52%	52%	58%	25%
Job reduction	35%	31%	30%	42%
Grand Total	100%	100%	100%	100%

Figure 11 explores the relationship between changes in loan amount and job creation. The correlation plot does not control for other variables that may be influential. There is a small, but weak positive correlation, (+0.08, significant at 10 per cent confidence level). For example, there are clients with constant loan amount that experienced job creation and also clients that received additional loan funding but did not create jobs. Also no correlation was observed between changes in loan amount and respectively family and daily labour. (See Appendix I) The correlation between interest rate changes and job creation is weak and negative (-0.11, significant at one per cent confidence level), it could mean a higher interest rate may lead to a somewhat lower job creation.

Figure 11. Job creation, loan amounts and interest rates

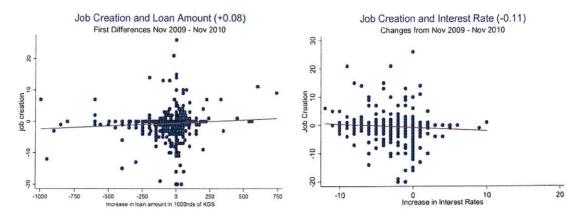
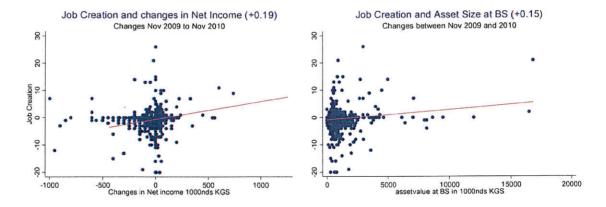


Figure 12 shows that the correlation between net income and job creation is stronger (+0.19 significant at one per cent level). The second plot shows that the correlation between asset size in kilograms (as per November 2009) and job creation is small and positive (+0.15, significant at one per cent level).

Figure 12. Job creation, net income and asset size



Further regression analysis showed there is a very small positive relationship between extra loan amount and job creation. See Table 6 in the simple estimation (1) we find that for every additional kilograms 100,000 (\$2,298) approximately 0.09 job positions are created. However, after controlling for several variables (i.e. branches, clients baseline characteristics and different time trends in estimations 2-4) we find the effect varying and becoming insignificant. The effect is much less than what Bai Tushum had estimated. Interestingly clients that exited the loan program experienced a reduction in job creation (-0.21 job positions) which could mean it is important for job creation that clients stay in the loan program.

Other variables that seemed influential in determining job creation were household dependency index (positive), net income (positive), and sectoral work activity in production (positive) as well as type of branch. (See Appendix II for more information.)

Table 5. Regression analysis

	(1)	(2)	(3)	(4)
	OLS regression	OLS regression controlling for branch	Fixed effects OLS estimation.	Fixed effects controlling for timely variables
Loan amount per	0.0897*	0.0399	0.112	-0.00519
100,000nds of kgs	(0.0483)	(0.0498)	(0.141)	(0.110)
Whether client exited	-0.214*	-0.142	-0.197	-0.214
	(0.112)	(0.121)	(0.280)	(0.286)
Standard errors in parentheses $p < 0.10, p < 0.05, p < 0.01$ See Appendix 1 for more data.				

#### 5. Concluding remarks

The social performance assessment compared several clients groups namely those who received loans under new delivery channels and those who did not.

- We find a small effect of increases in loan size on job creation, but it's not always significant
- We find a negative effect of client exit on job creation
- Other factors such as type of sector (production activities) are influencing job creation

Limitation of the study is that we only have data for 12 month period and this may be too short for the innovation to capture effects. And in absence of a control group it is difficult to link the social performance outcomes to the changes in loan size and delivery.

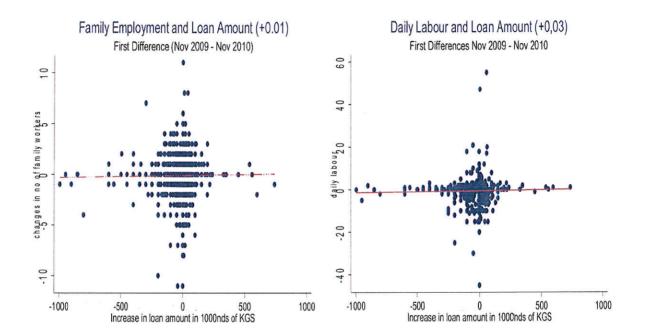
Based on the overall research process and conclusions, the ILO would like to make the following recommendations to Bai Tushum regarding the future of the system delivery:

- (1) Continue providing support for enterprises with potential for job creation
- (2) Incorporate indicators for job creation used in the survey into social performance management
- (3) Identify more clearly SMEs according to several metrics used in the study and national legislation such as number of wage workers, assets, turnover, investment and loan amount and segmentation by sector.
- (4) Continue to identify and track clients with potential for job creation and incentivize loan delivery to the objective of job creation.
- (5) Share tools methodologies, experiences, and findings through national and international networks of microfinance institutions in order to encourage similar work in the promotion of formalization and the campaign for Decent Work around the world

## Appendix I. Correlation between loan and employment

As can be seen in the below figures no correlation was measured between changes in loan amount and family and daily labour.

Figure 14. Correlation between loan amount and employment



#### Appendix II. Job creation estimates

#### **Empirical** model

The data at hand allows for the comparison before and after the innovation took place. However since we do not have a control group and all clients could be treated with the new loan delivery it is not possible to establish impact. What we can do is see if changes in loan amount are correlated with or contributing to changes in job creation and in doing so try to control for some of the correlation of other factors that may also influence job creation.

We estimate the following econometric model:

$$\mathbf{y}_{it} = \mathbf{X}_{1t}\mathbf{\beta} + \mathbf{X}_{2t}\mathbf{\beta}..... + \mathbf{X}_{it}\mathbf{\beta} + \mathbf{\alpha}_{i} + \mathbf{U}_{it}$$
 (1)

 $\mathbf{y}_{ii}$  is the total number of wage workers

 $X_{ij}$  is the total loan amount in 100,000nds of KGS

 $\mathbf{X}_{ii}$  are the other variables that can influence job creation

 $a_i$  is the unobserved effect that is assumed constant over time and specific to each individual client

 $\mathbf{U}_{ii}$  is the error term components for variables that vary over time.

It is possible to control  $\alpha_i$  by estimating a fixed effects model (3) that controls for each client identification number (e.g. Hsiao 2003 Ch3: Dougherty 2007: Ch14, Wooldridge Ch14). This equation will then look only at the within-changes for clients.

We modify the basic regression in equation (1) in a number of ways to check the stability of our estimated coefficients. We estimate the model in several ways:

- (1) is the basic model using Ordinary Least Squares (OLS) that shows the estimation of the relation between loan amount and job creation.
- (2) also includes several other variables at client level that change over time, specifically whether the client lives in a rural area, household dependency ratio, net income, land ownership, age of the client, work activity and type of branch
- (3) shows the fixed effect or within-estimate for model 1, controlling for client characteristics that do not change over time.
- (4) shows the fixed effect estimate but controls for several other variables that change over time such as type of work activity, landownership and net income.

All coefficients are OLS estimated with robust standard errors in parentheses. \*, \*\*, \*\*\* denote significance at the ten, five and one percentage level. The estimated effect for beta captures the difference in outcomes before and after the innovation.

Table 6. Job Creation Estimates

	(1)	(2)	(3)	(4)
	OLS regression	OLS regression controlling for Branch	Fixed Effects OLS estimation.	Fixed Effects controlling for timely variables
Loan Amount per 100, 000nds of KGS	0.0897*	0.0399	0.112	-0.00519
	(0.0483)	(0.0498)	(0.141)	(0.110)
Whether client exited	-0.214*	-0.142	-0.197	-0.214
	(0.112)	(0.121)	(0.280)	(0.286)
Time (Survey FS2)	-0.438***	-0.576***	-0.445***	-0.638***
	(0.103)	(0.0998)	(0.162)	(0.175)
Client lives in rural area		0.0608		0.370
		(0.127)		(0.352)
Household dependency ratio		0.701***		-0.0517
		(0.241)		(0.555)
Estimated net income in 1000nds of KGS		0.00300**		0.00393*
		(0.00125)		(0.00230)
Owns land 0-99 hectares		0.0362		0.600**
		(0.129)		(0.301)
Owns equal or more than 100 hectares	CONTROL CONTRO	0.140		0.500
		(0.152)		(0.392)
If age is higher or equal to 50 years		0.0350		
		(0.215)		
If age is in between 26-49 years		0.142	The state of the s	
		(0.206)		
If work activity in production		4.284***		4.873**
		(1.050)		(2.046)
f work activity in agriculture		0.326**		-0.134
		(0.152)		(0.373)
f work activity in trade		0.247		0.159
		(0.178)		(0.548)
Branch Batken		-0.376*		
		(0.212)		
Branch Bishkek		-0.345*		
		(0.199)		
Branch Jalalabat		0.669***		
		(0.253)		
Branch Karakol		0.147		
		(0.205)		
Branch Naryn		0	mtanaan in tarah an	
		(0)		
Branch Osh		-0.524**		

	(1)	(2)	(3)	(4)
	OLS regression	OLS regression controlling for Branch	Fixed Effects OLS estimation.	Fixed Effects controlling for timely variables
		(0.215)		
Branch Talas		-0.164		
		(0.218)		
Constant	1.110***	0.412	1.081***	0.552
	(0.0973)	(0.339)	(0.215)	(0.574)
N	2432	2343	2432	2343
adj. R²	0.018	0.099	0.035	0.092
F	22.80	9.644	8.199	3.919

Standard errors in parentheses, \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01 Loan amount, household dependency ratio and estimated net income are continuous variables. All other variables are dummy variables coded 1 if yes, 0 otherwise.

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