Online Appendix for The effects of micro entrepreneurship programs on labor market performance: Experimental evidence from Chile

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Appendix 1: Training and Procurement Process for in-Kind Capital

The program was implemented by private institutions selected through a bidding process. The bidding process established the rules that all implementing institutions had to follow.

Training was provided byorganizations that included private institutions, such as foundations, or tertiary educational institutions that were duly accredited by the government. The selected institutions provided all services as a package, with standardized protocols for service provision. These protocols specified the content of the classes, a maximum class size of 30 students, a transportation subsidy, and childcare. In order to assesses compliance with training protocols, we surveyed a sample of participants and randomly supervised training sessions, observing that the protocols were correctly implemented.

The following are the steps that beneficiaries and implementing agencies had to follow in order to obtain the asset transfer:
1. Participants of the program had to prepare a business plan, where they specified how they would spend the $600 US dollar subsidy. The options were: infrastructure, assets, inputs, or working capital, where working capital could not make up more than 20% of the subsidy.
2. As part of the training, beneficiaries were required to obtain quotes for the assets they desired to purchase with the transfer.
3. The business plan and the price quotes were presented to FOSIS, which had to approve them.
4. After FOSIS approval, the implementing institutions had to make sure that the materials were purchased. Most of the time, the beneficiaries made the purchases themselves (though we do not have the exact figure, because this information was not collected by the implementing agencies).
5. If the participant chose to receive working capital, the implementing institutions were required to make a deposit into the participant's savings or bank account.
6. After purchasing the materials, the implementing agencies had to present to FOSIS the original receipts of the materials purchased. The receipts had to show the name of the participant.
7. In case of a deposit, the implementing agency also had to present the original deposit receipt.

In principle, the price quoting exercise ensures an efficient use of the subsidy; however, it is hard to know how well this worked. FOSIS had access to the price quoting exercises of all participants, but, as far as we know, they did not verify the quotes. FOSIS held final responsibility for the approval of the business plan.

Since FOSIS requested a formal receipt (used for value added tax collection) or a deposit document, there were fewer opportunities for corruption. It was still possible for individuals to purchase these inputs at higher prices from friends or family businesses, or they could have colluded with the implementing agency to share the resources deposited into the individual accounts. The second strategy would not be in the self-interest of the individual, and therefore this outcome is not likely. The first strategy would reduce the

value of the assets purchased, so it is unclear whether an individuals would worth pursue this strategy.

According to FOSIS experience, beneficiaries do purchase the materials for their businesses, and there is almost no diversion of resources in this step of the program. Nonetheless, once the program is finished, participants are free to sell any of the materials they bought and close their businesses.

Appendix 2: Attrition

Overall, we surveyed 94.4%, 87.9%, and 77.1% of the original sample at baseline, one-year follow-up, and three-year follow-up survey, respectively. These figures are comparable to similar studies. For the one-year tracking rate, similar studies include: De Mel, et al. (2014), who report a 15 month 92.9% tracking rate in Sri Lanka; Drexler, Fischer and Schoar (2014), who report 87% in the Dominican Republic (1 year); and Blattman et al. (2016) who report 96.3% (at 16 months). For the three-year tracking rate, comparable studies include: Fairlie, Karlan and Zinman (2015), reporting a 55.9% (60.8%) tracking rate for the control (treatment) group 60 months after treatment assignment in the U.S. Also, Valdivia (2015) finds 80.2-81.7% of the sample 27-30 months after treatment. Finally, Blattman et al (2014) locates 79.1-85% 4 years after the intervention.

Appendix 3: Robustness Check

3.1 Main Results With Only Survey Strata Covariates

Table A3.1 : ITT effects on main labor market outcomes (no baseline)

			2011					2013		
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
Panel A: Employment	Control	MESP	MESP+	P-value	Sample Size	Control	MESP	MESP+	P-value	Sample Size
Self-Employment	0.433	0.160*** (0.039)	0.260*** (0.039)	0.003	1,683	0.398	0.033 (0.034)	0.081** (0.032)	0.063	1,502
Wage Employment	0.270	-0.026 (0.027)	-0.062** (0.023)	0.113	1,683	0.352	0.071** (0.031)	-0.007 (0.037)	0.008	1,502
Total Employment	0.654	0.120*** (0.031)	0.179*** (0.029)	0.039	1,683	0.701	0.062* (0.034)	0.054 (0.032)	0.742	1,502
Panel B: Income and Hours Worked										
Self-Employment Income	77.50	33.26** (15.975)	62.43*** (15.707)	0.106	1,684	86.02	4.78 (13.959)	20.67 (15.947)	0.082	1,502
Wage Employment Income	66.15	7.78	4.20	0.724	1,707	118.4	27.94*	3.38	0.079	1,503

Total Labor Income	144.2	41.39**	66.43***	0.176	1,683	204.4	33.083*	24.06	0.510	1,502
	(10.680)	(18.617)	(17.543)			(14.696)	(18.743)	(18.565)	(13.543)	

Note: Columns [1] and [6] report the control mean group at each endline. Columns [2]-[3] and [7]-[8] report the intent-to-treat (ITT) estimate and standard error (in parenthesis) of program assigment in each endline. Columns [4] and [9] report the p-value of the null hypothesos that MESP=MESP+ All income variables are measured in real US dollars (using exchange rate as of November 2009). Regresions include dummies for strata (defined by a socioeconomic index computed by the government using the Social Security Card score and municipality of residence). Regresions are weighted to account for different probabilities of selection in each strata (Following Duflo, Glennerster and Kremer (2007)). Standard errors are calculated allowing for clustering at the municipality level. Sample size varies due to missing values. *** p<0.01, ** p<0.05, * p<0.1.

3.2 Main Results Without 1% Outliers

Table A3.2: ITT effects on main labor market outcomes (99th percentile)

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
			2011					2013		
	Control	MESP	MESP+	P-value	Sample Size	Control	MESP	MESP+	P-value	Sample Size
Panel B: Income and Hours Worked										
Self-Employment Income	61.30	33.22*** (9.192)	54.36*** (9.880)	0.044	1,617	76.88	9.00 (8.279)	14.14 (9.780)	0.401	1,419
Wage Employment Income	56.81	5.91 (7.626)	-3.23 (6.300)	0.181	1,642	105.1	32.71** (11.966)	2.32 (12.559)	0.015	1,416
Total Labor Income	127.1	38.62*** (9.363)	55.05*** (10.485)	0.132	1,612	192.6	42.13*** (14.145)	16.63 (14.748)	0.032	1,413
Weekly Hours Worked	19.68	4.04*** (1.427)	7.47*** (1.576)	0.025	1,665	24.35	2.75* (1.442)	2.01 (1.823)	0.465	1,484
Panel C: Business variables										
Sales on past month	64.89	55.86*** (13.74)	105.8*** (18.75)	0.016	1,696	109.2	8.070 (12.57)	22.73 (16.56)	0.319	1,487
Profits on past month (only 2011)	38.88	45.26*** (9.243)	70.47*** (9.794)	0.026	1,630					

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Profits on good month (only 2013)	96.65	22.29* (12.77)	30.34* (17.57)	0.524	1,488
Profits on bad month (only 2013)	30.19	0.617 (5.141)	3.760 (6.110)	0.530	1,488
Profits on average month (only 2013)	55.34	5.666 (8.240)	11.69 (10.11)	0.371	1,488

Note: Columns [1] and [6] report the control group means at each endpoint. Columns [2]-[3] and [7]-[8] report the intent-to-treat (ITT) estimates and standard errors (in parentheses) of program assigment at each endpoint. Columns [4] and [9] report the p-values of the null hypothesis that MESP=MESP+ All income variables are measured in real US dollars (using the exchange rate from November 2009). Number of employees included the participant interviewed. Regressions include dummies for strata (defined by a socioeconomic index computed by the government using the Social Security Card score and municipality of residence). All variables in panels A and B, with the exception of weekly hours worked, include the baseline value of the dependent variables. Regresions are weighted to account for different probabilities of selection in each stratum (Following Duflo, Glennerster and Kremer (2007)). Standard errors are calculated allowing for clustering at the municipality level. Sample size varies due to missing values. *** p<0.01, ** p<0.05, * p<0.1.

3.3 Main Results Using log(1 + y)

Table A3.3: ITT effects on main labor market outcomes (log(1+y))

| | 2011 | | | | | 2013 | | | | |
	[1]	[2]	[3]	[4]	[5] Sample Size	[6]	[7]	[8]	[9]	[10] Sample Size
Panel B: Income and Hours Worked	Control	MESP	MESP+	P-value		Control	MESP	MESP+	P-value	
Self-Employment Income	2.051	0.776*** (0.199)	1.278*** (0.196)	0.007	1,633	2.029	0.193 (0.179)	0.316* (0.154)	0.341	1,433
Wage Employment Income	1.362	-0.018 (0.151)	-0.194 (0.139)	0.149	1,649	1.893	0.526*** (0.161)	0.042 (0.205)	0.005	1,430
Total Labor Income	3.256	0.689*** (0.157)	0.988*** (0.145)	0.046	1,625	3.729	0.532*** (0.179)	0.300 (0.194)	0.047	1,427
Weekly Hours Worked	2.131	0.442*** (0.104)	0.699*** (0.099)	0.015	1,677	2.461	0.222* (0.110)	0.195 (0.122)	0.743	1,500
Panel C: Business variables										
Sales on past month	1.520	1.436*** (0.214)	1.951*** (0.216)	0.018	1,712	2.045	0.131 (0.175)	0.400** (0.175)	0.042	1,503
Profits on past month (only 2011)	1.383	1.354*** (0.217)	1.785*** (0.212)	0.044	1,646					

Profits on good month (only 2013)	1.997	0.224 (0.190)	0.417* (0.218)	0.176	1,503
Profits on bad month (only 2013)	1.334	0.117 (0.139)	0.234 (0.163)	0.364	1,503
Profits on average month (only 2013)	1.715	0.189 (0.168)	0.329* (0.179)	0.197	1,503

Note: Columns [1] and [6] report the control group means at each endpoint. Columns [2]-[3] and [7]-[8] report the intent-to-treat (ITT) estimates and standard errors (in parentheses) of program assigment at each endpoint. Columns [4] and [9] report the p-value of the null hypothesis that MESP=MESP+ All income variables are measured in real US dollars (using the exchange rate from November 2009). Number of employees included the participant interviewed. Regressions include dummies for strata (defined by a socioeconomic index computed by the government using the Social Security Card score and municipality of residence). All variables in panels A and B, with the exception of weekly hours worked, include the baseline value of the dependent variables. Regresions are weighted to account for different probabilities of selection in each stratum (Following Duflo, Glennerster and Kremer (2007)). Standard errors are calculated allowing for clustering at the municipality level. Sample size varies due to missing values. *** p<0.01, ** p<0.05, * p<0.1.

Appendix 4: Variable Definitions

4.1 Survey Variables

Employment module

The questionnaire was developed to capture the main and secondary occupation of each household member. Individuals are asked if they worked at least one hour in the last week (not considering housework), if an individual answered *No* to that question, they were asked again if they performed any activity in their businesses or as a paid or unpaid household employee, or if they were absent from work due to sickness or a strike. If household members answered *Yes* to any of those questions, they were asked to report their main occupation, where the alternatives were:
- Employer
- Self-employed
- Public sector employee
- Public company employee
- Private sector employee
- Domestic help
- Unpaid family worker
- Serving in the police or armed forces (there are no individuals in the armed forces).

Next, individuals are asked whether they have a second occupation. If they do, they are asked again to classify themselves into the same categories used for the main occupation.

After indicating their main occupation, individuals are asked to report their income (see details below). If individuals also have a second occupation, they also report their income from that occupation. From these general questions we construct the income and employment variables.

How income is constructed

Individuals who classified themselves as "employers" or "self-employed" are then asked two questions:
- "Last month, how much money did you withdraw from your business to pay for own or household expenses?"
- "Last month, can you value all the company's products that you withdrew from your business for own or household consumption?"

We create self-employment income by summing the answers to both questions.

In the case of "public sector employees, public company employees, private sector employees and domestic help," individuals are asked:

- "Last month, what were your monthly earnings after tax?"

The answer to that question corresponds to their wage income.

Finally, labor income is the sum of self-employment income and wage income.

We impute zero income to individuals that are unemployed or out of the labor force. All income is measured in November 2009 USD.

Self-employment, wage work and employment

We define a self-employed worker as any individual reporting positive income from self-employment (or from being an employer), while we ascribe (paid) wage employment to any individual reporting positive income from wage employment. In both cases, income could come from the main or secondary occupation. Thus, it is possible that some individuals are wage-employed and self-employed at the same time. Finally, an individual is considered (paid) employed if she has positive labor income.

Additional self-employment income variables

As an alternative to the main self-employment income variable used in the paper, we ask individuals to report two other measures of self-employment income. First, we asked them to directly report their profits, and second, we ask them to separately report their sales and major expenditures (following de Mel, Mckenzie and Woodruff, 2009). Our measure of self-employment earnings allows us to consider two items that are usually not considered when asking about sales and expenses: business goods and materials used for home consumption, and business revenues used to pay for household expenses, but not included as profits or unreported drawings (See de Mel et al. (2009). When we compare the report on profits with our main variable of self-employment income, we find that our measure of income/profits is 10% larger than when asking directly about last month's profits. This result is consistent with de Mel et al. (2009), who find that self-employed individuals tend to underreport profits. Despite these differences in the levels, the correlation between both measures is 0.6, relatively high compared to what is reported in de Mel et al. (2009). Thus, our measures seem to capture roughly the same outcome despite the differences in the questions.

Hours worked

Individuals are asked "how many hours per week do you effectively work in your main occupation?" and, if they have a second occupation, individuals are asked "how many hours per week do you effectively work in your secondary occupation?" We add answers to both questions to construct total hours worked. Zero hours worked are assigned to those who are unemployed or out of the labor force.

4.2 Unemployment Insurance data

From the Unemployment Insurance data we are able to construct two variables: formal wage employment and formal earnings. Employees with a contract signed before October 2002 who are still employed under the same contract are not covered by the UI and therefore not included in the database. Since such positions are long-term contract jobs, it is very unlikely that anyone in our survey sample would be excluded. Also, jobs in the public sector are not captured in the UI data.

Formal wage employment and income
The UI data captures information on formal contracts in the private sector. We have information on all formal jobs and related income that an individual has or receives in any given month. We created formal wage income as the sum of all formal income from wage employment. Formal wage employment is an indicator variable, which takes the value of one if the individual has formal wage income for any given month. Individuals that do not have information for any given month were assigned the value of zero for formal income and formal wage employment.

4.3 Number of Employees

In both surveys, individuals are asked "Indicate how many people, besides yourself, work in your business or micro-business"

4.4 Business Practices

The **marketing** score ranges from 0 to 9. One point is summed for each one of the following activities undertaken within the last three months:

1. - Visited at least one competitor's business to note their prices
2. - Visited at least one competitor's business to note their products
3. - Asked existing customers if there are any other products they would like the business to sell or produce
4. - Talked to at least one former customer to find out why he/she is a former customer
5. - Asked a supplier about which products are selling well in their industry
6. - Had a special offer or sale
7. - Advertised in any form (past 6 months)
8. - Used non-rounded prices such as $999 instead of $1,000
9. - Suggested new products to their clients

The **stock management** score ranges from 0 to 5. One point is summed for each of the following activities undertaken within the last three months

1. - Attempted to negotiate with a supplier for a lower price on raw materials

2. - Compared the prices or quality offered by alternate suppliers or sources of raw materials with one point awarded for each affirmative answer to the following two questions:

3. - Do you maintain an inventory?

4. - Do you have a record of your inventory?

Additionally, the following question was worth multiple points:

5. - How often do you update the data in your inventory?
      a. - One point for answering daily
      b. - Zero points for answering weekly, monthly, less than monthly, and never

The **pricing and record keeping** score ranges from 0 to 7, where one point is summed for each of the following:

1. - Recording every purchase and sale made by the business
2. - Having the ability to use records to see how much cash is on hand
3. - Using records to see whether sales of a particular product are increasing or decreasing
4. - Working out the cost of each product sold
5. - Knowing which goods have the highest profit margins
6. - Having a written budget, which states how much is owed each month for rent, electricity, equipment maintenance, transport, advertising, and other indirect costs to business
7. - Having records documenting that the business makes enough of a profit to pay back a hypothetical bank loan

The **financial planning** score ranges from 0-4 and is calculated by summing one point for each of the following questions.
The first question awards points on the following scale:

1. - How frequently do you review the financial performance of your business and analyze where there are areas for improvement
      a. - Zero points for "Never," "Once a year or less," and "Two or three times a year"
      b. - One point for "Monthly or more often"

Questions 2 and 4, sum one point for any of the below

2. - A target sales amount for the next year
3. - A budget of likely costs for the next year

And summing one point for the presence of any of the following business items:

- An annual profit and loss statement
- An annual cash flow statement
- An annual balance sheet
- An annual income/expenditure sheet

4.5 Numerical Index

This index was created using the following survey question:

> *"Now imagine you have 100 units and you must subtract 7 units 5 times in a row. Remember there are no correct or incorrect answers."*

Every correct answer in this question represents a unit in our index. In other words, if a person made the first subtraction correctly (answered 93) but got all the other subtractions wrong he/she gets 1 point for the index; if he/she made the first two subtractions correctly he/she gets 2 points, and so on. The index ranges from 0 to 5, where 0 signifies all subtractions were incorrect and 5 signifies all the subtractions were correct.

4.6 Financial Literacy Index

This index was constructed using the first three questions of the Financial Literacy Module of the survey. These questions are:
- If a bank pays a monthly interest rate of 2%, the annual interest rate is:
   a) Less than 24%
   b) 24%
   c) More than 24%
- Suppose you have 1000 pesos in a bank account, and the annual interest rate was 10%. After 5 years, how much do you think you should have in your account?
   a) More than $1000
   b) Exactly $1000
   c) Less than $1000
- Suppose the interest rate on your bank account is 2% per year, and the inflation rate is 3%. After one year, should you able to buy more, less, or the same as today?
   a) More than today
   b) The same as today
   c) Less than today

Every correct answer on these questions sums 1 unit to the index, so the maximum score is 3 and the minimum is 0.

4.7 Skills Index

The "skills" index is defined as the normalized linear prediction of the regression between being self-employed, and a set of variables that we consider as proxies of the entrepreneurial ability of the beneficiaries at baseline. Specifically, we use 4 variables for the construction of the index: years of education, numerical index, financial literacy index, and training.

We imputed the years of education using the highest level and grade each person reported at baseline. Training is a dummy variable that takes the value 1 if the person has

participated in any kind of training (technical training, job training, or entrepreneurship). The numerical and the financial literacy index were constructed using a principal components analysis. In the next section, we detail the construction of both indexes.

4.8 Assets Index

We follow de Mel et al. (2014) and use a principal components analysis for the construction of a wealth index using the possession of assets as inputs. The normalized index is the raw principal components score minus its average and divided by its standard deviation. The possession of assets is represented by a dummy variable which takes the value 1 if the person indicated having the asset and 0 otherwise. Missing values are replaced by 0.

We identify two different types of assets: household assets and business assets, which vary by survey. Specifically, in the baseline survey, we could only identify household assets, while in the follow up surveys, we could identify household and business assets. Moreover, the number of assets (household) in the first follow up survey is greater than the number included in the baseline survey, and the number of assets in the second follow up survey is similarly larger than the number in the first follow up survey (household and business).

Next, we summarize the assets we considered for the construction of the indices in each year:

a. Baseline Household Assets Index
- Car
- Washer
- Fridge
- Water-heater
- Phone
- Cell phone
- Computer
- Television

b. Follow Up 1: Business Assets Index
- Computer
- Cell phone
- Kitchen
- Furniture
- Car
- Towing vehicle
- Scale
- Fridge
- Tools
- Machines
- Real Estate
- Others

c. Follow Up 1: Household + Business Assets Index

Household assets are the same as in the baseline but with the additions of Stereo and No Phone. Business assets are the same used for the construction of the Business Assets Index.

d. Follow Up 2: Business Assets Index

This index contains the same assets as in the index of the first follow-up survey.

e. Follow Up 2: Household + Business Assets Index

Business assets are the same as for the Business Assets Index. Household assets are the ones used in the first follow-up survey plus DVD, Microwave and Electronic Games Console.

Appendix 5: Weighting Scheme

Within each stratum, we calculate the number of individuals in each treatment arm (MESP, MESP+ and control group), and then compute the probability of being selected. For example, let $N_{i,MESP}$ equal the number of individuals in strata j assigned to MESP, $N_{i,MESP+}$, the number of individuals in MESP+, and $N_{j,C}$, the number of individuals in the control group.

The probability of being selected would then be $p_{i,MESP}=N_{i,MESP}/(N_{i,MESP}+N_{i,MESP+}+N_{i,C})$, $p_{i,MESP+}=N_{i,MESP+}/(N_{i,MESP}+N_{i,MESP+}+N_{i,C})$, $p_{j,C}=N_{j,C}/(N_{j,MESP}+N_{j,MESP+}+N_{j,C})$ for MESP, MESP+ and the control group respectively.

Individual observations in strata j are then weighted by $1/p_{i,MESP}$ if they had been assigned to MESP, $1/p_{i,MESP+}$ if they had been assigned to MESP+ and $1/p_{j,C}$ if they had been assigned to the control group.

Regarding the weights, the mean and variance are 0.358 and 0.089, respectively. Values range from 0.14 to 1. There is only one individual with weight=1, and the next largest one has weight 0.675. If we drop the individual with weight=1, our main results do not change.

Appendix 6: Wage-Employment Hyphotesis

In the long run, we find that wage employment increased with MESP but not with MESP+ in 2013 with respect to the control group. This is an unexpected result and we consdider several speculative hypotheses below that might be consistent with this finding. We also characterize which individuals are more likely to be wage employed in 2013.

The hypotheses analyzed are valid for MESP and MESP+, but only individuals from MESP moved to wage employment, while individuals in MESP+ continue in self-employment in the long run. Thus, there has to be some friction that delays or prevents MESP+ individuals from moving from self-employment to wage employment. It may be that self-employed individuals in 2011 form MESP+, who have higher sales and assets than their counterparts in MESP, find it too costly to move to wage employment; they may be used to running their small businesses, or it may be costly to sell their capital. Unfortunately, we do not have the data to test these additional hypotheses.

6.1 Transitions

One hypothesis that might explain the transtition to wage work is that the program allowed individuals to use their increase in income (from self-employment) to move to wage-employment, by financing some fixed costs of wage-employment (such as clothing), or learning or showing a skill (self-employment as a "stepping stone"). We test this by calculating employment trajectories of individuals in the different treatment arms. The transition matrices of employment categories between 2011 and 2013 are presented in Table 7 of the paper. If there is a fixed cost to be paid to obtain wage employment, or if the stepping stone hypothesis were true, we should see transitions from self-employment to wage employment more often in MESP and MESP+ compared to the control group. However, we see that the transition from self-employed to wage-employed is higher in the control group (24.3%) compared to the MESP group (21.8%) and the MESP+ group (18.7%), so there is no evidence in favor of the fixed cost or stepping stone hypothesis.

6.2 Changes in Occupations Using ISCO Categories

A second set of hypotheses is related to the idea that some components of MESP and MESP+ could have made participants more attractive for wage work. To study whether there is any evidence in favor of this idea, we calculate the percentage of individuals that stays in the same economic activity between 2011 and 2013. In principle, if MESP or MESP+ allow individuals to build new skills, we should observe a higher probability of maintaining the same activity among participants of MESP. We coded the (three digit) economic activity performed by individuals (e.g. hairdresser) using the survey data for both follow-up surveys, and find evidence in the opposite direction: overall 43%, 41% and 37% of individuals in the control, MESP and MESP+ group maintain the same activity across surveys (See Tabla A.6.1). Among those that were self-employed in 2011 and wage-

employed in 2013, these figures are 36%, 29% and 32%, respectively (Tabla A6.6). This result is not consistent with the hypothesis of skill building in the same economic sector

Table A6.1: Continue in the same job (self-employed and wage employed)

Treatment	[1] Control	[2] MESP	[3] MESP+
Change Econ. Sector	56.36	58.49	62.77
Keep Econ. Sector	43.64	41.51	37.23

Note: Economic sectors were computed at a 3-digit level based on the classification of the International Standard Classification of Occupations (ISCO-88). Columns [1], [2] and [3] compute the percentage of self-employed and wage employed individuals within the Control, MESP and MESP+ groups that continued in the same economic sector (or changed) in 2013

Table A6.2: Continue in the same job (self-employed in 2011 and 2013)

Treatment	[1] Control	[2] MESP	[3] MESP+
Change Econ. Sector	44.79	46.15	42.72
Keep Econ. Sector	55.21	53.85	57.28

Note: Economic sectors were computed at a 3-digit level based on the classification of the International Standard Classification of Occupations (ISCO-88). Columns [1], [2] and [3] compute the percentage of self-employed individuals during 2011 and 2013 within the Control, MESP and MESP+ groups that continued in the same economic sector (or changed) in 2013.

Table A6.3: Continue in the same job (self-employed in 2011)

Treatment	[1] Control	[2] MESP	[3] MESP+
Change Econ. Sector	67.14	67.25	66.35
Keep Econ. Sector	32.86	32.75	33.65

Note: Economic sectors were computed at a 3-digit level based on the classification of the International Standard Classification of Occupations (ISCO -88). Columns [1], [2] and [3] compute the percentage of self-employed individuals during 2011 within the Control, MESP and MESP+ groups that continued in the same economic sector (or changed) in 2013.

Table A6.4: Continue in the same job (self-employed in 2013)

Treatment	[1] Control	[2] MESP	[3] MESP+
Change Econ. Sector	62.21	53.92	51.14
Keep Econ. Sector	37.79	46.08	48.86

Note: Economic sectors were computed at a 3-digit level based on the classification of the International Standard Classification of Occupations (ISCO-88). Columns [1], [2] and [3] compute the percentage of self-employed individuals during 2013 within the Control, MESP and MESP+ groups that continued in the same economic sector (or changed) in 2013.

Table A6.5: Continue in the same job (self-employed in 2011 but not in 2013)

Treatment	[1] Control	[2] MESP	[3] MESP+
Change Econ. Sector	75.76	79.44	83.44
Keep Econ. Sector	24.24	20.56	16.56

Note: Economic sectors were computed at a 3-digit level based on the classification of the International Standard Classification of Occupations (ISCO-88). Columns [1], [2] and [3] compute the percentage of self-employed individuals during 2011 but not in 2013 within the Control, MESP and MESP+ groups that continued in the same economic sector (or changed) in 2013.

Table A6.6: Continue in the same job (self-employed in 2011 and wage employed in 2013)

Treatment	[1] Control	[2] MESP	[3] MESP+
Change Econ. Sector	64.00	70.65	68.00
Keep Econ. Sector	36.00	29.35	32.00

Note: Economic sectors were computed at a 3-digit level based on the classification of the International Standard Classification of Occupations (ISCO-88). Columns [1], [2] and [3] compute the percentage of self-employed individuals during 2011 and wage employed during 2013 within the Control, MESP and MESP+ groups that continued in the same economic sector (or changed) in 2013.

6.3 Soft Skills

Another way that MESP boosts the chances of becoming wage employed in the long run could be through training that could have affected participants' soft-skills, which could be valuable in wage employment. We tested whether the program had any effects on self-esteem or empowerment, but we did not find any effects on those variables (see Appendix 10). [1]

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[1] However, in qualitative work we asked participants about program effects, and on top of the direct effect of training and the asset transfer, they mentioned the program allowed them to meet new people, make friends and have a better mood.

Self-Esteem:

Individuals were asked about their perception of themselves in 10 different questions and 5 answer options: i) Strongly Agree, ii) Agree, iii) Disagree, iv) Strongly Disagree, and v) Does not answer. We constructed an index that ranges from 1 to 40, where we assigned 1 point every time the interviewee answered option iv), 2 points if the interviewee answered option iii), 3 points if the interviewee answered option ii) and 4 points if the interviewee answered option i).

"Secure" in Actions

We use 5 questions about how secure or capable participants felt doing certain actions. Answers are assigned a number from 1 to 5, where 1 means "Very insecure" (at doing the action) and 5 means "Very Secure" (at doing the action). With this information, we constructed an index ranging from 1 to 25, such that the higher the score, the more secure the interviewee is.

Violence in the relationship

This is a dummy variable that takes the value of 1 if individuals reported having received insults from their partners over the last month.

Attitude on Women

This is an index comprised of 8 questions where individuals were asked their agreement with statements related to their perception of women. There were 4 options: i) Strongly Agree, ii) Agree, iii) Disagree and iv) Strongly Disagree. The index ranges from 1 to 32, where 1 means that the interviewee has a more conservative view of women's role in society, and 32 means that the interviewee has a more egalitarian view on men and women.

Table A6.7: Program Impact on Soft-Skills

Panel A: Soft Skills vs. Treatments	Control	MESP	MESP+	P-value	Sample Size
Self-Esteem	31.40	0.359 (0.431)	0.405 (0.330)	0.861	1,698
Secure Actions	17.10	0.387 (0.460)	0.450 (0.442)	0.841	1,686
Women Attitude	23.06	0.121 (0.135)	0.097 (0.210)	0.901	1,557
Violence in the relationship	0.104	0.024 (0.020)	0.026 (0.020)	0.930	1,309

Note: Standard deviations in parenthesis. Regressions include dummies for strata (defined by a socioeconomic index computed by the government using the Social Security Card score and municipality of residence). Standard errors are calculated allowing for clustering at the municipality level. Regressions are weighted following Humphreys (2009). Sample size varies due to missing values. Self Esteem is an index that takes values from 4 to 40 and is measured in 2010 and 2011. Secure actions is an index that takes values from 2 to 25 and is measured in 2010 and 2011. Women attitude is a index that takes values from 8 to 32 and is measured in 2010 and 2011. Violence in the relationship is a dummy variable that takes the value 1 if the person answered to have insulted his/her partner duting the last month, and is measured in 2010 and 2011. *** p<0.01, ** p<0.05, * p<0.1

Overall, we find no evidence supporting any of the presented hypotheses that could explain the effect of MESP on wage employment in the long run. Nonetheless, these results should be considered with caution as the experimental strategy was not designed to answer this specific question. This finding remains as an open topic of research.

6.4 Characteristics of wage workers in 2013

In terms of the type of individuals that ended up in wage employment in 2013, we use the transition matrices to characterize them. The employment paths that differ between MESP and MESP+ are for unemployed individuals in 2011: a smaller fraction of those assigned to MESP are self-employed in 2013 (14.9 vs 24.7%), and a larger fraction is wage-employed (40.6 vs 30.9%). The fraction that remains unemployed is similar across these two groups (44%). These trajectories show that MESP induces a transition from unemployment to wage employment between the two follow-ups. Regression results presented in Table A6.8 and show that this effect is statistically significant.

Table A6.8 Employment transitions 2011-13

Depvar: 1 if condition on top applies, 0 otherwise	[1]	[2]	[3]
Ocupation in 2011	From Self-Employment	From Self-Employment	From Unemployment
Ocupation in 2013	to Self-Employment	to Wage-work	to Wage-work
MESP	0.113***	0.0765***	0.027
	(0.037)	(0.019)	(0.020)
MESP+	0.149***	0.061**	-0.030*
	(0.0310)	(0.0221)	(0.017)
Self Employed baseline	0.233***	0.067***	-0.099***
	(0.028)	(0.023)	(0.021)
Wage Worker baseline	-0.063	0.110***	-0.039
	(0.043)	(0.029)	(0.024)
Observations	1,348	1,348	1,348
R-Squared	0.188	0.113	0.119
Mead dependent variable control Group	0.249	0.129	0.079
p-value MESP = MESP+	0.116	0.459	0.005

Thus, individuals who transit from unemployment to wage employment seem to be those who drive the overall effect of MESP on wage employment in the long run. The question is, then, why are unemployed individuals in the MESP group more likely to be wage-employed in 2013 than individuals in the control group? We know that they are younger and more educated than the mean population in the study, which suggests that they might have been in MESP to avoid long-term unemployment, applying to MESP as a way to have temporal employment while waiting for a more favorable labor market.

Appendix 7. Household Effects

**Table A7: Program
Household Effects**

	2011					2013				
	[1]	[2]	[3]	[4]	[5]		[6]	[7]	[8]	[9]	[10]
				P-value	Sample Size					P-value	Sample Size
	Control	MESP	MESP+				Control	MESP	MESP+		
Total household members currently working, other than interviewee	1.379	0.107*	0.174***	0.250	1,661		1.582	0.068	-0.005	0.337	1,436
		(0.057)	(0.057)					(0.057)	(0.082)		
Total household members currently working independently, other than interviewee	0.213	0.004	-0.007	0.683	1,661		0.262	-0.039	-0.060*	0.492	1,436
		(0.030)	(0.024)					(0.039)	(0.032)		
Household labor income per capita	80.67	11*	12.34**	0.817	1,661		119.4	11.38*	-1.817	0.052	1,436
		(6.007)	(5.463)					(6.585)	(8.019)		

Note: Columns [1] and [6] report the control group means at each end point. Columns [2]-[3] and [7]-[8] report the intent-to-treat (ITT) estimates and standard errors (in parentheses) of program assignment at each end point. Columns [4] and [9] report the p-value of the null hypothesis that MESP=MESP+. All income variables are measured in real US dollars (using the exchange rate from November 2009). Number of employees included the person interviewed. Regressions include dummies for strata (defined by a socioeconomic index computed by the government using the Social Security Card score and municipality of residence). Regressions are weighted to account for different probabilities of selection into each stratum (Following Duflo, Glennerster and Kremer (2007)). Standard errors are calculated allowing for clustering at the municipality level. Sample size varies due to missing values. *** p<0.01, ** p<0.05, * p<0.1.

Appendix 8: Impact Results Using Administrative Data from the Unemployment Insurance System

8.1 Employment

Table A8.1: Employment effects using Administrative Data

Months	Employment Effect MESP	Employment Effect MESP+	P-value MESP =MESP+
JAN 10	-0.018	-0.027**	0.629
FEB 10	-0.016	-0.011	0.746
MAR 10	-0.015	-0.007	0.588
APR 10	-0.004	-0.010	0.576
MAY 10	-0.004	-0.013	0.360
JUN 10	0.003	0.005	0.892
JUL 10	0.001	-0.002	0.855
AUG 10	0.001	-0.02	0.122
SEP 10	-0.003	-0.023	0.235
OCT 10	-0.021	-0.049**	0.084
NOV 10	-0.010	-0.033	0.274
DEC 10	-0.015	-0.004	0.456
JAN 11	-0.009	-0.034	0.119
FEB 11	-0.016	-0.023	0.604
MAR 11	-0.015	-0.024	0.599
APR 11	-0.006	-0.005	0.964
MAY 11	0.010	-0.022	0.131
JUN 11	0.018	-0.012	0.253
JUL 11	0.020	-0.011	0.186
AUG 11	0.016	-0.003	0.310
SEP 11	0.033*	0.009	0.175
OCT 11	0.028	0.006	0.349
NOV 11	0.018	-0.001	0.423
DEC 11	-0.006	-0.004	0.962
JAN 12	0.000	-0.016	0.530
FEB 12	-0.013	-0.019	0.808
MAR 12	-0.011	-0.010	0.972
APR 12	-0.008	-0.019	0.654
MAY 12	0.016	-0.003	0.439
JUN 12	0.008	-0.025	0.149
JUL 12	0.011	-0.029**	0.035
AUG 12	-0.002	-0.023	0.315
SEP 12	0.004	-0.013	0.425
OCT 12	-0.001	0.004	0.793
NOV 12	0.017	-0.005	0.297
DEC 12	0.011	-0.006	0.411
JAN 13	0.002	-0.014	0.304
FEB 13	-0.014	-0.010	0.808
MAR 13	0.019	0.002	0.336
APR 13	0.018	0.005	0.490
MAY 13	0.013	0.013	0.975
JUN 13	0.019	0.011	0.662
JUL 13	0.003	0.002	0.980

AUG 13	0.014	0.005	0.524
SEP 13	0.026	0.022	0.796
OCT 13	0.021	0.029	0.692
NOV 13	0.025	0.024	0.964
DEC 13	0.003	-0.001	0.852
JAN 14	0.000	-0.002	0.890
FEB 14	0.023	0.034	0.649
MAR 14	0.019	0.022	0.908
APR 14	0.024	0.023	0.983
MAY 14	0.023	-0.003	0.292
JUN 14	-0.002	0.001	0.896

Note: Administrative Data from Unemployment Insurance. All income variables are measured in real U.S. dollars (using the exchange rate from November 2009). Regressions include dummies for strata (defined by a socioeconomic index computed by the government using the Social Security Card score and municipality of residence). Standard errors are calculated allowing for clustering at the municipality level. Regressions a weighted to account for different probabilities of selection into each stratum (following Duflo, Glennerster and Kremer (2007)). *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

8.2 Earnings

Table A8.2: Earnings effects using Administrative Data

Months	Earnings Effect MESP	Earnings Effect MESP+	P-value MESP =MESP+
JAN 10	-7.436	-10.803	0.700
FEB 10	-6.734	-9.644	0.659
MAR 10	-11.03	-4.596	0.410
APR 10	0.757	-0.267	0.892
MAY 10	1.005	-3.282	0.431
JUN 10	-2.524	0.340	0.662
JUL 10	2.090	1.497	0.944
AUG 10	-3.571	-6.034	0.796
SEP 10	7.967	-0.601	0.398
OCT 10	-1.336	-12.888	0.285
NOV 10	3.876	-7.924	0.272
DEC 10	7.088	1.573	0.584
JAN 11	-1.967	-15.16	0.151
FEB 11	-3.423	-1.874	0.871
MAR 11	-2.499	-0.953	0.872
APR 11	6.553	1.467	0.690
MAY 11	13.215	-2.107	0.205
JUN 11	10.421	-5.53	0.222
JUL 11	15.67	1.963	0.296
AUG 11	18.356	3.699	0.227
SEP 11	29.283***	6.337	0.111
OCT 11	28.019**	6.354	0.144

NOV 11	21.973**	5.185	0.310
DEC 11	12.186	-2.724	0.417
JAN 12	0.919	-8.789	0.550
FEB 12	-6.088	-11.421	0.754
MAR 12	0.556	2.309	0.927
APR 12	16.884	-2.311	0.353
MAY 12	18.976	-2.561	0.274
JUN 12	18.422	-13.604	0.053
JUL 12	7.539	-9.413	0.246
AUG 12	1.507	-9.997	0.465
SEP 12	21.438	12.513	0.574
OCT 12	1.639	-0.152	0.907
NOV 12	14.456	-0.970	0.315
DEC 12	181.702	-8.111	0.125
JAN 13	2.182	-6.292	0.617
FEB 13	1.649	1.522	0.994
MAR 13	22.597	19.000	0.843
APR 13	19.296	7.753	0.55
MAY 13	42.627**	6.185	0.088
JUN 13	25.083	5.218	0.200
JUL 13	25.769	13.397	0.462
AUG 13	26.929	14.64	0.415
SEP 13	38.959*	25.898	0.401
OCT 13	27.842	23.942	0.836
NOV 13	27.123	21.372	0.770
DEC 13	27.289	9.284	0.299
JAN 14	25.898	0.186	0.208
FEB 14	27.758	24.793	0.895
MAR 14	34.669	30.14	0.858
APR 14	21.792	13.988	0.741
MAY 14	6.226	-1.476	0.717
JUN 14	14.333	-4.746	0.381

Note: Administrative Data from Unemployment Insurance. All income variables are measured in real U.S. dollars (using the exchange rate from November 2009). Regressions include dummies for strata (defined by a socioeconomic index computed by the government using the Social Security Card score and municipality of residence). Standard errors are calculated allowing for clustering at the municipality level. Regressions are weighted to account for different probabilities of selection into each stratum (following Duflo, Glennerster and Kremer (2007)). *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

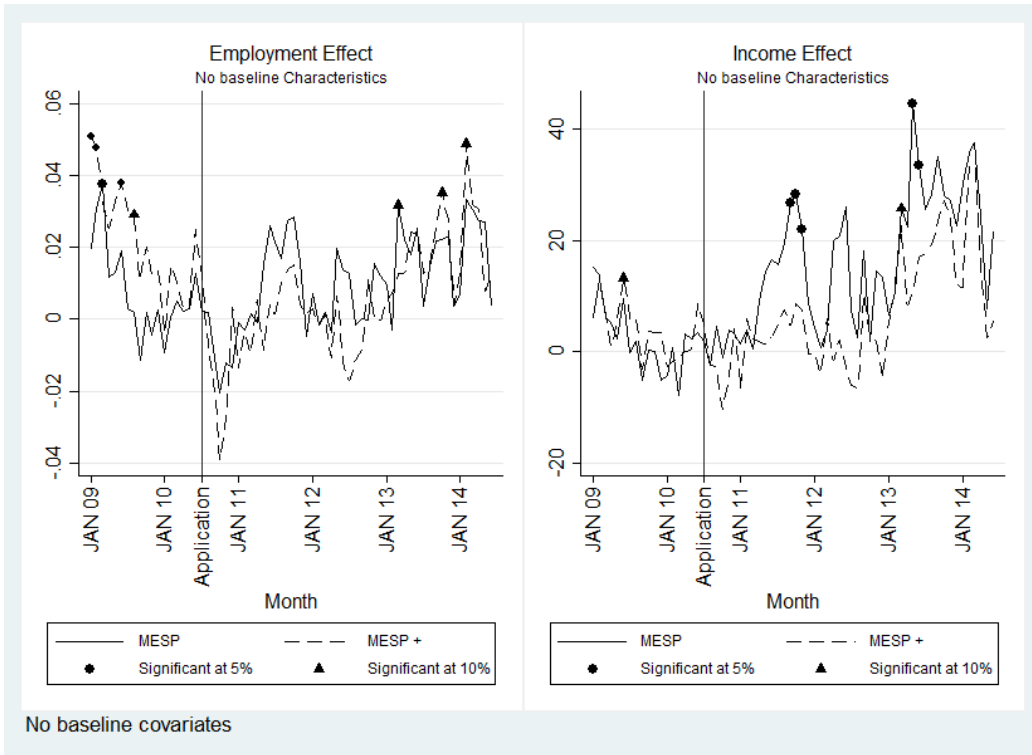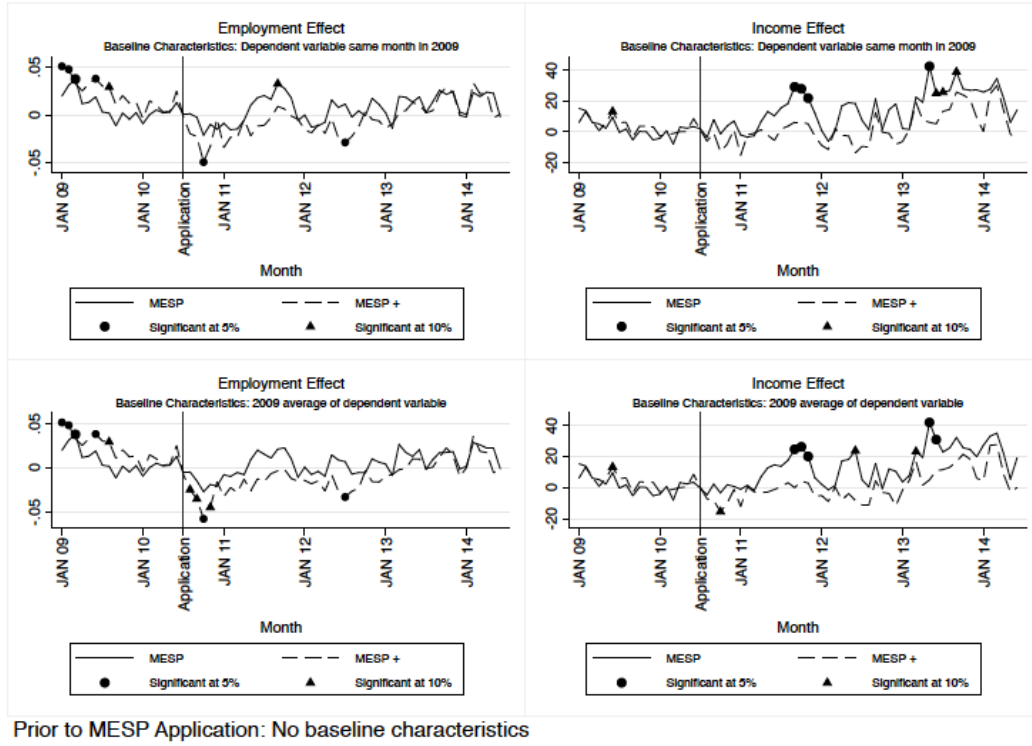FIGURE 8.1: No baseline covariates

No baseline covariates

FIGURE 8.2: Using different set of covariates

Prior to MESP Application: No baseline characteristics

Appendix 9: Cost-Benefit Analysis

9.1 Administrative Data for Costs

Costs were provided by the government agency FOSIS in Chilean pesos and were converted to US dollars using the exchange rate as of November 2009 (USD1 = CLP500).

All costs were assumed to exist at month 0 (rather than spread out over the duration of the program). The total cost of training for both MESP and MESP+ was US$600 per person. The initial transfer for both treatments was also US$600. Finally, the additional transfer received by individuals under MESP+ was US$240. Thus, the total cost of MESP was US$1,200 and the total cost of MESP+ was US$1,440.

9.2 Benefits

To measure benefits, we compare the income profiles of MESP and MESP+ to that of the Control group, so that benefits are net of the counterfactual case. That is, we compute benefits as income gaps: $y_{MESP} - y_{Control}$ and $y_{MESP+} - y_{Control}$.

Since we only have observations for individuals' labor income for three points in time (September 2010, November 2011, and December 2013), we conduct linear interpolation to simulate monthly income profiles (see Figure 1). In addition, we simulate a fade out of the labor income gaps within 1 year after our last observation in 2013.

Figure 9.1: Profile
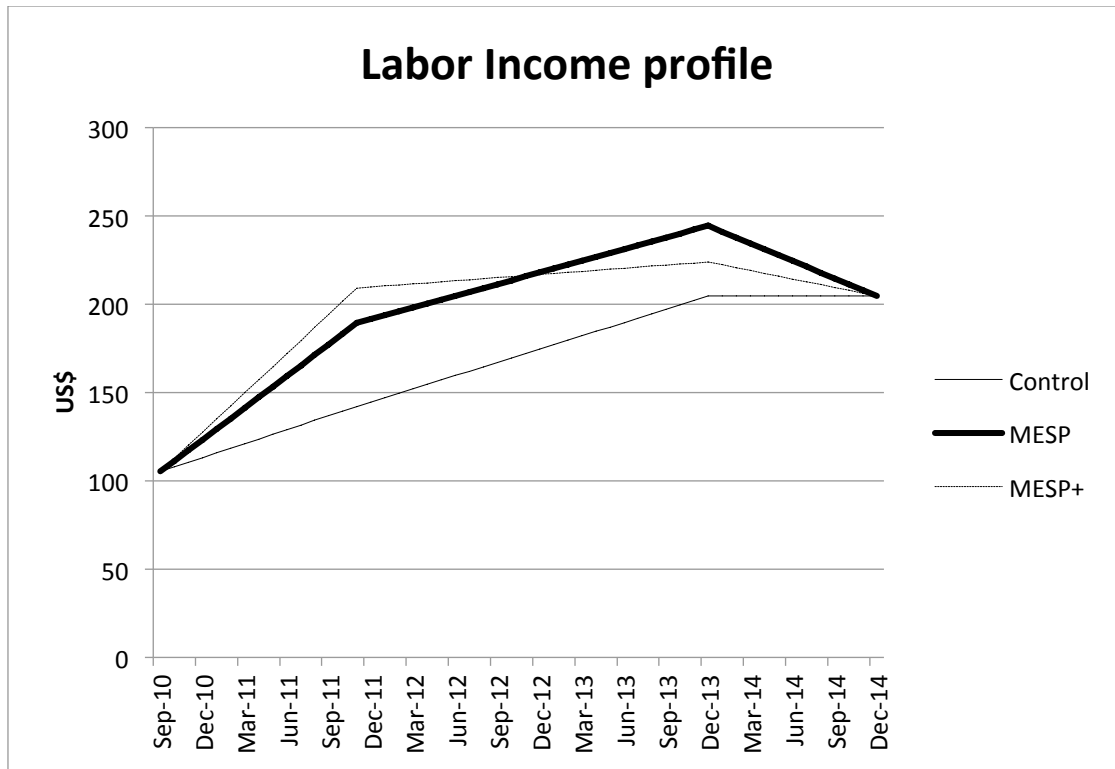
For linear interpolation we use three pivot points, one from each survey. These points are for September, 2010 (base line), November, 2011 (first follow-up) and December, 2013 (second follow-up).

For September, 2010 we assume that all groups start with US$105, which is the value for the Control group (see Table 2 for baseline balance of labor income). For 2011 and 2013, we estimate ITT effects for each treatment (using the information presented in Table 3). Then, for the control group in 2011 (2013), we assume a labor income of US$142 (US$205); while for the MESP group we assume US$189 (US$244); and for the MESP+ group we assume US$209 (US$224).

The linear interpolations are calculated using these three pivot points for the Control, MESP and MESP+ groups.

9.3 Cost-Benefit Analysis

We assume an annual discount rate of 5%, 7%, and 10% for all calculations, converted to monthly discount rate (see Table A9.1).

We conduct an additional sensitivity analysis by considering the case where income profiles begin fade out after December 2013 to completely disappear by December 2014. This analysis makes conservative assumptions since administrative data from the unemployment insurance system indicate that labor income (in this case only from formal wage-earners) remains at a similar level for the MESP group up to the end of 2014.

Cost-benefit results are summarized in Table A9.1:

Table A9.1: Cost-Benefit Analysis with Different Scenarios

	Control	MESP	MESP+
A. Present Value Total Income (sum 2010-2013) by annual interest rate			
5%	5,678	6,987	7,112
7%	5,485	6,747	6,873
10%	5,216	6,414	6,541
5% + Fade out during 2014	7,711	9,202	9,233
B. Labor Income Dif (A. MESP and MESP+ - Control) by annual interest rate			
5%		1,309	1,433
7%		1,262	1,388
10%		1,198	1,325
5% + Fade out during 2014		1,492	1,522
C. Total Program Cost		*1,200*	*1,440*

Training	600	600
Transfer	600	600
Additional transfer	-	240
D. Cost Benefit (B - C) up to Dec 2013 by annual interest rate		
5%	109	-7
7%	62	-52
10%	-2	-115
5% + Fade out through 2014	292	82
Ratio C/B (5% + Fade out through 2014)	124%	106%

We observe that when including perpetuity, both treatments have a positive return, with MESP having larger benefits than MESP+.