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Economic Impact of Support Service Program on Micro and Small Enterprises: The Case of Dire Dawa Administration, Ethiopia

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Abstract

Special attention has been given to untie the constraints of Micro and Small Enterprises in Ethiopia for they are important vehicles to address the challenges of unemployment, economic growth and equity in the country. The government is implementing different support service programs, in the forms of financial and business development, in different parts of the country. This study is aimed at evaluating economic impact of MSEs support service programs on enterprise sales, employment and capital asset formation in Dire Dawa Administration, Ethiopia. Propensity Score Matching is employed to estimate the impact of support service program. The result revealed that the program resulted in average increment of monthly sales by 28%, employee level by 42%, and capital asset formation by 60%. It is, therefore, indispensable to strengthen and expand the support service program to non participant enterprises by giving special attention to the major problems that participant enterprises are currently facing.

Key words

Micro and Small Scale Enterprises, propensity score matching, economic impact, support service programs, Ethiopia.

Introduction

Micro and small enterprises (MSEs) play vital roles in poverty reduction, income and employment generation as well as economic development in developing countries like Ethiopia. The sector is now increasingly recognized unlike the previous pessimist notion that these sectors are not linked to the modern and formal sectors and would disappear once industrial development is achieved (McPherson, 1996). The Ethiopian MSE sector include a diverse set of operators ranging from petty traders to small restaurant owners, shoeshine boys to small shoes making enterprises, peddler in the street to grocery business operators, and the likes. Even though, the increased role and contribution that the MSE sectors could provide to the country's economy is immense, the sector is largely constrained by various structural, institutional, and policy related problems and bottlenecks that stifle its rapid growth and development (FeMSEDA, 2004). The major constraints facing the sector comprises the stringent legal and regulatory environments, poor access to markets, shortage of finance, inadequate business information, absence of business premises (at affordable rent), lack of technical and managerial skills, very limited access to appropriate technology, absence of access to quality business infrastructure, and in some cases discriminatory regulatory practices (Mead, 1998). Research findings of Amha and Ageba (2006) which focused on MSEs in major urban centers of Ethiopia revealed that access to markets and finance are the most pressing constraints of the sectors. This sector faces similar constraints throughout Ethiopia including Dire Dawa Administrative region.

A number of African countries adopted poverty reduction strategies that mainly emphasized on development and promotion of micro and small enterprises (MSEs) as a major way to reduce poverty particularly among urban dwellers (Liedholm, 1993). The Ethiopian government recognized the sector in 1997 through the issuance of MSEs promotion and development strategy which was reviewed in 2011 in view of the country's dynamic economic progress, program feedback and experience of other countries (MoTI, 2011). Special attention has been given at all levels to untie the constraints of MSEs for they are important vehicles to address the challenges of unemployment, economic growth and equity in the country. The government of Ethiopia has

been implementing and incorporating the program as a strategic agenda in three consecutive five years national developmental plans of the country i.e. the 1st five years plan called Poverty Reduction and Sustainable Development Program (PRSDP), in the 2nd five years plan called Plan for Accelerated and Sustainable Development to End Poverty (PASDEP) and currently in the 3rd five years plan which is called Growth and Transformation Plan (GTP) covering the years from 2010/11 to 2014/15 (MoFED, 2011). In view of this, the government is implementing different support service programs in different parts of the country for helping MSEs attain their intended objectives.

The support service program for the promotion and development of these enterprises has been launched in Dire Dawa Administration since 2005. The elements of the program include an enabling legal framework and streamlining regulatory conditions and specific support services (financial and business development services). The financial service includes credit and saving scheme where as the business development services (BDS) include trainings, technology transfer, counseling, provision of working premises and the likes. In Dire Dawa, financial services are being provided through Dire Micro Finance Institution (DMFI) and the business development services are being provided by Dire Dawa Micro and Small enterprise Development Agency (AdMSEDA). Since the start of the support service programs, millions of dollars have been poured into the sector to ensure a healthy growth. The sector in Dire Dawa Administration comprises various set of enterprises under trade/ shop, services, and manufacturing category. It is, therefore, necessary to assess the impact brought about by the support service programs in Dire Dawa. Attempts made so far in this regard simply focused on qualitative evaluation of outputs and activities rather than on final outcomes of the program. This study is, therefore, an attempt to qualitatively and quantitatively evaluate the impact of the support service programs on final program outcomes in terms of changes in sales, employment opportunities, and capital accumulation of the enterprises.

The main objective of this study was to evaluate the impact of support services programs on the economy of micro and small enterprises in Dire Dawa Administration. Specifically it was intended to identify determinants of enterprise participation in support service program; and assess the impacts of support service programs on sales, employment and capital asset of MSEs.

Methodology

1. Description of the study Area

Dire Dawa Administration has 9 urban kebeles and 38 rural kebeles. The population of the Administration was 342,827 of which 68% are urban dwellers and the remaining 32% are rural dwellers (CSA, 2007). The administration is located between 90 27'- 90 49' north latitude and 41038'-42019' east longitude. According to the Central Statistical Agency of Ethiopia, the total area of the administration is 128,802 ha of which only 2% is urban and the remaining 98% is rural. The city is 515km away to the East from Addis Ababa. The topography of the administration varies from very high steep mountains to flat plains where altitude ranges from 950-2260 masl. The climate of the administration is classified as semi arid; the seasonal rainfall has a bimodal distribution with mean annual rainfall of 657mm and the mean annual air temperature of 25.30c. The Administration enjoys a sunny climate with mean and daily value of brighter sunshine for 8 hours. Trade and industry are the predominant sectors of the economy in Dire Dawa administration. Dire Dawa city is recognized to be a center of trade and industry for urban dwellers whereas the livelihoods of rural households depend on agro-pastoral way of livelihoods.

2. Sources and Method of Data Collection

Both primary and secondary data were the main sources of information for the study. The primary data were collected from randomly selected samples using structured questionnaire and interviews which were undertaken in May, 2011. Secondary data were gathered from relevant published and unpublished sources.

A multi-stage sampling technique was employed to select sample respondents. In the first stage, four kebeles were selected purposively out of the 9 kebeles based on population density and extent of enterprise activities. In the second stage, MSEs were stratified into two stratums, stratum one representing treatment group who participated in the support service programs, and stratum two representing the control group who do not participate in the program. In the third stage, using simple random sampling technique 83 program participant MSEs and 80 non-participant MSEs were selected randomly using probability

proportion to size sampling technique constituting a total sample of 163 MSEs.

3. Methods of Data Analysis

Both qualitative and quantitative analytical tools were employed to assess the impact of support service programs of MSEs. Actually, good impact evaluations often combine both quantitative and qualitative methods to the extent possible (Heckman and Robb, 1985). Recently, the use of qualitative impact evaluation method has got increasing acceptance because it can provide critical insights into the program context and in-depth explanations to the results observed in a quantitative analysis (Friedlander and Robins, 1995).

The most frequently used non experimental method available for evaluating impact of a given program in the absence of baseline and time series data is propensity score matching (PSM) method (Jalan and Ravallion, 2003). This method neither requires randomization nor pre-intervention data and it is also used in the post-intervention data only. Unlike econometric regression methods, PSM does not rely on parametric assumptions to identify the impacts of program and it does not impose a functional form of the outcome thereby avoiding assumptions on functional form and error term distributions (Dehejia and Wahba, 2002). Besides these, PSM compares outcome for observation, who share similar observable characteristics using matching methods. This method involves matching program participants with a comparable group of individuals who did not participate in the program. PSM compares the actual observed outcomes of the program participants with counterfactual outcomes i.e. the hypothetical outcomes that would have prevailed in the absence of a program (Jalan and Ravallion, 2003). The central objective of this method is to estimate these unobserved counterfactual outcomes.

Now a day, matching, especially in its propensity score flavor, has become a popular program evaluation method in many applications of interest due to the high dimensionality of the observable characteristics. Consequently, in both academic and applied literature, the amount of research based on matching methods has been steadily increasing. The basic idea of the propensity score matching method is to match program participants with non participants typically using individual observable characteristics. Each program participant is paired with a small group of non participants in the comparison group that are most similar in the probability of participating in the program. The most frequently estimated parameter for such studies is the average treatment effect on the treated (ATT) which is the difference between the observed mean outcome of the program participants and the mean outcome of the constructed counterfactual (Caliendo and Kopeinig, 2008).

In the estimation of average treatment effect on treated (ATT) using PSM method the first task is estimating the propensity scores. A logit model is used to estimate the p-score using composite pre-intervention characteristics of sampled enterprises (Rosenbaum and Robin, 1983). The binary logit mode for obtaining the p-scores is specified as follows:

The probabilities of the MSE to participate and not to participate in the program are expressed, respectively, as:

$$P_i = \frac{1}{1 + e^{-Z_i}} \text{ and } 1 - P_i = \frac{1}{1 + e^{Z_i}}$$

where

$$Z_i = \beta_0 + \sum_{i=1}^{n} \beta_i X_i + U_i$$

Now the odds ratio (Pi/1-Pi) is

$$\frac{P_i}{1 - P_i} = \frac{1 + e^{Z_i}}{1 + e^{-Z_i}} = e^{Z_i}$$

The natural log of this equation is logit which is expressed as

$$L_i = \ln\left[\frac{P_i}{1 - P_i}\right] = Z_i = \beta_0 + \sum_{i=1}^{n} \beta_i X_i + U$$

Where:

L_i = is a function of an explanatory variables (X_i)

i = 1,2,3,4...,n; β_0 = Intercept; β_1 = Regression coefficient to be estimated

X_i = Pre intervention characteristics

U_i = Disturbance term;

In this particular study, in order to assess impact, the dependent variable is participation in support service programs of MSEs; outcome variables are sales, capital assets and employments; and the independent variables are sex, years of schooling, marital status, family size, enterprise location, formality of business, enterprise age, and prior business experience.

After obtaining the predicted values conditional on the observable covariates (p-score) from logit estimation, matching was done using matching algorithm which is selected among the commonly used matching methods (nearest neighbor matching, caliper and radius matching and kernel matching) based on the matching criteria: estimator which have low pseudo R2, large matched sample size and large number of covariates with insignificance mean difference between the two groups of enterprises. Then the average effect of enterprise participation in the program on outcome variables (sales, capital asset and employment) was computed and it was specified as:

$$\tau_i = Y_i(D_i = 1) - Y_i(D_i = 0)$$

Where τ_i is treatment effect (effect due to participation in the intervention), Y_i is the outcome on enterprises, D_i is whether enterprise has got the treatment or not (i.e. whether an enterprise participated in the intervention or not).

However, one should notice that $\tau = Y(D = 1)$ and $\tau = Y(D = 0)$ cannot be observed for the same enterprises at the same time. Depending on the position of enterprises in the treatment (intervention participation), either $\tau = Y(D = 1)$ or $\tau = Y(D = 0)$ is unobserved outcome (called counterfactual outcome). Due to this fact, estimating an enterprises treatment effect τ_i is not possible. One has to shift to estimate the average treatment effect of the population than the individual one. The most commonly used average treatment effect estimation is the average treatment effect on the treated ( ) and is specified as

$$\tau_{ATT} = E(\tau|D = 1) = E[Y(1)|D = 1] - E[Y(0)|D = 1]$$

As the counterfactual mean for those being treated, $E[Y(1)|D = 1]$ is not observed, one has to choose a proper substitute for it in order to estimate ATT. One may think to use the mean outcome of the untreated enterprises, $E[Y(1)|D = 0]$ as a substitute to the counterfactual mean for those being treated, $E[Y(1)|D = 1]$. However, this is not a good idea especially in non-experimental studies. Because, it is most likely that components which determine the treatment decision also determine the outcome variables of interest.

For our particular case, variables that determine enterprise decision to participate into the program could also affect enterprise sales, capital asset and employment. Therefore, the outcomes of individuals from treatment and comparison group would differ in the absence of treatment leading to a self selection bias.

By rearranging and subtracting $E[Y(1)|D = 0]$ form both sides, one can get the following specification for ATT.

$$E[Y(1)|D = 1] - E[Y(0)|D = 0] = \tau_{ATT} + E[Y(0)|D = 1] - E[Y(0)|D = 0]$$

Both terms in the left hand side are observables and ATT can be identified if and only if $E[Y(1)|D = 1] - E[Y(0)|D = 0] = 0$ i.e. when there is no self selection bias. This condition can be ensured only in social experiment where treatments are assigned to units randomly (i.e. when there is no self section bias. In non-experimental studies one has to introduce some identifying assumption to solve the selection problems. The following are two strong assumptions to solve the selection problem.

Conditional independent assumption

Given a set of observables covariates (X) which are not affected by treatment (in our case, intervention participation), potential outcome (sales, capital asset and employment) are independent of treatment assignment (independent of how program participation decision is made by enterprises). This assumption implies that the selection is solely based on observable characteristics and variables that influence treatment assignment (program participation decision made by enterprises) and potential outcomes (sales, capital asset and employment) are simultaneously observed.

Common support region

This assumption rules out perfect predictability of D given X. That is $0 < P(D = 1|X) < 1$ .This assumption ensures that enterprises with the same X values have a positive relation of being both participants and non- participants.

Given the above two assumption, the PSM estimators of ATT can be written as

$$\tau_{ATT}^{PSM} = E_{P(x)|D=1}\{E[y(1)|D = 1, P(X)] - E[Y(0)|D=0,P(X)]\}$$

Where P(X) is the propensity score computed on the covariates X. The above equation indicates that the PSM estimators is the mean difference in outcome over the common support, appropriately

weighted by the propensity score distribution of participants.

In the final stage the robustness of the evaluation results were tested for their sensitivity for the hidden variables that may affect participation decision of enterprises.

Results and Discussions

1. Descriptive Results of Pre treatment characteristics

The survey result indicates that the mean of the two groups were significantly different with respect to operators education level (years of schooling), operators prior business experience, enterprise age, and enterprise location at 5%, 5%, 1% and 5 % probability levels, respectively. In contrast to non participants, participants have low years of schooling, small share of operators who have prior business experience, low years of enterprise age, and are located nearer to owners' residential areas. These might be due to the fact that enterprises with better educational attainments, better years of experiences, and older ages since establishments are not in need of the support services as they are now economically in a better position to expand their business. Besides these, the result disclosed that lack of working premises, lack of raw material supply and lack of working capital were the three critical problems facing the enterprises in the area. With regard to the quality of direct support services (both financial and BDS) so far provided to participant enterprises, owners of only 17% of enterprises responded that they are satisfied with the support services.

The survey result further revealed that the mean differences between the two groups in terms of the outcome variables, sales, capital asset and employment were statistically significant at 5%, 5% and 1% probability levels, respectively (Table 1).

Generally, the descriptive results of all variables are based on pre-intervention characteristics of enterprises, and it does not indicate whether the observed differences are exclusively because of the program.

Those enterprises which are engaged in manufacturing sector gained more income and save more as compared to the other two sectors followed by those which are involved in service sectors and retail trades in that order. Those enterprises engaged in manufacturing accumulated higher capital asset as compared to those in the service sector. Enterprises which are engaged in trade/ shop sectors did not create adequate capital asset as compared to the other two sectors. Furthermore, enterprises which are engaged in retail trades did not recruit employees and are almost operated by owners; whereas enterprises which are engaged in service and manufacturing sectors have 2 to 10 employees.

All participant enterprises undeniably underlined the importance of both support services (financial and BDS). However, they indicated that the loan size (intensity of loan) was too small to expand their businesses. Besides, they also revealed that the interest rate and other additional fees (service charges and registration fees) were very high. With regard to the second support service (BDS), they indicated that the service is very limited in coverage and contents; the service provider institutions lack capacity particularly in terms of man power; there is weak and loose contact between extension agents and MSEs; and there is poor linkage between

Characteristics	All sample (N=163)		Particip. (N=83)		Non- Particip. (N=80)		t- Value
	Mean	SD	Mean	SD	Mean	SD	
Education (years)	7.83	3.92	7.12	3.63	8.58	4.09	2.403**
Family size (no.)	4.45	2.16	4.59	2.33	4.3	1.97	-0.858
Enterprise age (yrs)	7.6	6.62	6.25	4.93	9	7.55	2.759***
Sales (Br)	6,647	5,880	7,723	6,466	5,531	5,003	2.415**
Capital Asset (Br)	25,431	24,335	31,297	14,292	19,345	16,171	2.45***
Employment (no.)	1.9	1.23	2.37	0.89	1.41	1.35	5.386***

Note: *** and ** means significant at 1% and 5% probability levels, respectively.

Table 1: Summary of descriptive results for some pre-intervention characteristics.

service providers and enterprises.

2. Econometric Model Results

2.1. Estimation of propensity scores

Prior to running the logistic regression model, a test of multi-collinearity problem and problem of hetroscedasticity were done. There was no explanatory variable dropped from the model since there is no series problem of multicollinearity. This is because for all explanatory variables VIF values were by far less than 10. Furthermore, hetroscedasticity test was done using Breusch-pagan (Cook-Weisberg) test. This test resulted in rejection of the existence of heteroscedasticity hypothesis because the p-value was 0.1418 (14%) which is insignificant, implying absences of hetroscedasticity problem.

In order to measure the average treatment effect on the treated (ATT) for the projected outcome the usual PSM steps were performed: logit model was run to estimate the p-score using pre intervention characteristics, selection of best matching estimators and matching performed, common support and overlap were checked, matching quality test and effect estimation were done and finally sensitivity analysis were performed to correct the hidden bias and common support problems.

The logistic model result revealed low pseudo R2 (0.15) indicating that the variables included in the model are simultaneously affecting both the probability of participation decisions into the program and the outcome variables. Besides these it showed that the explanatory variables are independent of participation and hence, it becomes easier to find a good match between participant and non-participant enterprises.

2.2. Factors affecting program participation

According to the logit result, four explanatory variables determined participation decision: years of schooling at 5%, prior business experience at 1%, enterprise age at 5% and location at 1%. The estimated results revealed that those operators who do not have prior business experience, who have low level of education, and enterprises that have short business life and located nearer to the owners' residence were those which are more likely to participate in the support service program (Table 2).

2.3. Matching sampled enterprises

Before matching, three main tasks were accomplished. First, predicted values of program participation (propensity scores) were estimated for all sample respondents. Second, a common support condition was imposed on the propensity score distributions of sample respondents. Finally, observations whose predicted propensity scores fall outside the range of the common support region were discarded. Accordingly, the estimated propensity scores vary between 0.028 and 0.933 (mean = 0.604) for participant enterprise operators and between 0.018 and 0.80 (mean = 0.410) for non-participant enterprises. The common support region would then lie between 0.028 and 0.80. In other words, enterprises whose estimated propensity scores are less than 0.028 and larger than 0.80 were discarded for the matching exercise.

Then matching was performed using propensity score of each observation using alternative matching methods. The choice of best matching method involves a trade-off between matching quality and its variance. The result indicated that

Independent variables	Coefficients	Std. Error	Z-value
Sex	-0.09	0.37	-0.24
Marital status	0.54	0.41	1.31
Years of schooling	-0.12**	0.05	-2.24
Family size	0.13	0.08	1.62
Prior business experience	-1.07***	0.38	-2.81
Enterprise age	-0.09**	0.04	-2.25
Location	-1.04***	0.37	-2.81
License	0.05	0.42	0.12
Constant	2.68***	0.94	2.85

Note: *** and ** means significant at 1 percent and 5 percent probability levels, respectively.

Table 2: Logistic results for factors affecting enterprise participation in the programs.

kernel matching with a band width of 0.1 is found as the best estimator for the data at hand as it satisfies the three important criteria; estimator having higher number of variables with no statistically significant mean difference between the mean of the estimated propensity scores in both treatment and control groups, an estimators having low pseudo-R2, and large matched sample size. Thereafter, the estimation results and discussion are the direct outcomes of the kernel matching algorithm with a band width of 0.1.

After choosing the best performing matching algorithm, the next task is to check the balancing power of estimation (propensity score and covariate) using different matching quality test methods: reduction in the mean standardized bias between the matched and unmatched enterprises, equality of means using t-test and chi-square test for joint significance for the variables used by applying the selected matching algorithm (in our case kernel matching 0.1 band width). In the present matching models, the standardized difference in X before matching is in the range of 13.5% and 48.9% in absolute value. After matching, the remaining standardized difference of X for almost all covariates lie between 1.8% and 10.5%, which is below the critical level of 20% suggested by Rosenbaum and Rubin (1985). The process of matching thus creates a high degree of covariate balance between the treatment and control samples that are ready to use in the estimation procedure. Similarly, t-values show that before matching all of the chosen variables exhibited statistically significant differences while after matching all of the covariates are balanced. The low pseudo-R2 and the insignificant likelihood ratio tests support the hypothesis that both groups have the same distribution in covariates X after matching. These results clearly show that the matching procedure is able to balance the characteristics in the treated and the matched comparison groups. Thus, the results used to evaluate the impact of program interventions on participant enterprises which have similar observable characteristics allowed comparing observed outcomes for participant enterprises with those of a comparison groups sharing a common support region.

2.4. Testing overlap and conditional independence assumptions

The result indicated that the value of pseudo R2 is fairly low after matching indicating that the unconfoundedness assumption is plausible. In addition to this, the study uses p-scores to test the plausibility of the overlap assumption. The results of matching exercise indicated that there appeared unmatched observations in the treated groups before common support condition is imposed. However, after matching the data using kernel matching method with band width 0.1, the common support condition has trimmed out a total of 18 participant observations from the model signifying that the overlap assumption is also plausible for the estimator.

2.5. Treatment effect on the treated (ATT)

The impact of MSEs support service program on outcome variables (sales, capital asset, and employment) are evaluated for their impact on participant enterprises. After controlling the differences in pre intervention characteristics of treatment and control enterprises, it was found that program intervention improved sales of participant enterprises by birr 2,248 (38%) per month. The program also improved capital asset of participant enterprises by birr 11,091.68 (60%) and employment by 1.02 (42%) as compared to non-participant enterprises (Table 3). These were achieved through the specific support services provided which helped them in improving product quality, improving their competitive power, getting access to finance and financial management skills, getting access to the market and to have access to production and sales outlets and the likes. Furthermore, the specific support services (financial and BDS) provided in the area focused on healing the critical challenges of enterprises that restrain business start up and expansion.

Variable Sample	Obs.	Treated	Controls	Difference	S.E.	t-value
Sales	145	8,113.88	5,865.62	2,248.25	1073.83	2.09**
No of employees	145	2.43	1.4	1.02	0.21	4.83***
Capital asset	145	29,615.51	18,523.83	11,091.68	6,368.19	1.74*

Note: ***, ** and* means significant at 1%, 5% and 10% probability levels, respectively.

Table 3: Average treatment effect on the treated (ATT).

2.6. Sensitivity analysis

Sensitivity analysis is aimed to assess the sensitivity of estimated results with respect to deviation from conditional independence assumption. Thus, Rosenbaum bounds were calculated for program effects that are positive and significantly different from zero.

Under the assumption of no hidden bias (log of odd ratio one) for each outcome variables, the upper bound significance levels (sig^+ = test statistics) give similar result indicating the significance of treatment effect. For sales and capital asset the upper bound on the significance level for gamma value of 1.05 - 1.75, 2 and 3 are 0.00, 1.10, and 2.4, respectively; and also for employment the upper bound on the significance level for gamma value of 1.05 - 1.75, 2 and 3 are 0.00, 5.10, and 1.3. This implies that capital asset and sales are insensitive to a bias that would multiply the odds of participation by a factor of 1.05 - 1.75 but sensitive to a bias that would double and triple the odds.

In conclusion, the results show that the inference for the effect of the program interventions is not changing, though participants and non-participant enterprises have been allowed to differ in their odds of being treated up to 1.75 in terms of unobserved covariates. Thus, impact estimates (ATT) are insensitive to unobserved selection bias and pure effect of support service program.

Conclusions and Recommendations

1. Conclusions

This study evaluated the impact of support service program on sales, capital asset and employment of micro and small enterprises (MSEs) in Dire Dawa Administration. The study used cross sectional data collected randomly from four urban kebeles out of the nine urban kebeles in Dire Dawa, Ethiopia. The data were analyzed using propensity score matching (PSM) approach.

The econometric result revealed that participation decision is significantly influenced by four explanatory variables: years of schooling, prior business experience, enterprise age, and location of enterprise. The PSM result revealed that the support service program has brought positive impact through augmenting gross income (sales) and saving, capital asset formation, employment generation. Specifically, the program intervention has improved the economy of participant enterprise through improving sales by an average amount of birr 2,248 (38%), employment level by a number of 1.02 (42%), capital asset by an amount of birr 11,091.68 (60%).

These program impacts were observed through the efforts so far performed for promoting and developing MSEs: establishment of legal framework and streamlining of regulatory conditions and the provision of direct enterprises support services (Financial and BDS). However, the qualitative analysis indicates that still there have been certain problems that impede the promotion and development of the sectors, particularly in terms of financial and business development services.

Generally, both qualitative and econometric analysis concretely justified that MSEs support service program intervention so far provided in Dira Dawa adminstration has brought positive impact on participant enterprises.

2. Recommendations

Close collaboration of financial service providers and business development service providers is extremely necessary for the MSEs to curb their working capital problems and expand their sales and employment levels. In addition, in order to have maximum impact of support services on MSEs, policy makers and the service provider institutions need to consider and revise the extent, intensity and quality of services and their linkages. Besides, Dire Dawa city administration and the service providers have to undertake aggressive promotion and awareness creation activities so as to bring the jobless youth to the business of MSEs. Furthermore, strengthening the available services to the participant enterprises and extending the services to non-participants will also help the MSEs absorb the extra jobless communities, build their capital assets, and enhance their sales volume.

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References

[1] Amha, W., Ageba, G. Business Development Services in Ethiopia: Status, Prospects and Challenges in the Micro And Small Enterprise Sector. International Journal of Emerging Markets, 2006, 1 (4): 305 - 328.

[2] Caliendo, M., Kopeinig, S. Some Practical Guidance for the Implication of Propensity Score Matching. Journal of Economic Survey, 2008, 22(1): 31- 72.

[3] CSA (Central Statistical Agency). Population and Housing Census in Ethiopia. Addis Ababa, 2007.

[4] Dehejia, R.H., Wahba, S. Propensity Score Matching Methods for Non Experimental Casual Studies. The Review of Economics and Statistics, 2002, 84 (1): 151-161.

[5] FeMSEDA (Federal Micro and Small Enterprise Development Agency). Proceedings of the International Workshop on the Role of Micro and Small Enterprises in the Economic Development of Ethiopia. Addis Ababa, Ethiopia, 2004.

[6] Friedlander, D., Robins, P. Evaluating Program Evaluations: New Evidence on Commonly Used Non Experimental Methods. American Economic Review, 1995, 85: 923-937.

[7] Heckman, J., Robb, R. Alternative Methods for Evaluating the Impact of Interventions: An Overview. Journal of Econometrics, 1985, 30 (1-2): 239-267.

[8] Jalan, J., Ravallion, M. Estimating the Benefit Incidence of an Antipoverty Program by Propensity-Score Matching: Journal of Business and Economics Statistics, 2003, 21(1) 19-30.

[9] Liedholm, C., Mead, D. The Structure and Growth of Micro Enterprises in Southern and Eastern Africa: Evident from Recent Survey. GEMINI Working Paper No. 36., 1993.

[10] McPherson, M.A. Growth of Micro and Small Enterprises in Southern Africa. Journal of Development Economics, 1996, 48 (2): 253-277.

[11] Mead, D.C., Liedholm, The Dynamics of Micro and Small Enterprises in Developing Countries. World Development, 1998, 26(1): 61-74.

[12] MoFED (Ministry of Finance and Economic Development), 2010. Growth and Transformation Plan of Ethiopia 2010/11-2014/15. Addis Ababa.

[13] MoTI (Ministry of Trade and Industry). Micro and Small Enterprises Development Strategy. Addis Ababa, Ethiopia, 2011.

[14] Rosenbaum, P. R., Rubin, D. B. Constructing a Control Group Using Multivariate Matched Sampling Methods that Incorporate the Propensity Score, The American Statistician, 1985, 39 (1): 33-38.