



Acceleration of Poor Women Capability in Increasing Income Through Self-Help Group

Chatarina Yekti Prawihatmi[✉]

¹Faculty of Economy, Soegijapranata Catholic University

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Abstract

This study analyzed the impact of the acceleration of women capabilities in creating family income through self-help group based micro credit. The analysis unit of this study are the members of UP2K-PKK (Efforts to Increase Family Income). They are poor women who run productive business. The samples of this research are 177 members of the UP2K-PKK in West Semarang. The data is collected using a questionnaire that is delivered directly to the respondents along with in-depth interview. The analysis tool used is multiple linear regressions. This research tests the model that is the family income as the dependent variable and the development capability through self-help group based micro credit as the independent variable. The acceleration of capability through self-help group based micro credit includes microcredit, training, partnerships, technical assistance, membership. The poor women have individual capabilities (initial endowment) including education, business experience, and membership. To know that the capability development through self-help group accelerates the development of individual capabilities, then the multiplicative variables are inserted. The results of this research show that capability development through self-help group accelerates the impact of micro credit and initial endowment in creating the family income.

Key words : Self-help group based micro credit, Initial endowment, Capability development, Acceleration, Family income.

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[✉] Corresponding author :
Address: Jl. Pawiyatan Luhur IV No.1, Bendan
Dhuwur, Semarang, Central Java
E-mail: yekti.prawihatmi@gmail.com

INTRODUCTION

Micro credit is a popular breakthrough in efforts to alleviate the poverty in the developing countries including Indonesia. Micro credit is a loan intended to empower the poor with facilities without collateral, the low rate interests, and the easy procedures. Business actors who have no access to banking or non-bankable are very helpful with this micro credit scheme.

Both the governmental and non-governmental institutions have increasingly been concerned about the financial accessibility faced by the Micro, Small, and Medium Enterprises (MSMEs). Either the governmental or non-governmental financial institutions move together to increase the credit expansion for MSMEs.

Bank Indonesia reported that the number of credits for MSME actors from year to year continued to increase despite the fluctuating growth as shown in table 1. The growth of credit for MSMEs in the period during 2013 to 2016 grew on the average of 12.23 percent. The growth of credit expansion shows the seriousness in overcoming the lack of financial accessibility faced by MSMEs.

The micro-scaled business actors are the most restricted business group in enjoying the micro credit expansion. Table 2 indicates that the number of credits for micro-scaled enterprises is the lowest one compared to the number of credits for the small and medium enterprises, while the number of micro businesses dominates the business actors in Indonesia. This condition indicates that micro-scaled enterprises still face problems in accessibility to the financial institutions. To face the low accessibility of micro business actors to the financial resources, the government and the governmental.

Table 1. Development of Number of Credits of MSMEs

Year	Number of Credits of MSMEs (billion) of Rupiahs	Growth (%)
2013	639.471.5	20.03
2014	767.577.6	10.82
2015	850.656.2	5.58
2016	900.359.9	12.23

Source : The Central Bank of Indonesia, 2017.

One of the self-help group based micro-credit programs developed by the government at the grassroots level in Indonesia is UP2K-PKK. The UP2K-PKK program is a micro-credit program for the low-income families who have or have not owned a business and really need additional funds accompanied by the development of capabilities. The assistance provided is in the form of simultaneous assistance that should be returned to the other group manager to be rolled out and played to other group members.

The empowerment program provided in UP2K-PKK is aimed at developing women's capability to be independent and to contribute to the creation of family income. Women's capability development program implemented in the self-help group such as UP2K-PKK group includes various trainings that can improve the members' capabilities such as skill training, entrepreneurship training, and others; development of partnership (networking) among the members of the self-help group with the interested parties; technical assistance in the form of equipment or infrastructure required to run the business.

Besides, the members of the self-help group can also increase their capabilities with education and experience in running the business, which is then called the ability of individuals (initial endowment).

Table 2. Development of Number of Credits of Business Scale

Year	Number of Credits of Micro Business (billions of Rp)	Number of Credits of Small Business (billions of Rp)	Number of Credits of Medium Business (billions of Rp)
2013	139.797.7	193.060.3	308.613.5
2014	179.748.3	224.824.5	363.481.1
2015	199.123.4	239.194.5	392.338.3
2016	218.511.9	266.618.5	415.250.4

Source : The Central Bank of Indonesia, 2017

Besides providing the alternative capital access for women having no assets and access to the formal financial institutions, self-help group based micro credit also provides the opportunities for women to develop themselves through the group. Mayoux (2005) asserted that the empowerment of women through self-help group based credit enable them to have access to savings and credit, income opportunities, consumption, mobility, education, health, and control over assets that will improve their welfare. Self-help group based micro credit does not only help its members to be economically empowered and able to contribute to the family, but also to be socially empowered (Rao, 2000; Manimekalai and Rajeswari, 2001; Styasai, 2003; Rajagopalan, 2005). For women, self-help groups provide opportunities for them to be able to run businesses, to have access to resources, information and markets for their products. Credit recipients from self-help groups can solve the problems jointly and assume the risks together (Vadivoo and Sekar, 2004). Women need not only the access to capital, but also the ability to properly manage and use the micro credit. Self-help group becomes a media that functions as a capability building for women who become its member. Women receiving micro credit through the self-help

group mechanism are empowered with training, counseling, and mentoring so that the women receiving micro credit involved in self-help groups have the ability or capability to start businesses and develop productive business. The members' active participation to join the programs and activities within the self-help group will increase women's ability to manage their business. Many previous researches such as Alkire and Seth (2015), Anitha and Reverker (2007), Basher (2011), Chiba (2011), Galab and Chandra Sekhara (2003), Gupta and Yesudian (2006), Juliet (2002) and Juthy (2010) found reinforcing results that self-help group based micro credit has a positive impact on the ability of women in the poor to contribute to the family income.

Not all previous researches examining the self-help group based micro credit found the positive impact on women empowerment. Some research conducted by Selvarajan (2004), Sinha (2006), Jyotirmayee (2008) and Singh (2012) found that self-help group based micro credit has the negative impact on women's empowerment. Selvarajan found that self-help group based micro credit provides a heavier burden to women because the group sets higher interest rates, while Sinha and Jyotirmayee found the ineffectiveness of self-help group, so it does not provide better conditions to its members. The non-positive impact of micro credit on women's

ability in creating income is also found by researchers such as Rai and Topa (2003); Gaikipati (2008) and Kabeer (2008). The difference of previous research results and the debate on the impact of micro credit on women empowerment shows that the problem of micro credit as one of the solutions in poverty alleviation still needs to be studied.

The failure of self-help group based micro credit in empowering women raises the big question of whether the existence of self-help group based credit can truly become a media functioning as a capability-building for poor women so that they can then become more empowered.

Basically, women have had an initial endowment to be able to perform productive activities in the form of education, willingness to work hard, and experience. Lack of access to capital and capability development makes women with their initial endowment dare not start and develop productive enterprises. Is self-help group based micro credit able to open access to capital and also provide access to its initial endowment development? Is self-help group based micro credit capable of accelerating the ability of poor women to increase their family income?

Self-Help Group Based Micro Credit and Family Income, Musinguzi (2000) stated that one way to increase the income of poor families is by providing an access to the loans in accordance with the capacity of the poor families. Self-help group based micro credit is a credit intended for the poor who have no financial access to a bank's financial institution. It is a revolving loan distributed through groups and accompanied by the capability development programs for self-

help group members. Self-help group based micro credit is very helpful for the micro entrepreneurs to dare to start a business or increase a production, to increase the ability to have assets, so as to increase the family income. Micro credit increases the production capacity, improves the savings and the family income. The research of Palanichamy (2011) and Khan et.al. (2011) concluded that women receiving the micro credit experience an increase in the income and the significant standard of living after receiving the loans through self-help group.

Self-help group based micro credit is usually accompanied by the trainings for capability development. The training received through self-help group improves the capability of the micro entrepreneurs to develop their products and develop their entrepreneurial capability so that the business they manage can be more developed. The research of Manimekalai and Rajeswari (2001) examined that micro credit through self-help group helps the members achieve the economic empowerment and the social empowerment. Self-help group develops leadership trainings, organizational skills, and business activity management. The positive impact of trainings on the family income is also proved in the research of Lalitha and Nagarajan (2004), which concluded that micro credit through self-help group improves the access to information and skills through trainings and coaching provided to their members.

Partnerships built in the self-help group will open the access to information, market, development services, and technology (Barton, 2007). The more the micro entrepreneur members of the self-help group have partners will facilitate their business activities to develop. The more parties are partnering, the more easiness the micro entrepreneurs will get either

to the upstream or downstream. The marketing access will develop, the promotional opportunities either with the exhibitions or the word of mouth promotions are increasingly widespread, the access to information is getting easier and faster, and there are many other opportunities to be achieved from the established partnerships. Oommen (2008) analyzed that one of the impacts of partnership is the increase in the bargaining position of its members, especially against the moneylenders or pengijon. Sathiyabama and Meenakshi (2011) reinforced Oommen's analysis that women receiving the micro credit among the self-help group members will be a teamwork to overcome any obstacles encountered, one of which is to overcome the marketing barriers by establishing a cooperation with various parties that may cut the marketing chain of the products controlled by the pengijon. Thus, the partnership will encourage the increasing productivity of the micro-credit recipients based on self-help groups and will finally increase the family income.

According to Barton (1997), technical assistance for the micro-enterprises is still required to make the small businesses recognize and utilize the technology so that they can respond to the changes in demand quickly. One characteristic of the micro business is that the production process still uses the traditional tools.

If there is an increase in demand, the micro enterprise cannot capture the opportunity because of the limitations of the production equipment. The consequence of traditional equipment is the limited production capacity of the micro enterprises. Therefore, the provision of technical

assistance is expected to encourage the productivity of the self-help group based micro credit that will then increase the family income.

The membership in the self-help group is the development of social capital for its members to improve the ability to expand their business and increase their income. In the self-help group, the built social capital in the self-help group includes three main elements those are: (1) trust, (2) network, and (3) norms (Yukuhama, 2008). These three elements are the strengths existing in the self-help group that can empower its members. In the self-help group there will be knowledge transfer and information transfer among its members that is very useful for its members in running their productive business. The high social capital may reduce the transaction costs among the actors, the information search costs, the offering costs, and the decision-making costs (Doh and Zolnik, 2011). Thus, by becoming the member of the self-help group, micro business actors will be encouraged to be more productive and to increase their business performance so that they will be able to increase their family income.

Initial endowment and family income, each member of the self-help group is an individual who has the ability to develop her own (initial endowment). The level of education taken by the self-help group based micro credit recipients is the basic provision to be able to manage the productive business. The higher the education of the micro credit recipients who become the productive business actors is, the higher the ability to run their business will be. Women who have higher level of education can take advantage of what they have learnt rather than the less educated women can (Grown et al., 2005). Formal education increases women's ability to process and use the new information

Education allows women to respond to the opportunities, to try the existing challenges, and to change the traditional ways (Ramakhrisman, 2010). Micro entrepreneurs with higher education have strong analytical ability, information-absorbing ability, helpful technology and knowledge to innovate their products. Then the micro entrepreneurs who have higher education will be able to survive and develop in various situations and finally will increase the ability to create the family income.

Women's micro business actors have relatively limited time to run their business activities. Therefore, the women business actors are willing to sacrifice their rest time and their leisure time to run their business. Considering the dual task of the micro business women, the opportunity cost they should bear in running their productive business is very high. Therefore, the time they should allocate to run their business actually reflects a high work ethic and a strong willingness to contribute to the family income. The more time allocated to run the business is, the higher the contribution to the family income will be.

The experience of micro credit recipients who are the members of the self-help group is similar to how long the micro business actors have run their business since starting the business to today. The longer the micro business actors have run their business, the more experience they will have gone through.

The micro business actors who have been running their business for a long time must have encountered many problems and challenges. Tubey's research (2013) concluded that the experience of women in running their

business in the past has a positive effect on their performance in running their business today. The experience of the micro business actors in solving the problems and facing various challenges sharpen their entrepreneurship ability.

Acceleration of capability development through self-help group on micro credit impact in increasing family income.

Development of capabilities that accompany the micro credit through self-help groups in the form of trainings, partnerships, technical assistance, and membership in the self-help groups increases the capabilities that individual women have had or developed to be able to manage the micro credit more efficiently. Capability development through self-help group plays a role to accelerate the initial endowment that women have to be more professional in their productive business activities and to be more capable to create their own income that finally will increase a contribution to the family income.

RESEARCH METHODS

The data used in this research is the primary data collected from the survey with the questionnaire guide to the UP2K-PKK members who become the samples or respondents. The questionnaires are designed with two types of questions, which are closed and open in order to get clearer and more accurate information about the impact of self-help group based micro credit.

The population in this research is women's micro business actors who become the members of UP2K-PKK in Semarang City, Central Java Province, Indonesia. The sampling taken in the research uses purposive sampling method starting from the selection of districts to the selection of respondents. The selection of districts is based on the districts with the highest

poverty level and the highest number of UP2K-PKK. The selected districts of 16 districts in Semarang are Ngaliyan District and Semarang Barat district. Both districts have the highest capital growth compared to the others and have very high dynamics of UP2K-PKK.

After selecting two districts as the sample, it selected the sub-districts from each district with the same criteria to select the district. Based on the capital growth and the group dynamics, the most prominent implementation of UP2K-PKK in Ngaliyan District is in Wonosari Sub District, while the most prominent implementation of UP2K-PKK in Semarang Barat District is in Gisikdrono Sub District. Based on Semarang City in 2016, Wonosari Sub District and Gisikdrono Sub District are those included in the sub districts with the highest number of poor people in Semarang City. Therefore, the implementation of UP2K-PKK is really intensified in Gisikdrono Sub District of Semarang Barat District and Wonosari Sub District of Ngaliyan District with the aim of reducing the poverty level that exist those sub districts.

The selection of respondents as the samples in the research also used the purposive random sampling technique. The sample is determined based on the following criteria: 1) the respondents have been a member of UP2K-PKK for at least one year; 2) the respondents have productive activities that are actively run; 3) the respondents actively participate in the activities organized by UP2K-PKK group they join.

The analysis technique used is the multiple linear regression analysis with family income as the dependent variable and self-

help group based micro credit and initial endowment as the independent variable. The self-help group based micro credit includes the variables of the number of micro credits, the number of trainings, the number of partnerships and technical assistance, while the initial endowment includes the variables of the education level, the length of time allocated for work, the experience and membership duration in the self-help group.

RESULTS AND DISCUSSION

After conducting the data analysis of primary data, it found the result of data normality test shown at the number of data amounted 177, the maximum Zscore value no more than 3, the detected existence of multicollinearity. The existence of multicollinearity cannot be avoided because in this model the multiplicative variable is included, which is the multiplication of two variables. Because the multiplicative variable is the result of a multiplication between two independent variables, the estimation result cannot be avoided from multicollinearity problem. The result of heteroscedasticity detection based on the scatter plot and gelsjer test show that no heteroscedasticity symptoms of regression model are used to analyze the effect of the micro credit based on the self-help group on the family income. The coefficient of determination (R^2) for the result of determinant regression equation, or the factor-coefficient of determination (R^2) for the estimation results of determinant regression equations or factors affecting the amount of family income is 0.833, which means that 83.3 percent of the behavior of family income increase can be explained by the variables: the number of micro credit received, the trainings undertaken, the partnerships, the

technical assistance received, the education, the allocation of time devoted to manage the business every day, the business experience, and how long the membership in the self-help group and multiplicative variables. It also means that the model used reflects the condition of the modeled phenomenon. The magnitude of F count from the model used is 47.291 with a probability (Sig) 0.000 smaller than the significance of 0.05 or 5 percent, which means that the model can be used to predict the family income.

The estimated results show that self-help group based micro credit has a positive impact on the family income. The capability development program accompanying the micro credit in the form of trainings (TRAIN) and partnerships (NET) is proved to have a positive effect on the family income (FAMINC). Technical assistance (AID) has no significant effect on the family income. The membership in the self-help group has a positive effect on family income.

The development of individual capabilities including education (EDU) and time allocation for business (TIME) has a positive effect on family income, while business experience (EXP) has no significant effect on family income.

In the equation, the multiplicative variables are also included to test whether the development of capabilities in the group accelerates the impact of micro credit and the impact of development of individual capabilities on the family income.

Multiplicative variables that significantly affect the family income are as follows: multiplicative variables between micro credit and trainings (MCTRAIN), micro credit with technical assistance (MCAID), time allocation

with trainings (TIMETRAIN), time allocation with technical assistance (TIMEAID), experience with partnerships (MEMBERNET), and experience with membership (EXPMEMBER), while the multiplicative variables between education and trainings (EDUTRAIN) and the multiplicative variables between experience and membership (EXPMEMBER) have no significant effect on the family income.

The result of the statistic test can be seen in table 1. Based on the hypothesis test, self-help group based micro credit has a positive impact on the family income.

This result reinforces the previous research findings concluding that the micro credit has a positive impact on the family income (Rankin (2001), Silvia (2004), Devi (2006), Khan et.al (2011), Palanichamy (2011), Puhazhendi and Badyata (2002). Rankin (2001) concluded that the micro credit has a positive impact on the family income in which the micro credit provides the working capital for the poor women to run their micro businesses. The micro credit enables the poor women to create jobs for themselves and to create their own income. A higher capital will increase the ability of self-help group based micro-credit recipients to increase their production, to increase their ability to create the family assets that finally will increase the family income.

The development of capabilities that accompany the micro credit that is trainings, partnerships, and membership in the self-help group has also proved to have a positive impact on the family income. This result strengthens the result of research of Scmihdt et.al (2006), which concluded that the trainings given to the group members have a positive impact on the creation of job opportunities, increased sales, and increased family income.

The technical assistance evidently has no positive impact on the family income.. Based on the interview result with the members of the self-help group who received the technical assistance, it is said that many technical assistance is not used because it is

not in accordance with the business they run Besides, the equipment as the technical assistance has been broken so that they cannot be utilized. A membership in a self-help group provides a positive benefit for its members.

Table 1. Coefficient of Regression and Significancy of Self-Help Group Based Micro Credit on Family Income

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	227659.816	204113.915		1.115	.266
Micro Credit (MC)	1.392	.348	.325	4.003	.000
Trainings (TRAIN)	5599.081	2602.254	.129	2.152	.033
Technical Assistance (AID)	-189715.481	213807.197	-.089	-.887	.376
Partnerships (NET)	86845.072	29997.416	.181	2.895	.004
Time Allocation for Business (TIME)	54694.412	23615.361	.096	2.316	.022
Education (EDU)	166275.311	55363.286	.226	3.003	.003
Experience (EXP)	3467.820	12742.199	.018	.272	.786
Membership (MEMBER)	53997.991	19339.886	.229	2.792	.006
Micro Credit-Training (MCTRAIN))	.011	.004	.209	3.125	.002
Micro Credit-Technical Assistance (MCAID)	-.803	.308	-.240	-2.603	.010
Micro Credit-Partnership (MCNET)	-.043	.054	-.089	-.793	.429
Micro Credit-Membership (MCMEMBER)	-.047	.027	-.172	-1.729	.086
Education-Training (EDUTRAIN)	365.134	631.009	.048	.579	.564
Education-Partnership (EDUNET)	-322.300	8972.636	-.004	-.036	.971
Time Allocation-Training (TIMETRAIN)	-66.529	471.301	-.011	-.141	.888
Time Allocation-Technical Assistance (TIMEAID)	103325.219	31635.846	.273	3.266	.001
Experience-Training (EXPTRAIN)	-308.356	222.467	-.138	-1.386	.168
Experience-Partnership (EXPNET)	4302.265	1816.705	.191	2.368	.019
Experience-Membership (EXPMEMBER)	1816.220	864.479	.157	2.101	.037

Dependent Variabel : Family Income (FAMINC)

Source: primary data processed, 201

The interaction among the members that has occurred for a long time provides the additional knowledge and more abilities for the self-help group based micro-credit recipients rather than if she is self-employed and not a member of the self-help group.

Initial endowment in the form of education has a positive impact on the family income. The results of this research support research result conducted by Kiiru (2007) in Kenya, which proved that the level of education of the micro entrepreneurs is positively correlated with the family income. Self-help group based micro credit recipients graduating with higher education has the ability to innovate by utilizing the technology and information to expand their business. Educational findings have a positive effect on the family income and also support the results of research of Garikipati (2008), which told that women who have higher education have higher marginal productivity as well. Women's micro entrepreneurs who have higher levels of education have better skills in understanding and applying the productive technology so that their productivity is high. In addition, the education will increase the self-capability to be able to take decisions and to overcome the problems that occur (Desiderius, 2009)

The Experience has no significant impact on the family income. Variable of business experience in this research is proxied by running business so long that it does not reflect the performance of the managed business. The length of time of running a business alone does not guarantee the capability of women in managing the business and creating the income. A business

without innovation and creativity can survive, but lack of competitiveness.

If the managed business has no competitiveness, the business will not grow and cannot encourage the increase in the family income. The results of this research are similar to those of Richardson (2004) in Zimbabwe. Richardson found that business experience has no effect on the family income. Business experience should be related to an access to ownership of human assets and the women access to other assets.

Time allocation for business has a positive impact on the family income This means that the more time allocated by the women's micro entrepreneurs as the members of self-help group is, the higher the family income will be. The number of hours allocated to manage the business represents the work ethic and the fighting power of the women's micro entrepreneurs. The higher the work ethic of the micro-entrepreneurs will be realized by hard work, which is devoting more and more time to manage the business, although the women's micro entrepreneurs also have to do the households. These findings support the results of research of Garikipati (2008), which concluded that the allocation of time for business has a positive impact on the family income. Garikipati also distinguished between the time allocation for business of the women's micro-entrepreneur and the men's micro-entrepreneur. As the micro business actor, a woman must consequently perform various works related to her business in between her busy households. A woman's micro entrepreneur who has a high work ethic will spend more and more time on her business, even if she has to sacrifice her leisure time or rest time.

Acceleration of capability development through self-help group on impacts of micro

credit and initial endowment, multiplicative variables between trainings and micro credit are proved to significantly affect the family income. This means that the trainings received by the members of the self-help group are proved to be able to accelerate the impact of micro credit on the family income. This finding reinforces the research of Villar (2008), which concluded that the micro enterprise development program through trainings has succeeded in encouraging the micro entrepreneurs to become more productive. The trainings provided in self-help group will increase the capability of women's micro entrepreneurs who are the members of self-help group in managing their capital. The increase in capability of women in managing the capital also means the increase in marginal product of capital (MPk) from women receiving the micro credit.

The hypothesis stating that technical assistance accelerates the impact of micro credit on the family income based on the estimation results is unacceptable. The estimation results show the opposite direction to the proposed hypothesis that the technical assistance will accelerate the impact of micro credit on the family income. The field findings indicate that the technical assistance cannot be utilized optimally by the recipients. The technical assistance provided does not fit with the need or not durable so that technical assistance in the form of more modern equipment just does not support the productivity of women's micro entrepreneurs as the member of self-help group. It is not given simultaneously for all members of the self-help group, so some technical assistance should be used interchangeably among the group members of the self-help group. It is

usually in the form of more modern production equipment, which requires adaptation in its utilization for women's micro entrepreneurs who have been using traditional tools for a long time to adapt to more modern equipment. This adjustment process causes the production process rather disrupted. Such things cause the technical assistance not able to accelerate the micro credit, but weaken the impact of microcredit on the family income. Related to these findings, Sasono (2012) stated that technical assistance is not a strengthening of capacity building. The focus of assistance should be on strengthening the capacity building that encourages innovation and creativity (in production, management and marketing) as the main driving force.

Multiplicative variables between partnership and micro credit do not significantly affect the family income. These results indicate that there is a mutual independence between the variables of partnership and micro credit. Based on the observation, a partnership established in UP2K-PKK is still focused on marketing. Partnerships in product development, technology and information having impact on the cost efficiency that finally will improve the efficiency of capital use have not been done.

Multiplicative variables between micro credit and membership do not significantly affect the family income. This means that there is a mutual independence between the micro credit variables with the membership variables in self-help groups. Being the members of the self-help group does not guarantee that women entrepreneurs can manage their capital more efficiently if they are not actively developing

themselves individually or actively participating in development activities in the self-help group.

The multiplicative variable between education and trainings has no significant effect on the family income. These results indicate that the education and training variables are independent to each other. Women entrepreneurs with higher education have higher creativity and innovation. Thus, without attending the trainings, women entrepreneurs are able to compete for their business. Trainings through self-group certainly provide additional knowledge and skills, but trainings do not accelerate the education impact on the family income.

Multiplicative variables between partnership and education have no effect on the family income. It means that the education and partnership variables have a mutual independence. The partnership that exists among the members of the self-help group with various parties does not accelerate the education impact on the family income. Partnership is a mutual beneficial partnership for both partners. The need of partnership is in accordance with the condition of micro entrepreneurs. The current partnership is more focused on marketing the products of UP2K-PKK. The impact of partnership is still in the standard that the members of UP2K-PKK are able to sell more products, but there has been no transfer of knowledge or information that can enrich the knowledge of UP2K-PKK members. UP2K-PKK members have not achieved strengthening for their knowledge and business capability through partnership.

Multiplicative variables between training and time allocation for enterprises

have no significant effect on the family income. The non-significance of the multiplicative variables between training and time allocation for enterprises means that each training variable and time allocation variable for business is mutually independent. The time allocated by women's micro entrepreneurs to run the productive business activities is not affected by trainings. Based on the interview results, the amount of time allocated to run the business follows the rhythm of household affairs, considering that women entrepreneurs have double roles as housewives and as entrepreneurs. Trainings do provide useful insight, skills, and knowledge for women entrepreneurs in managing businesses, but trainings do not accelerate the allocation of time for business.

The multiplicative variables between technical assistance and time allocation for business are proved to have a significant effect on the family income. The results show that the technical assistance can accelerate the impact of time allocation for business on the family income. This means that in the same number of hours allocated to run the business, the technical assistance helps the higher output or makes the work completed faster. Typical technical assistance in the form of more modern and more practical production equipment encourages women entrepreneurs to become more productive. Women will be more efficient in using their time with technical assistance. Time efficiency for women is important because women have multiple roles as housewives and as micro entrepreneurs.

The multiplicative variable between trainings and experience are proved to have no effects on the family income. It means that the training and experience variables are independent to each other. Based on the

observations and interviews, the training provided in the internal self-help group has not provided additional experience for its members because it is only given in a short time.

However, if the training is conducted by a competent outsider by inviting the members of the self-help group, it will give additional experience to the members of the self-help group. The training conducted by the competent outsiders is usually a long-term training, accompanied by practice and comparative studies.

Multiplicative variables between partnership and business experience are proved to have a significant effect on the family income. It means that partnership as one form of capability development in the self-help group may accelerate the business experience of women's micro entrepreneurs who become the members of the self-help group. These finding indicates that at the same level of experience, women's micro entrepreneurs as the member of the self-help group who are in partnership with various stakeholders will have higher capabilities in creating the income and in contributing to the family income rather than women's micro entrepreneurs who do not establish partnerships with various related parties. Partnerships that can be established in a self-help group become one part of the experience. Partnerships with various parties related to the business carried on enrich the learning that has been obtained in the past to run the business in better ways in the future. The more partnerships can be established, the more learning experiences will be achieved by women entrepreneurs of self-help group members.

Multiplicative variables among the membership in the self-help group and experience significantly influence the family income. It means that membership in the self-help group is able to accelerate the impact of the business experience of the self-help group members on the family income. These results indicate that with the same business experience, women's micro-entrepreneurs who become the active members of the self-help group have higher capability to create the income. Membership in the self-help group itself provides a place for the members to exchange experiences and to exchange ideas and information with other members. Learning from the experiences of others will be useful to overcome various problems and challenges faced by women in running their business. Due to the many benefits achieved during being a member of the self-help group, many micro entrepreneurs last up to 20 years as the members of the self-help group.

CONCLUSION

Self-help group based micro credit is a solution of the helplessness of women who want to start and develop productive activities. The presence of self-help group based micro credit opens an access to the capital and the development of capabilities for the poor women to start and develop productive enterprises so that they can contribute to the family income. Capability development provided through the self-help group in the form of trainings, technical assistance, partnerships, and membership in the self-help group itself may accelerate the impacts of micro credit and of individual capability (initial endowment) those are education, time allocation for business, and experience owned by women to start and develop business. The results

of this research prove that the development of capabilities given to women through the self-help group encourages the optimization of the use of micro credit by women.

All forms of capability development through the self-help group accelerate the impact of micro credit and initial endowment. Trainings accelerate the impact of micro credit on the family income. Technical assistance accelerates the impact of time allocation on the family income. Partnerships accelerate the impact of experience on the family income. Membership in the self-help groups itself accelerates the impact of experience on the family income.

Micro credit accompanied by trainings, partnerships, technical assistance, and membership (self-help group based micro credit) are proven to function as a capability building for women who will start and run the productive enterprises and not just as the micro credit dealers. The active membership in the self-help group opens opportunities for capability development that will increase the productivity of women. The dynamics of the self-help group determines the productivity of its members, thus, empowering the self-help group will also affect its members.

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