THE IMPACT OF THE MICRO CREDIT PROGRAM ON THE URBAN POOR COMMUNITIES CONSUMPTION IN PALEMBANG CITY, INDONESIA

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Abstract

The objective of this study is to analyze the Household Consumption Pattern of Urban Poor Communities in Palembang City, Indonesia. The object of this research is households that are members of the Community-Based Livelihood Improvement program. This household community gets regular revolving loans from this program. The study uses descriptive and simple regression analysis techniques using one independent variable, namely the proportion of food consumption with the dependent variable is the income level. The results showed that there was a difference in consumption patterns between the users of regular revolving loans and PPMK loan beneficiaries where the consumption pattern of PPMK was smaller in proportion to food consumption compared to users of regular revolving loans and income levels had an effect and were significantly related to the proportion of food consumption.

Keywords: Angel Law, Consumption Patterns, Revolving Loans, Microfinance

1. Introduction

Indonesia as a developing country has very complex urban problems. One of them is the very rapid development of the urban population, especially big cities, due to the high population growth rate and urbanization. Urban people from the poor usually target the suburbs that do not yet have city space facilities so that they are cheaper. One of the consequences is the emergence of dense residential areas, unplanned and without good infrastructure facilities, so that in the end they grow out of control into chaotic and slum residential areas prone to floods, fires, infectious diseases and other social problems.

Palembang City is one of the urban cities in Indonesia, which has a high number of poor people. Based on BPS data in 2014, the number of poor households in Palembang City was 13% of the total population or 202,000 people. The Urban Slums Settelements Program (KOTAKU) is a program to build an integrated system for handling slum settlements, where local governments lead and collaborate with stakeholders in planning and implementation, as well as promoting community participation. One of the ultimate goals of this program related to poverty alleviation is increasing the level income of low-income communities through the provision of infrastructure and activities to improve community livelihoods to support the prevention and improvement of the quality of slum areas.

The relationship between household income and consumption has been studied by one of the Prussian economists, German Ernest Engel (1821-1896). Ernest Engel argues that household

income that is used for food spending tends to decrease if income increases, which means that the lower a person's income, the greater the proportion of expenditure spent on food or food consumption, this statement is known as Engel's Law (Nicholson & Snyder, 2000). Engel's Curve Theoretically, it is known that the level of consumption by a household for an item will be influenced by many factors, one of which is influenced by income. In microeconomic theory it is known that to determine the relationship between the level of income and the amount of a particular item purchased by a consumer.

According to Michail (2020) and Kadariah (1996), the low-income group spends a large part of their income for absolute life necessities such as; food, housing and clothing. The higher a person's income, the smaller the expenditure allocated for basic needs. the high-income groups have a lower tendency to consume (average propensity to consume) than low-income groups (Yang, Ren, & Zhou, 2018); (Ekulend, 1993). The poor households generally spend more on basic needs, both consisting of individual needs and consumption (food, clothing, housing) and certain social service needs (drinking water, sanitation, transportation, health and education) (Pitomo, 1992). The Community-Based Livelihood Improvement Program is an intervention in the development of productive community activities that can directly improve the livelihoods of the poor with a continued KSM mentoring approach after accessing Regular revolving loans where the activities of the two programs are carried out by the Central Government through the Ministry of Public Works under the name KOTAKU Program.

The mentoring strategy for institutional strengthening and business development of the MSME group in Regular Loans and PPMK is carried out through the principle of developing five assets for human livelihoods, namely: human capital, social capital, natural capital, and physical resources. In managing these sources of livelihood, the Regular revolving Loan Program and PPMK are related to increasing the ability of MSME groups to access various sources of livelihood capital. The focus of facilitation for the strengthening of the MSME group, apart from being related to the smooth running of financial capital, is primarily oriented towards the effectiveness of productive activities developed by the UMKM group, so that they can contribute positively to improving the livelihoods of their group members.

Studies regarding consumption patterns have been carried out, including research conducted by Susilowati (2016) in research on the Consumption Patterns of Malang City People after the Increase in Food Prices by using descriptive analysis techniques with research that the consumption patterns of Malang people do not change after the increase in food prices.

Anwar (2011) examined the Consumption Patterns in rural communities of Bireun District, Aceh, with the result that the consumption patterns of rural communities in Bireuen Regency were dominated by basic needs, especially for the type of food. All income received is spent on consumption needs without the remainder for savings. The level of education, type of work, and family size as social variables actually influence the consumption pattern of rural communities. With an increase in the level of education, and the better the type of work, the food consumption expenditure is reduced and the income earned is diverted for non-food consumption. Statistically, only the education level variable does not significantly affect consumption patterns, while other

observational variables have a significant effect on the consumption pattern of rural communities in Bireuen Regency.

Mustika (2015) conducted a research on Public Consumption Expenditure Patterns in the City of Denpasar in an Economic and Cultural Perspective. The analytical tool to be used is Path Analysis. The results of the analysis show that simultaneously, Disposable Income, Religious Ritual Frequency, and Food Consumption Expenditures have a significant effect on Religious Ritual Expenditures.

Dianita (2017) examined the Consumption Patterns of Cassava Farm Workers and Rubber Tappers. By using descriptive analysis, the results of the research show that the percentage of family food expenditure of rubber tappers is smaller than the total expenditure, so the rubber tappers' family is classified as having a high level of welfare. Meanwhile, the food expenditure of the family of agricultural workers is greater than the proportion of expenditure so that it can deny that the family of cassava farming workers is classified as having a low level of welfare.

This study will analyze the consumption patterns of the Poor who are beneficiaries of the Regular revolving loan and the KOTAKU PPMK program, both food and non-food consumption related to the behavior of poor households in allocating limited sources of income to meet their household needs as optimally as possible. Revolving loan users in the early stages can only access regular loans with a maximum first ceiling of IDR 500,000 and continue to increase the amount of the ceiling when each repayment and it is considered that their business is growing until the credit limit can reach IDR 2,000,000 with a maximum of four loans. The process of upgrading from a regular KSM occurs when it is recommended to become a KSM PPMK so that it is entitled to a loan with a maximum ceiling of IDR 5,000,000 because it is considered that the turnover continues to increase and has good business prospects to continue to grow.

From the above description, it can be concluded that there has been an increase in income from business actors who have been served by PPMK compared to when they were still on regular revolving loans, and of course this will have an impact on the household consumption patterns of the poor. To achieve the final goal above, especially in order to increase MBR income, the Kotaku program intervenes using the following activities:
1. MBR Business Financing (Microfinance) through the Livelihood / PPMK Program
2. Vocational training to increase the capacity and quality of MBR business products
3. Increasing banking access through increasing banking habit (savings) and capital

2. Method

This research was conducted in Palembang City, South Sumatra Province. The location of this research was chosen purposively because Palembang is an urban city that has received the Kotaku Program from the government due to its high poverty levels. The research was carried out on July untill October 2018. This research is still relevant to the current conditions where the slum area household community still benefits from government programs. The population in this study was members of the business group that received revolving loans for the early-stage Regular program with a maximum loan size of IDR 1,000,000. per member, amounting to 327 people and PPMK loan recipients who have received a maximum loan of IDR 5,000,000 per

member, totaling427 residing in Palembang City. The method of determining the sample in this study was carried out deliberately and disproportionately (purposive and un-proportional sampling). The number of samples taken was 10% of the sample population to be taken in 5 sub-districts including Ilir Barat I, Bukit Kecil, Gandus, Plaju and Seberang Ulu 2 Districts with a total sample size of 81 respondents with details of regular KSM members as many as 38 people and members of KSM PPMK as many as 43 people which means more than 10% of the total population, namely 748 people.

The data analysis used in this research is divided into quantitative analysis and qualitative analysis. Qualitative data is presented through descriptive methods using tabulations to support quantitative data, while quantitative data is processed using Microsoft Excel 2007 and IBM SPSS version 20. Analysis of household expenditures in question are costs incurred for living needs within one year. which consists of expenditures for food and non-food which are stated in rupiah per 21 years (BPS, 2005). Total household expenditure can be formulated as follows:

$$C = CP + CNP$$

Where,

$$CP = CP1 + CP2 + CP3 + CP4 + CP5$$

$$CNP = CNP1 + CNP2 + CNP3 + CNP4 + CNP5 + CNP6 + CNP7 + CNP8 + CNP9 + CNP10 + CNP11 + CNP12 + PNP13$$

C = total household expenditure (rupiah / year)

CP = Consumption for food (rupiah / year)

CNP = Consumption for non-food items (rupiah / year)

CP1 = Rice, tubers (rupiah / year)

CP2 = side dishes, vegetables and fruit (rupiah / year)

CP3 = Drinking ingredients (coffee, tea, sugar) (rupiah / year)

CP4 = cooking oil, seasonings, supporting ingredients (rupiah / year)

CP5 = tobacco / cigarettes (rupiah / year)

CNP1 = Clothing (rupiah / year)

CNP2 = Housing and household facilities (rupiah / year

CNP3 = Clean Water (rupiah / year)

CNP4 = Electricity (rupiah / year)

CNP5 = Transportation (rupiah / year)

CNP6 = Health (rupiah / year)

CNP7 = Education (rupiah / year)

CNP8 = Communication (rupiah / year)

CNP9 = Recreation (rupiah / year)

CNP10 = celebration (rupiah / year)

CNP11 = Taxes, Fees (rupiah / year)

CNP12 = Credit Installment (rupiah / year)

PNP13 = Savings, Arisan (rupiah / year)

Based on Engel's Law, which is related to the relationship between household income and consumption, which suggests that the lower a person's income, the greater the proportion of expenditure spent on food or food consumption, so in this study it will be tested using simple linear regression analysis to determine whether statistically Engel's law has an effect on this research.

The prediction model used is;

Where:

Cp = Proportion of household food consumption (percent)

$\beta 0$ = intercept / constant

C = household consumption

$\beta 1$ = Regression coefficient

ε = Component error

Hypothesis testing uses a significance level of 5%. If the p value <5%, the initial hypoth sis is rejected, but if the p value> 5%, the initial hypothesis is accepted. To test the hypothesis the t test is used, the t test is a test of individual explanatory variables which aim to determine whether there is a significant influence between the dependent variable (Y) on the independent variable.

3. Results and Discussion

Table 1 shows that there are differences between the use of income from respondents who are in the regular program and respondents who are in the PPMK program, where there is a significant difference in the allocation of food and non-food expenditure. In regular program respondents, the use of income was 40.57% for food and 59,43% for non-food with an average annual income

of IDR37.56 million, while PPMK respondents used their averaged income (per year) IDR65.21 million.32.51% for food and 67.49% for non-food. According to Lee, S., Sohn, S., Rhee, E., Lee, Y.G., & Zan, H. (2014) in their research in America Households show that expenditures on necessities such as food, health, and housing leave older households feeling financially stressed.

Table 1. Consumption Patterns and placement of Respondents' household income by type of loan

No	Type of Expenditure and Placement	Regular Borrower Households		PPMK Borrower Households	
		Value (RP)	Proportion	Value (RP)	Proportion
1	Rice, Corn ang Tubers	4.142.211	10,97%	3.986.326	6,11%
2	Side dishes, vagetable and Fruit	7.254.158	19,21%	12.064.605	18,50%
3	Beverage ingredients: Tea, Coffee, Sugar	1.025.605	2,72%	972.837	1,49%
4	Supporting materials for food consumption	2.896.632	7,67%	4.178.326	6,41%
5	Tobacco	2.604.632	6,90%	2.598.140	3,98%
	Total of Food Expenditure	15.318.605	40,57%	21.202.093	32,51%
6	Clothing	759.211	2,01%	952.791	1,46%
7	Housing	715.789	1,90%	1.727.907	2,65%
8	Clean Water	784.132	2,08%	990.419	1,52%
9	Electricity	1.016.842	2,69%	2.006.047	3,08%
10	Transportation	4.190.526	11,10%	6.296.279	9,66%
11	Health	1.340.895	3,55%	1.726.791	2,65%
12	Education	5.769.211	15,28%	8.669.302	13,29%
13	Communication	1.113.474	2,95%	1.839.907	2,82%
14	Recreation	193.158	0,51%	412.326	0,63%
15	Celeberation	1.312.763	3,48%	1.411.744	2,16%
16	Taxes, Dues	306.553	0,81%	341.674,42	0,52%
17	Credit Installments	2.750.526	7,28%	11.064.744	16,97%
18	Arisan, savings	2.185.263	5,79%	6.566.512	10,07%
	Total of Non-food Expenditure/Placement	22.438.342	59,43%	44.006.442	67,49%
	Total Expenditures and Placements	37.756.947	100,00%	65.208.535	100,00%

Source: Primary Data (2018)

PPMK respondents had a smaller value and proportion of expenditure on carbohydrate intake than regular program respondents, with an average of IDR 4.1 million per year in the regular program and an average of IDR 3.9 million per year at PPMK. Likewise, the proportion is 11% for regular program respondents and 6% for PPMK. And this is also offset by the increase of the expenditure value for side dishes, vegetables and fruit, which is IDR 7.2 million for regular respondents and IDR 12 million in PPMK respondents per year. This illustrates the increase in welfare due to the increasing variety of food consumed, especially in fulfilling the more complete nutrition of PPMK respondents.

PPMK respondents had smaller value and proportion of expenditure on tobacco/cigarettes compared to regular program respondents with a value of IDR 2,6 million for regular program respondents and IDR 2.58 million for PPPMK respondents, with a proportion of 6.9% for regular respondents and 3.98% for PPMK respondents which also occurred in expenditures for drinks that contains sugar where regular program respondents had a greater expenditure value, with a value of IDR 1.05 million while PPMK respondents were IDR 0, 95 million with a proportion that was also greater for regular program respondents, namely 2.7% and PPMK respondents with the value of 1.5%. Even though the proportion was decreased, when it viewed in terms of the amount of rupiah, there has been very little change. This indicates that consumption for cigarettes and drinks containing sugar such as coffee and tea tends to stable despite the increased of income so that these goods are categorized as neutral goods for the respondent's household.

PPMK program respondents have an average value and proportion of expenditure on electricity of IDR 2 million, which is higher when compared to regular loan respondents with an average of IDR 1 million with a proportion of 2.69% for regular respondents and 3% for PPMK respondents. This indicates that there are more types of electronic goods used in various activities in the household of PPMK respondents compared to regular program respondents which can increase productivity and comfort which means a higher level of prosperity. It is supported by Trotta, Gram-Hanssen, & Jørgensen (2020) that some households spent their expenditure for electricity. Likewise, the increase in spending on housing, education, health and recreation needs also indicates the same thing.

The value and proportion of expenditure for credit payments on an average of IDR 2.75 million for regular program respondents is very low in value when compared to PPMK respondents with an average of IDR 11.1 million. Likewise with the proportions where regular program respondents were 7.28% and PPMK were 16.97% which indicated an increase in purchases in terms of durable goods, production equipment and business capital loans to PPMK program respondents. This condition shows that PPMK respondents have high expectations of increasing current income from the past compared to regular program respondents, so they feel they are able to pay all bills for the loans they make. This may occur as a result of improving conditions for family income sources and the economy in general.

Likewise, in terms of the placement of income at the savings and arisan posts, there was quite a large difference from an average of IDR 2.2 million for regular program respondents per year and an average of IDR 6.6 million for PPMK respondents. Also in terms of proportion, an average of 5.79% for regular program loan respondents to 10% for PPMK loan respondents. This indicates a higher financial management capacity of PPMK respondents who have previously been on regular loans. Providing understanding and implementation of saving activities as a condition for accessing the revolving loan program has provided good results in changing financial management behavior, so that in the future it is hoped that it will have an impact on increasing the ability to overcome the risk of income shocks in the future, be able to make capital accumulation, and be able to access financial institutions which in turn will increase the level of welfare.

Table 2.The result of the effect of expenditure on househols food expenditure proportion

Variable	Coefficient	T	P
Konstanta	58.875	14.768	.000
Total Expenditure	-3.763E-007	-5.415	.000
R=.520	R Square=.271	Adjusted R Square=.261	

The P Value indicates that the amount of total expenditure has a significant effect on the proportion of food consumption with a value of <5%. This aims to reject the initial hypothesis, which means that the results are in accordance with the hypothesis previously discussed which states that the higher the income, the less the proportion of expenditure on food consumption will be. The coefficient of determination ($R2$) of 27.1% indicates that 27.1 percent of the diversity of consumption proportions is explained by total expenditure. A constant value of 58,875 indicates that, if the total expenditure is 0, food consumption will be 58.87 percent. While the b1 coefficient of -3.763E-007 shows that if the amount of total expenditure increases by one unit, food consumption will decrease by 0.0000037 units and this also shows that the relationship between the two variables is negative.

From the results of data calculations and analysis shows that Engel's Law which states that the greater the income a person has, the less the allocation of consumption of foodstuffs is evident in this study. On the other hand, we can also conclude that there has been an increase in income, and the ability to better manage finances with the microfinance program from the government through the Kotaku / Urban PNPM Program with various interventions for the urban poor in Palembang.

4. Conclusions

There are significant differences in the allocation for expenditure of food and non-food and the amount of total expenditure have significant impact on the proportion of food consumption, so the results are consistent with the hypothesis based on the law angel that stating the higher a person's income, the less the proportion of expenditure on food consumption will be. For further research, it is necessary to add an analysis of savings patterns in addition to consumption patterns and also to expand the research area that can cover all provinces in Indonesia considering that the regular revolving loan program and PPMK in the Kotaku Program are central government programs that are run throughout Indonesia, aiming at the success rate of this program. It can be measured more widely.

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