Making Social Protection Work for the Informal Sector: The Case of PhilHealth and ALKANSSSYA Program for the Self-Employed in the Services Sector

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Abstract: In the DLSU-AKI annual report of Monitoring the Philippine Economy, the Philippines maintained its growth momentum in 2014, besting other Asian economies. Given this, it is interesting to find out whether various sectors have benefited from this growth, particularly the informal sector which includes bulk of the poor who are self-employed and are mostly engaged in the services sector. The intention of this study aimed to determine the effect of social protection, particularly PhilHealth and the ALKANSSSYA on informal sector especially those who are poor and self-employed.[1] By the end of 2014, total benefit payment for all sectors amounted to PhP 78.2 billion (PhP 19.2 billion for the informal sector). Since the government spends so much on the PhilHealth, especially with its expansion of the indigent program, there is a need to investigate the effectiveness of the program especially on the poor. Utilizing data from the Community Based Monitoring Survey (year 2015) from several barangays in Metro Manila, the propensity score matching method showed that those who availed of PhilHealth have a higher annual income compared to those who did not avail (PhP18,975). PhilHealth beneficiaries are also more likely to have a higher annual income from entrepreneurial activities in the informal sector (PhP14,361) than non-beneficiaries. On the other hand, ALKANSSSYA beneficiaries also had higher annual income than non-beneficiaries (PhP17,843). The results support the claim that social protection is indeed effective in improving the income of the poor, especially those who are dependent on the informal sector. Expanding the coverage of the programs for the informal sector, thus, will aid in reducing poverty levels.

Key Words: social protection, poverty, informal sector, self-employed

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[1] The AlkanSSSya is an innovative saving mechanism which allows people to pay premiums whenever they can. It was introduced by Social Security System to address expansion coverage of PhilHealth to include the informal sector.

1. INTRODUCTION

1.1 Background of the study

In the DLSU-AKI annual report of Monitoring the Philippine Economy, the Philippines maintained its growth momentum in 2014, besting other Asian economies. Despite doubts over growth prospects and challenges in the external market, the Philippine economy attained a solid 6.1 percent growth in 2014. Favorable demand and supply side factors combined with improvements in the global market, particularly a recovering US economy and intensifying demand in Asia, led to the 6.1 percent growth in the country's Gross Domestic Product (GDP). This brings the year-end forecast to a higher estimate (Monitoring the Philippine Economy, January 2014). Given this, it is interesting to find out whether various sectors have benefited from this growth, particularly the informal sector which includes bulk of the poor who are self-employed and are mostly engaged in the services sector.

Despite the performance of the economy, unemployment still remains one of the major concerns. By the end of 2014, unemployment rate was recorded at 6.8 percent which implies that there is still a large number of Filipinos who are unemployed given our population. Moreover, the Philippine Statistics Authority reported that most of the unemployed were males, high school graduates and belonged to the age group 15 to 24 years old (Philippine Statistics Authority, 2014). Given fewer stable job opportunities in the country, Filipinos are seeing entrepreneurship as an alternative to earn income.

As of 2012, there were 940,886 registered micro, small and medium enterprises (MSMEs) in the Philippines (99.6 percent of the total establishments), majority of which are in the retail and wholesale industry. Despite this impressive number, there is a huge number of businesses, mostly belonging to self-employed Filipinos, that are not registered and are part of what is called the informal sector. There are many barriers as to why many of them are not registered and one of the reasons is the high opportunity cost of having to register their business especially for micro establishments such as sari-sari stores, food stalls and other small scale businesses.

More often than not, these businesses belonging to the informal sector are exposed to different types of shocks, both internal and external such as sickness in the family and natural disasters. Their vulnerability to shocks hinders the business from realizing its full potential and thus resources are wasted. To protect the informal sector from shocks, the government invested in social protection. The definition of social protection in the Philippines was formalized in 2007 and covers four components namely: social insurance, social welfare, social safety nets, and labor market interventions (International Labor Organization, 2014). On the other hand, the National Economic Development Authority (NEDA) is a set of policies and programs that seek to reduce proverty and vulnerability to risks and to enhance social status and rights of the marginalized. One of the initiatives on social protection was the passage of the National Health Insurance Act in 1995 which aims to provide equitable access to quality health care to everyone (International Labor Organization, 2014). Through the Act, the National Health Insurance System or PhilHealth was established to implement universal health care by the year 2016. As of the December 2014, there were a total of 2,023,696 members in the informal sector, which is only 9 percent of the informal sector (PhilHealth, 2014). It is thus important to increase the coverage of the informal sector since they are more vulnerable to shocks.

According to the International Labor Organization (2014), social protection is crucial as the country faces socio-economic factors that affect the population. For one, the Philippines has most unequal income distribution among East Asian middle-income countries. Second, general and youth

unemployment are high (7.1% and 16.6% respectively). Furthermore, the rapid population growth at the rate of 1.9% places pressure on the labor market. Third, aside from unemployment, a high percentage of the employed are considered vulnerable (38.4%). Fourth, a strong service sector is prevalent which requires more man power. Lastly, the exposure of the country to natural disasters such as typhoons makes it more vulnerable (International Labor Organization, 2014).

It is the intention of this study to determine the effect of social protection, particularly PhilHealth and the ALKANSSSYA on informal sector especially those who are poor and self-employed.[2] By the end of 2014, total benefit payment for all sectors amounted to PhP 78.2 billion (PhP 19.2 billion for the informal sector). Since the government spends so much on the PhilHealth, especially with its expansion of the indigent program, there is a need to investigate the effectiveness of the program especially on the poor. There are many programs aimed towards the informal sector but there are a few studies on this. This study will focus on answering the research question: "Are people in the informal sector better-off availing PhilHealth and the ALKANSSSYA program?"

Specifically, the research questions are:

1. What is the extent of coverage of the Philhealth under the ALKANSSSYA program in the informal sector?
2. Is ALKANNSYA program effective as a saving mechanism that improves the capacity of the informal workers manage risk?

1.2 Poverty in the Philippines

In an effort to address poverty through the MDGs on human capital development through education, health and women empowerment, various programs have been implemented. However, progress

has been slow in reducing poverty. Table 2.1 shows that poverty incidence in the Philippines has not improved that much since the year 1991. Moreover, the magnitude of poor families has increased from 3.8 million families in 2006 to 4.2 million in 2012 (NSCB, 2012). The poverty incidence among Filipino families in 2012 was the highest in the regions ARMM, Eastern Visayas (region 8), and Soccsksargen (region 12) with 48.7 percent, 37.4 percent, and 37.1 percent respectively. In the region ARMM, Lanao del Sur had the most severe incidence of poverty among families with 67.3 percent. This was followed by Maguindanao with 54.5 percent families of the total number of families who are considered poor.

Table 1. Poverty incidence among families (%)

Region/Province	Poverty Incidence Among Families (%)			
	1991 a/	2006	2009	2012
PHILIPPINES	29.7	21.0	20.5	19.7

Source: National Statistical Coordination Board

This is where social protection programs such as PhilHealth and ALKANSSSYA come in. Such programs can serve as a safety net that can cushion the impact of shocks.

1.3 Social protection for the poor

One of the ways to minimize the shocks experienced by the poor is to provide an enhanced the health insurance. In 2014, the government expanded the PhilHealth coverage through the PhilHealth Indigent Program which enlisted 14.7 million families based on the Department of Social Welfare and Development's National Household Targeting System for Poverty Reduction. The National Government has paid the premiums for such coverage, as provided for in Republic Act 10606 with a total cost of PhP 35.7 billion. The health insurance covers hospitalization and other special packages for facility-based deliveries and newborn screening and treatment of illnesses. The Sponsored Program has an Out-Patient Benefit Package (OPBP), that includes preventive services such as primary consultation, blood pressure monitoring, breast and rectal examination, and diagnostic and laboratory services (Lee, Taroja, Pacificador, Tiongco, Lapena, Alcantara, 2014).

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[2] The AlkanSSSya is an innovative saving mechanism which allows people to pay premiums whenever they can. It was introduced by Social Security System to address expansion coverage of PhilHealth to include the informal sector.

Aside from the Indigent Program, PhilHealth also has a specific program for those who are part of the informal sector. This includes street hawkers, market vendors, pedicab and taxi drivers, small-time construction workers, and home-based industries and services. They also cover dependents such as the legitimate spouse, child or children below 21 years old and are still unmarried, children above 21 years old but are suffering from physical or mental disability, and parents who are 60 year old and above (http://www.philhealth.gov.ph/members/informal/depe ndent.html).

Another social protection program from the government is Social Security System's (SSS) program for self-employed people. The program includes self-employed professionals, owners of business, farmers and fisherfolk, and workers in the informal sector such as market and ambulant vendors, public utility transport drivers, tourism industry-related workers, and others in a similar situation (https://www.sss.gov.ph/sss/appmanager/pages.jsp?pag e=selfemployedcoverage). The SSS has a specific program called the AlkanSSSya, which is derived its concept from a piggy bank, is a large metal safety box with secure individual compartments in which members can put their savings to pay for their monthly contribution. The money saved will be picked up by SSS authorized collectors by the end of the month and will be credited to their monthly contribution. This does away with the hassle of having to go to a bank or the SSS office to remit their money, which is often of the hindrances that members experience. The program was initially conceptualized for tricycle drivers in Las Pinas but has spread nationwide because of its effectivity and popularity. This has deemed to be successful because of the benefits of the micro-savings program (http://www.philstar.com/business/2013/06/09/951731/ sss-expands-alkansssya-program-inmates-drivers. The program has more than 80 partners across the country that service the self-employed and the informal sector workers.

These social security programs are aimed at minimizing the negative impact of internal and external shocks that may affect families who are dependent on self-employment and informal sector activities. Little studies though have shown its effectivity on the beneficiaries thus this study aims to look deeper into how the program works and what benefits do the beneficiaries receive compared to non-members.

2. METHODOLOGY

In assessing whether the social protection programs of PhilHealth and SSS are effective, the study will employ and impact evaluation. Usui (2011) discussed the various approaches to conducting an impact evaluation study. The basic idea behind an impact evaluation study is to compare the indicators before and after the implementation of the program. Setting up time-bound and measurable performance indicators is very important because this will allow proper monitoring and evaluation. Usui (2011) identifies the first step as setting up an ex-ante target for each performance indicator with a specific time frame. To determine the impact of the program, the actual value of the indicator is measured at a certain stage after completion of the project (Usui, 2011). The baseline value is usually used as a point of comparison. This baseline could be the initial characteristics of the household before implementation of the program.

The study will evaluate the impact of the programs on the informal sector using propensity score matching. Propensity score matching, as developed by Rosenbaum and Rubin (1983), is a statistical technique that tries to estimate the effect of an intervention or treatment given certain covariates that predict receiving the treatment. The PSM technique is used for observational data to estimate the impact of an intervention and helps answer the question "what is the treatment effect on the treated." In the case of this study, we answer the question what is the impact of PhilHealth and Social Security System's AlkanSSSya on income and health expenditures of the beneficiaries. Moreover, the PSM technique establishes the counterfactual, that is what would have happened to the beneficiaries had they not received the social protection program. Through the

PSM a proper counterfactual can be found by matching a beneficiary to a non-beneficiary with similar pre-intervention characteristics (also called covariates). For the households with matched characteristics, each has an equal chance of becoming a beneficiary or non-beneficiary (Capuno, 2013).

For observational studies such as this, the assignment of treatments to subjects is not randomized and the PSM thus mimics an experiment by creating a sample of units that received the treatment that is comparable on all observed covariates to a sample of units that did not receive the treatment. The propensity scores that will be generated will be used to match a beneficiary to a non-beneficiary, which is better than using covariates to match the two groups because the latter has too many dimensions which may result in the failure of common support (Capuno, 2013).

In carrying out the PSM in this study, the following steps will be implemented. First, covariates (independent variables) that simultaneously influence participation into the program as well as the outcome will be selected. The covariates and outcome will then used in the probit model that would help estimate the propensity score.

In the absence of pre-treatment data, we will use time invariant observable variables in the study. We will use household characteristics such as gender of the household head (1 if male, 0 otherwise), highest educational attainment of the household, age of the household head, and family size. The treatment variable shall be whether the household is a beneficiary or not of the two social protection programs. The model will be regressed against several outcome variables such as income and health expenditures.

The model is described as:
$$\Pr(SS = 1) = F(\beta_1 + \beta_2 age_i + \beta_3 hhstatus_i +$$
$$\beta_4 hheduc_i + \beta_5 sex_i + \varepsilon_i) \qquad \text{(Eq. 1)}$$

The equation will be used for both the PhilHealth and Social Security System's AlkanSSSya. The equation above describes the relationship of the independent variable which are the characteristics of the household to whether they are beneficiaries or non-beneficiaries using the latest Community Based Monitoring System which includes questions on unemployment, social protection and entrepreneurship.

The outcome total income from entrepreneurial activities (including informal sector) represents the additional income that the family gets and serves to augment the expenses in the home.

3. RESULTS AND DISCUSSION

3.1 Descriptive statistics

The propensity score model was computed using the outcomes total income in general and total income from entrepreneurial activities. The table below describes the variables that were used in the study:

Table 2. Descriptive statistics for PHILHEALTH

Variable	Mean	Std. Dev.	Min	Max
totin1	33832.06	74132.5	0	2132667
workcl1	0.5	0.50	0	1
toil1	0.06	0.25	0	1
phsize	5.29	1.98	1	19
educal1	0.15	0.36	0	1
educal2	0.10	0.30	0	1
educal3	0.42	0.49	0	1
educal4	0.006957	0.08	0	1
sex1	0.48	0.49	0	1
civstat1	0.04	0.21	0	1
civstat2	0.05	0.22	0	1
civstat3	0.01	0.12	0	1
civstat4	0.28	0.45	0	1
civstat5	0.17	0.38	0	1
etotcsh1	13891.66	38461.58	0	625000

Number of individuals 4025

Income and expenditure are in current prices (Philippine pesos) and represent annual figures.

Table 2 provides some information about the characteristics of individuals who are beneficiaries and non-beneficiaries of PhilHealth in the CBMS 2015. Almost half of the individuals who are part of the informal sector are females. Most of them are married, have high school as their highest educational attainment, and belong to a family with an average size of 5 members. Moreover, the average annual total income is PhP33,832 while the average annual income from entrepreneurial activities (including the informal sector) is PhP13,891.

Table 3. Descriptive statistics for ALKANSSSYA

Variable	Mean	Std. Dev.	Min	Max
totin1	24034.62	44378.62	0	240000
etotcsh1	1964.57	8033.49	0	60000
sex1	0.45	0.49	0	1
civstat1	0.08	0.28	0	1
civstat2	0.08	0.27	0	1
civstat3	0.03	0.17	0	1
civstat4	0.33	0.47	0	1
educal1	0.21	0.41	0	1
educal2	0.15	0.36	0	1
educal3	0.01	0.11	0	1
age_yr	32.21	22.06	0	90
Number of individuals	146			

Income and expenditure are in current prices (Philippine pesos) and represent annual figures.

The profile of those who availed of ALKANSSSYA is almost similar to the PhilHealth beneficiaries. Most are females, age 32, are married, and have grade school as their highest educational attainment. Moreover, the average annual total income is PhP24,034 while the averagel annual income from entrepreneurial activities is PhP1,964.

The individuals who are engaged in activities in the informal sector are mostly in the retail business (44%): sari-sari store, food vendors; and are engaged in the services sector (25%) - either drivers, carpenters, work in the parlor as a stylist, manicurist, etc.

3.3 *Propensity score matching results*

The following results are based on the CBMS 2015 database. Several more tests were conducted to check the robustness of the model and revealed favorable results. The last step performed was to estimate the average treatment effect (ATT) using the beneficiaries (poor individuals who are part of the informal sector who availed of PhilHealth and ALKANSSSYA) versus the non-beneficiaries. The results are summarized in the table below:

Table 4. Average Treatment on Treated (ATT)

Outcomes	ATT	Std. Error	t-stat	Sig.
PHILHEALTH				
totin (total income per capita, annual)				
1. NNM	18975.08	3896.41	4.87	* *(95%)
bootstrapped SEs	18975.08	3765.25	5.04	* *(95%)
etotcsh (Income from entrep activities per capita, annual)				
1. NNM	14361.03	3432.69	4.18	* *(95%)
bootstrapped SEs	14361.03	3250.59	4.41	* *(95%)
ALKANSSSYA				
totin (total income per capita, annual)				
1. NNM	17843.44	10632.77	1.67	*(90%)
bootstrapped SEs	17843.44	9690.51	1.84	* (90%)

*statistically significant at p<0.10
**statistically significant at p<0.05

To check the robustness of the ATT results, the study used Nearest Neighbor Matching (NNM). If any of these tests appeared significant (based on the bootstrapped standard errors), then it means that the results are robust.

The results for PhilHealth reveal that those who availed of the program have a higher annual income than those who did not avail – by PhP18,975. Furthermore, annual income from entrepreneurial activities (including informal sector) is PhP14,361 higher than those who did not avail.

As for the ALKANSSSYA program, the result is more or less the same. Those who availed of the program are more likely to experience an higher income compare to those who did not. Annual income increases by PhP17,843 if they avail of the ALKANSSSYA program.

4. CONCLUSION

This study has shown some initial evidence on the effectiveness of some social protection programs such as the PhilHealth and ALKANSSSYA program for those who are involved in the informal sector. Being part of the informal sector implies that the individual has no permanent source of income, thus there is no financial security. The PhilHealth and ALKANSSSYA programs aim to provide health and insurance security.

The results show that both programs are effective for poor individuals involved in the informal sector in terms of gaining more income. The programs help augment the financial needs by allowing them to use their income for expanding their business instead of using it for emergency purposes such as hospitalization or other health needs.

Given the results of this exercise, it is recommended to expand the coverage among the informal sector. Though it is difficult to reach individuals in the informal sector since most are undocumented, it is best to involve the participation of the local government units in identifying, monitoring and providing support for the informal sector.

5. ACKNOWLEDGMENTS

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