Towards Inclusive Social Protection Program Coverage in the Philippines: Examining Gender Disparities

Aubrey D. Tabuga and Carlos C. Cabaero

PIDS Philippine Institute for Development Studies

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Abstract

The Philippines, being prone to natural calamities and vulnerable to economic fluctuations, has much to accomplish in terms of improving its population's access to social protection. A focus on women's access is crucial in the light of their significantly lower labor force participation rate (LFPR) compared to men's and because many women are in the informal sector. An ADB study noted that the disparities in the access to social protection between men and women are found largely in social insurance, attributed to low representation of women in the formal sector resulting to the inability of many women to gain social insurance benefits. Using survey-based data from the Philippine Statistics Authority, this paper examines people's access to social protection by looking at the coverage of various social protection programs such as GSIS for government workers, SSS for private sector workers, and PhilHealth. It examines the circumstances of different groups of workers such as wage and non-wage earners, the self-employed and the household workers, among others. It identifies the types of occupations and locations of those without access to social protection who belong to the bottom 30 percent of households as these represent those most in need of government intervention. This analysis is supplemented by an empirical estimation of the likelihood to be covered by social insurance schemes for both employed and unemployed persons. It likewise offers a closer look at the characteristics of those not in the labor force because this is a primary reason for the exclusion of many individuals in accessing social protection. Furthermore, the study examines the social insurance aspect of the Pantawid Pamilyang Pilipino Program (4Ps). The overall goal of this undertaking is to recommend insights for purposes of improving the coverage of social protection programs in the country.

Key words: social protection, women, labor force participation, social insurance

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Towards inclusive social protection program coverage in the Philippines: Examining gender disparities

Aubrey D. Tabuga and Carlos C. Cabaero[1]

1. Introduction

The Philippine economy is growing robustly. The average annual GDP growth rate[2] from 1998 to 2018 is 5.2%; that for the current decade is at 6.2%. Despite this robust economic growth, there has only been marginal progress in the reduction of inequality in the country, with the Gini index being reduced minimally from 0.468 in 1991 to 0.453 in 2015. Data show that there has been a reduction in poverty incidence, from 26.6% to 21.6%, between 2006 to 2015. This downward trend continued in the first semester of 2018 where the poverty incidence among families is down to 16.1 percent from 22.2 percent in the same period in 2015. Despite this reduction, however, anti-poverty efforts are not at par with growth of the population. In fact, the number of poor families in 2015 stood at 3.7 million families, which is even larger than the 3.6 million poor families in 1991 based on data from the Philippine Statistics Authority. Apart from the persistence of poverty and inequality, the country is also vulnerable to natural disasters like typhoon, flooding and landslides. It ranks third in the world in terms of vulnerability to disasters (Birkmann et al, 2011). Usually, it is the agricultural sector, where most of the poor are, that suffers the most from damages caused by natural disasters. Exposure to natural calamities without adequate social protection can make such vulnerable groups fall into or back to poverty, leading to the situation of persisting poverty and inequality. People who do not have access to adequate social insurance are likely to add to the number of poor who require government assistance in the event of economic shocks, sickness, or unemployment.

The adequacy and coverage of social protection programs are therefore important subjects of inquiry. The presence of gaps in the implementation demands for the development or improvement of relevant interventions. The idea is to achieve inclusiveness regardless of gender, employment status, and class of worker, in accessing social protection because the 2030 Agenda for Sustainable Development seeks to leave no one behind. The need for addressing gender inequality when it comes to providing economic opportunity as well as social and political rights are highlighted in Sustainable Development Goal 5 (Achieve Gender Equality and Empower All Women and Girls), which hopes to achieve gender equality through empowering ownership, employment and participation of women, alongside the mitigation of discrimination and violence against them. Global goal 8 aims to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

This study examines Filipinos' access to social protection, alongside the various economic and social nuances that influence their access to such programs. Specifically, it seeks to create a profile of those deprived of adequate social protection, analyzing their circumstances and identifying potential beneficiaries of social protection programs. The ultimate objective is to

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[2] Basic data was taken from the National Income Accounts of the PSA at constant 2000 prices.

propose insights for program and policy design for the improvement of the coverage and implementation of social protection initiatives in the country.

2. Social protection programs

Social protection is defined as "policies and programs that seek to reduce poverty, inequality and vulnerability to risks and enhance the social status and rights of the marginalized by promoting and protecting livelihood and employment, protecting against hazards and sudden loss of income, and improving people's capacity to manage risks." [3] There are four main components – social insurance, labor market interventions, social assistance, and social safety nets. The Philippine Social Protection Operational Framework and Strategy (PSPOFS) defines these as follows:

   a. Social Insurance and related programs consist of contributory and non-contributory based programs that protect households from lifecycle and health related risks. These include life and health insurance, agricultural insurance, pension, and retirement programs.
   b. Labor market interventions are those that provide gainful employment to citizens via "employment facilitation and placement schemes, active labor market programs (ALMPs), emergency and guaranteed employment and unemployment insurance" (p. 12, PSPOFS)
   c. "Social assistance programs provide basic protection to the poor, excluded, discriminated and marginalized. These may include conditional and unconditional cash transfers, housing and shelter subsidies, food stamps, educational scholarships, etc. Social assistance must be specific depending on the needs of the sector. Specific sector example for PWDs include access to assistive devices/technology, personal assistance, sign language interpreters, home improvement to mitigate the possible impact of disaster or to improve accessibility of home, etc." (p.12, PSPOFS)
   d. "Social safety nets are short-term stop-gap measures usually implemented as a response to emergencies and crisis situations unlike social assistance and services which maybe regular programs with longer duration" (p.12, PSPOFS)

This study focuses on the access of women to social protection programs namely – the Social Security System (SSS) and the Government Service Insurance System (GSIS). Also included in the study is the National Health Insurance by PhilHealth to be divided into the program for paying beneficiaries and the program for indigents. Furthermore, the country's biggest social welfare program - the *Pantawid Pamilyang Pilipino* Program (4Ps) is also analyzed in terms of social insurance aspect. It must be noted that the study does not examine labor market interventions owing to the limitations in the survey-based data being used.[4]

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3 This is based on the official definition from SDC Resolution No. 1 Series of 2007 which was adopted in the Philippine Social Protection Operational Framework and Strategy by the Department of Social Welfare and Development and NEDA-SDC-Subcommittee on Social Protection (SC-SP) version February 2019
4 While the PSA's Annual Poverty Indicator Survey contains some information about labor market-related programs, the number of beneficiaries included in the survey is very small to allow any detailed analysis of the characteristics of these beneficiaries.

2.1 Social Security System

The SSS was created through Republic Act 1161 on June 1954, with the policy strengthened by Republic Act 8282. The statute provides for the meaningful protection of members and their beneficiaries against the risks of disability, sickness, maternity, old age, death and other contingencies resulting in loss of income or financial burden." The SSS provides compulsory coverage for employers and all private sector employees not over 60 years old, including self-employed persons, household helpers with a minimum monthly income of PhP1000, seafarers and employees of foreign governments and international organizations that are based in the country. RA 11199 or the Social Security Act of 2018 stipulates that self-employed media practitioners like actors, directors, scriptwriters and news correspondents be included in the program. Self-employed athletes, coaches' trainers and jockeys are also included. Self-employed agricultural workers like farmers and fisher folk are also under mandatory coverage of the SSS. Under the law, SSS shall also be compulsory to sea-based and land-based overseas Filipino workers (OFWs) not over sixty years of age. Meanwhile, voluntary coverage is given to separated members and non-working spouses of SSS members. Aside from abovementioned benefits, the SSS also has an Employees Compensation Program which offers double compensation for work-related incidents, as well as a salary loan and calamity relief packages. The table below summarizes benefits under the SSS:

Table 2.1. Summary of SSS Benefits[5]

Type of Benefit	Amount of Benefit
Sickness	The amount of the member's daily Sickness Benefit allowance is equivalent to ninety percent (90%) of his/her average daily salary credit (ADSC). The Sickness Benefit is granted up to a maximum of 120 days in one calendar year.
Maternity	The amount of the daily Maternity Benefit allowance is equivalent to one hundred percent (100%) of her ADSC, multiplied by 60 days in case of normal delivery/miscarriage/ectopic pregnancy without operation/hydatidiform mole (H-mole), or by 78 days for caesarean section delivery/ectopic pregnancy with operation. The Maternity Benefit is granted up to the first four (4) deliveries or miscarriages only
Disability	If qualified, the member is granted a monthly Disability Pension, plus a P500 monthly Supplemental Allowance. The lowest monthly Disability Pension is P1,000 if the member has less than ten (10) credited years of service (CYS); P1,200 if with at least ten (10) CYS; and P2,400 if with at least twenty (20) CYS.
Retirement	If qualified, the member is granted a monthly Retirement Pension, plus a 13th Month Pension payable every December. The retiree has the option to receive the first eighteen (18) months pension in lump sum, discounted at a preferential rate of interest to be determined by the SSS. This option can be exercised only upon filing of the first retirement claim, and the

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5 Table is taken from the SSS Website. Link:
https://www.sss.gov.ph/sss/DownloadContent?fileName=SUMMARY_OF_BENEFITS.pdf

Type of Benefit	Amount of Benefit
	Dependent's Pension and 13th Month Pension are excluded from the advanced eighteen (18) months pension.

If the member has dependent minor children, they are given a Dependent's Pension equivalent to ten percent (10%) of the member's monthly pension or P250, whichever is higher. Only five (5) minor children, beginning from the youngest, are entitled to Dependent's Pension. No substitution is allowed.

The lowest monthly Retirement Pension is P1,200 if the member has 120 monthly contributions or at least ten (10) CYS; or P2,400 if with at least twenty (20) CYS. |
| Death | If qualified, the member's primary beneficiary is granted a monthly Death Pension, plus a 13th Month Pension payable every December.

If the member has dependent minor children, they are given a Dependent's Pension equivalent to ten percent (10%) of the member's monthly pension or P250, whichever is higher. Only five (5) minor children, beginning from the youngest, are entitled to Dependent's Pension. No substitution is allowed.

The lowest monthly Death Pension is P1,000 if the member had less than ten (10) CYS; P1,200 if with at least ten (10) CYS; and P2,400 if with at least twenty (20) CYS. |
| Funeral | The Funeral benefit is a variable amount ranging from a minimum of P20,000 to a maximum of P40,000, depending on the member's paid contributions and CYS. |
| Employees' Compensation Program | The EC Program aims to assist those who suffer from work-connected sickness or injury resulting in disability or death. Starting June 1984, the benefits under the EC Program may be enjoyed simultaneously with benefits under the Social Security Program, thus, allowing double compensation for covered members who suffer work-related contingencies. All SSS-registered employers and their employees are compulsorily covered under the EC Program and need not register again under the EC. |
| Salary | A one-month loan is equivalent to the average of member's last twelve (12) monthly salary credits (MSCs), or the amount applied for, whichever is lower.

A two-month loan is equivalent to twice the average of the member's last twelve (12) MSCs posted, rounded to the next higher MSC, or the amount applied for, whichever is lower.

The loan shall be charged an interest rate of ten percent (10%) per annum until fully paid, based on diminishing principal balance, and shall be amortized over a period of 24 months.

If the loan is not fully paid at the end of the term, interest shall continue to be charged on the outstanding principal balance until fully paid.

In case of default, the arrearages/unpaid loan shall be deducted from the member's short-term benefit claims (e.g., sickness/maternity), if any, or from his/her final benefit claim (e.g., death, retirement, total disability).

The loan can be renewed after payment of at least fifty percent (50%) of the original loan amount and at least fifty percent (50%) of the loan term has lapsed. |

As of the end of 2017, the SSS Annual Report shows that it has about 36.13 million members and 964,000 employers. The social security net revenue however has peaked in 2014 and has been in decline since 2015 where it went down to PhP38.99 billion from PhP43.19 billion. In 2018, the net revenue was a mere PhP22.74 billion.

2.2 Government Service Insurance System

The GSIS is the insurance company of the government, created to give insurance coverage for all employees within the public sector. RA 8291 states that the GSIS "was established to promote the efficiency and welfare of the employees of the Philippine government under a defined benefit scheme. It insures its members against occurrences of certain contingencies in exchange for their monthly premium contributions." Membership under the GSIS is compulsory for all government employees, save for uniformed members of the AFP and PNP, contractual workers without employee-employer relationship with the government agencies they work for and members of judiciary and constitutional commissions covered by other retirement laws. All members of the GSIS are entitled to life insurance, retirement, disability, separation and unemployment benefits. In particular, active GSIS members are also entitled to loan privileges such as salary, policy and emergency loans. As of 2018, GSIS has a total of about 1.5 million members.

2.3 National Health Insurance Program

The National Health Insurance Program was institutionalized through RA 7875 or the National Health Insurance Act of 1995, guided by the principle to adopt an integrated and comprehensive approach to health development that make health resources affordable to the people. NHIP is administered by the Philippine Health Insurance Corporation (PhilHealth), a government corporation attached to the Department of Health (DOH). Article III, Section V of RA 7875, stipulates that PhilHealth shall have a sustainable system of fund collection and distribution that shall finance both basic and supplemental health insurance benefits for a progressively expanding population. PhilHealth is limited, though, to paying for the utilization or purchasing of health services. As such, it cannot provide for purchasing and dispensing drugs, employing physicians, and owning or investing in health care facilities. PhilHealth consists of two packages: Program I, which covers members and dependents of SSS and GSIS, and Program II which is intended for those not covered in Program I. The end goal is to create a universal health insurance program for the entire population.

PhilHealth members and dependents are entitled to the following benefits: (a) in-patient care, (2) out-patient care, (c) emergency and transfer services, (d) health education packages and (e) other health services that are determined by PhilHealth and DOH. PhilHealth also has what it calls Z package that provides financial protection for room and boarding fees, laboratory and operating rooms and professional fees for a limited group of patients with conditions that lead to prolonged stays in the hospital. These illnesses, classified as "case type Z", include selected heart ailments, kidney disease and varying types of cancer. Packages were also developed for achieving the Millennium Development Goals (MDG) on maternal care, HIV-AIDS, malaria, tuberculosis, among others.

The institution is mandated to provide universal coverage, including private and public sector employees, household help, individually paying members, indigents, retirees, dependents and

other members of the informal sector. To this end, PhilHealth membership is divided into six categories:

(a) Members of the formal economy with formal contracts and fixed employment terms,
(b) Members from the informal economy that earn outside of an employee-employer relationship,
(c) Indigent members with no means of income or whose income is insufficient for subsistence,
(d) Members that are sponsored by other individuals, government agencies or private entities,
(e) Lifetime members who have reached retirement age and paid at 120 monthly contributions,
(f) Senior citizens who do not belong to the preceding classifications.

As of June 30, 2018, PhilHealth serves a total of 51,583,321 members, alongside their 48,783,917 dependents. This number is estimated to be 94% of the projected population of the Philippines in 2018. Of its total number of beneficiaries, including dependents, 30,360,415 (30.2%) are part of the formal economy, 23,633,033 (23.5%) are part of the informal economy, and 15,218,115 (33.3%) are indigents.

2.4 Pantawid Pamilyang Pilipino Program

The 4Ps, implemented by the DSWD, is a human development intervention aimed towards ending intergenerational poverty by providing financial protection under the condition of greater investment in health services and education. Thus, 4Ps hopes to achieve the dual objectives of social assistance and social development, in line with both the MDGs and SDGs agenda to eradicate extreme poverty and hunger, achieve quality education, promote gender equality, reduce child mortality, and improve maternal health care.

It is operationalized through a conditional cash transfer. It has two types of cash grants given to household beneficiaries with children 0 to 18 or pregnant woman: (a) a health grant worth Php 500 per household and (b) and an education grant worth Php 300 per child enrolled in primary school (Php 500 for every child in secondary school) every month for ten months. These grants are provided with the following conditions:

   i.   Pregnant women should avail pre and post-natal care and seek professional attention in childbirth,
   ii.   Parents or guardians must attend family development sessions,
   iii. Children aged 0-5 must receive vaccines and health check-ups,
   iv.   Children aged 6-14 must receive deworming pills biannually, and
   v.   Children aged 3-18 should be enrolled and maintain and 85% monthly class attendance rate.

Additionally, new benefits have been added, in the amount of Php 600/month rice subsidy. Unconditional cash grants in the amount of Php 200/month for 2018 and P300/month for 2019 and 2020 will also be provided to beneficiaries to mitigate the effects of the Tax Reform for Acceleration and Inclusion (TRAIN) Law.

The coverage of the 4Ps spans all 17 regions in the Philippines, wherein beneficiaries are selected through the National Household Targeting System for Poverty Reduction (NHTS-PR).

Generally, beneficiaries must fulfill the following conditions: (a) be a resident of the poorest municipalities based on the 2003 Small Area Estimates (SAE), (b) be a household with an economic condition equal to or below the provincial poverty threshold, (c) be a household that has children 0-18 years old and/or have a pregnant woman at time of assessment, and (d) meet conditions specified in the program. As of September 2018, 4Ps has a total of 4,166,314 household beneficiaries, of which 3,950,896 (94.8%) are covered by regular conditional cash transfers (CCT), whilst the rest are covered by a modified conditional cash transfer (MCCT).

These are the key social protection programs that this study examines because of the presence of public-use files for analysis of their coverage. It is noteworthy that there has been greater prioritization given to social protection over the years. From 2009-2017 national government expenditure on social protection has grown, averaging at 5.9% of the national government expenditure or 0.9% of total GDP. Among the social protection programs, social welfare programs get the lion's share in the total government in the total government spending for social protection at 4.7% of NG expenditures or 0.7% of GDP. In comparison, social insurance gets 0.8% of NG expenditures. It can be seen from the data that less priority is given to labor market interventions, whereas social insurance and safety nets have seen steady increases in government expenditure (Diokno-Sicat & Mariano, 2018).

Figure 2.1. Social Protection Spending by program (in real terms, 2000=100)
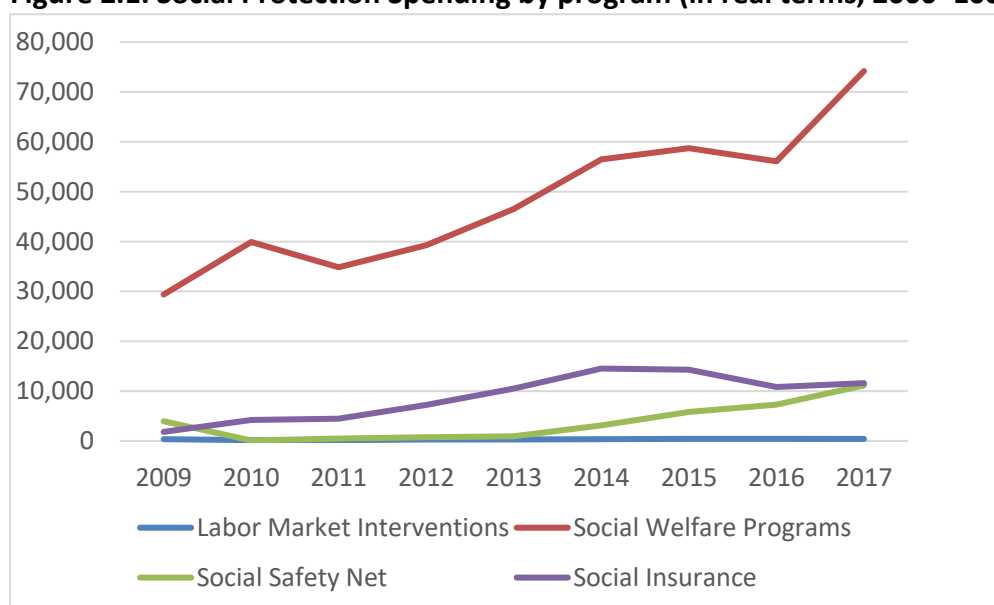
Source: Diokno-Sicat & Mariano (2018) based on DSWD, DBM, DepEd

Data from the World Bank on the country's social assistance programs are consistent with the observation of Sicat and Mariano (2018). Conditional cash transfers comprise 0.5 percent of the GDP while other social assistance programs get a combined share of 0.2 percent (see Figure 2.2). Furthermore, the coverage of social protection and labor programs (SLP) in poorest quintiles shows that while 62 percent of those in rural areas and 38 percent of those in the urban areas are covered by conditional cash transfers, there is near to zero percentage of these groups covered by active and passive labor market programs, based on 2015 data (see Figure 2.3).

Figure 2.2. Public spending on social assistance programs (% of GDP), Philippines

All Social Assistance	Cash Transfers	Conditional Cash Transfers	Fee Waivers	In-Kind	Other Social Assistance	Public Works	School Feeding	Social Pension
0.7	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0
Philippines	Philippines	Philippines	Philippines	Philippines	Philippines	Philippines	Philippines	Philippines
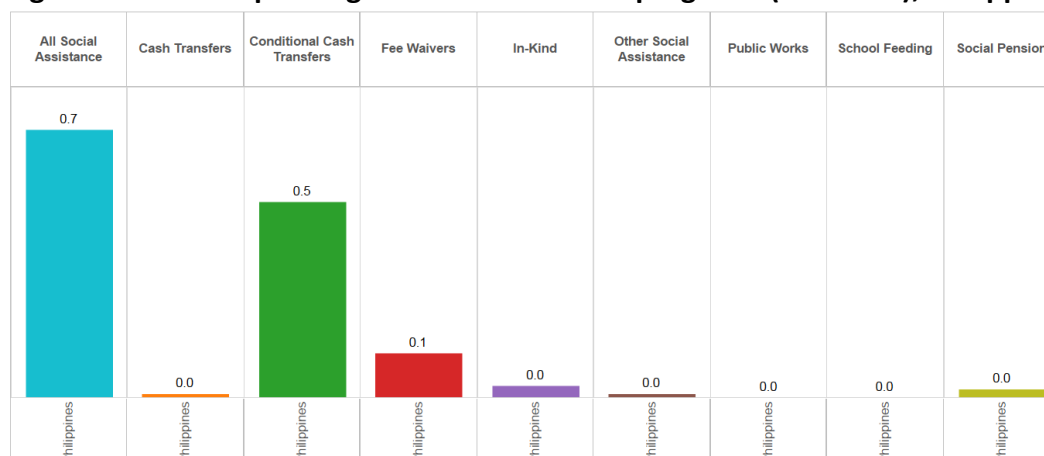
Source: World Bank ASPIRE Database, http://datatopics.worldbank.org/aspire/country/philippines
Date retrieved August 8, 2019

Figure 2.3. Coverage of SPL programs in poorest quintile, Philippines

Coverage of SPL Programs in Poorest Quintile (%)

Program	Country	Year	Value
Contributory Pensions -rural	Philippines	2015	1.3
Contributory Pensions -urban	Philippines	2015	3.1
Other Social Insurance -rural	Philippines	2015	1.3
Other Social Insurance -urban	Philippines	2015	1.6
Active Labor Market -rural	Philippines	2015	0.0
Active Labor Market -urban	Philippines	2015	0.0
Passive Labor Market -rural	Philippines	2015	0.0
Passive Labor Market -urban	Philippines	2015	0.0
Cash Transfer -rural	Philippines	2015	0.0
Cash Transfer -urban	Philippines	2015	0.0
Conditional Cash Transfer -rural	Philippines	2015	61.7
Conditional Cash Transfer -urban	Philippines	2015	38.4
Social Pensions -rural	Philippines	2015	0.0
Social Pensions -urban	Philippines	2015	0.0
In-Kind -rural	Philippines	2015	0.0
In-Kind -urban	Philippines	2015	0.0
Public Works -rural	Philippines	2015	0.0
Public Works -urban	Philippines	2015	0.0
School Feeding -rural	Philippines	2015	0.0
School Feeding -urban	Philippines	2015	0.0
Fee Waivers -urban	Philippines	2015	0.0

Source: World Bank ASPIRE Database, http://datatopics.worldbank.org/aspire/country/philippines
Date retrieved August 8, 2019

In terms of the impact of social insurance programs, the figure below shows that the effectiveness of social insurance programs in the country has been very low when compared to that in neighboring countries. While such programs reduced poverty headcount ratio of the poorest quintile by 1.2 percent in the Philippines, Vietnam was able to bring its rate down by 10.4 percent through its social insurance programs. China reduced its by 35 percent through social insurance programs.

Figure 2.4. Impact of all social insurance programs on poverty and inequality reduction
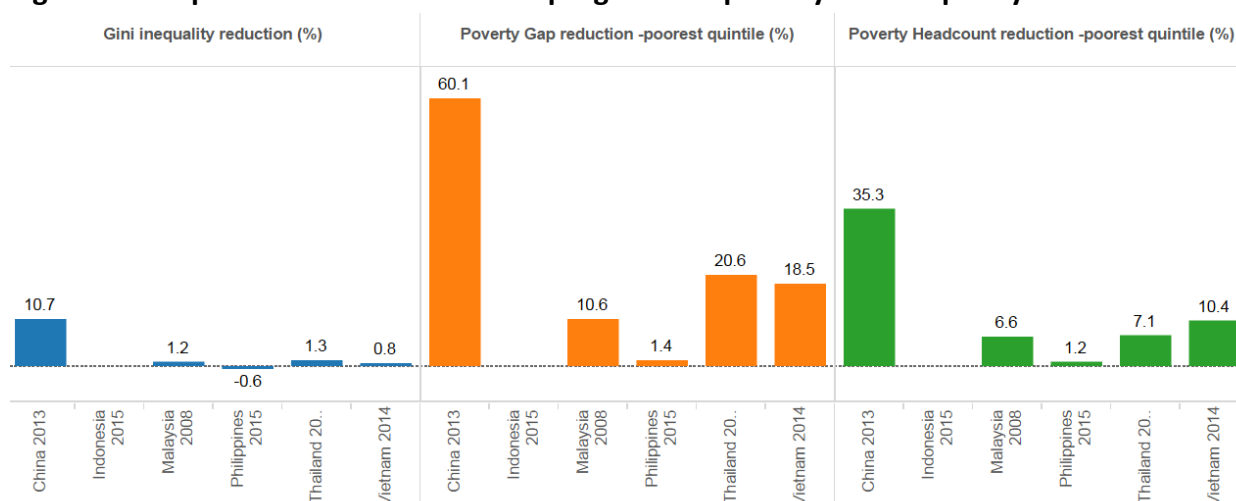
Note: These data show simulated % change due to SPL.
Source: World Bank ASPIRE Database, http://datatopics.worldbank.org/aspire/country/philippines
Date retrieved August 8, 2019

This paper, therefore, focuses on the coverage of these social protection programs. Owing to the data source, the analysis is structured by employment status – that is employed, unemployed and not in the labor force. As mentioned, the focus is on being a member or beneficiary of the programs namely SSS, GSIS, PhilHealth and 4Ps. Furthermore, it does not examine the specific components of the social protection programs like emergency loans, sickness benefits, pension, unemployment benefits, among others to shed light on the coverage of specific components as defined under the Philippine Social Protection Operational Framework and Strategy (2019). Notwithstanding the limitations, this paper offers empirical analyses that can inform the formulation or improvement of social protection programs.

3. Research Objectives, Data and Methodology

The research objectives of this study are: 1) to identify gaps in the coverage of social insurance programs SSS/GSIS, PhilHealth, and the *Pantawid Pamilyang Pilipino* Program (4Ps), 2) to examine the characteristics and circumstances of men and women without access to social protection; to examine factors associated with access to social insurance, and 3) to draw insights for purposes of program and policy design in improving social protection coverage in the country. This paper also attempts to profile the group which can be prioritized in social insurance interventions. These pertain to individuals who do not have access to social insurance and belong to the poorest 30 percent of the families.

The main sources of data for the empirical analyses are the PSA's merged Labor Force Survey (LFS) and Annual Poverty Indicator Survey (APIS) 2016 and 2017. The analyses are limited to associative and descriptive methods. The regression analyses implemented are meant to obtain correlations rather than causal effects. Such approaches suffice because the main goal is to draw insights for improving coverage of these programs and not to test the impact of a specific social protection program.

4. Key gender issues

The argument towards granting greater access to social policy programs for women are not only based on a notion of social equality, but also on its potential gains from a perspective of holistic development. Various evaluation studies on social protection policies have observed that when cash grants and benefits are given to the women in the household, they are more likely to invest in essential household needs like proper nutrition, education and health care for children (Behrmann & Hoddinott, 2005; Himmelweit et al, 2013). The Asian Development Bank (2010) corroborates this through their analysis of the 4Ps in the Philippines. They found that conditional cash transfers that were directly paid to the mothers increased their bargaining power within the household and led to increase health and education outcomes for female children and pregnant women.

Despite this, however, stark discrepancies between women's access to social protection compared to that of men continue to exist. This difference in access may be attributed to a more systematic and complex structure of gender inequality that permeates through all dimensions of society. These stem from gender roles which are shaped by various ideological, social and economic norms that lead into an inequitable allocation of resources and responsibilities to men and women (Moser, 1989). The disparity manifests itself early in the household, wherein there is a tendency to place greater investment in terms of health and education in male offspring than females. Women are also more susceptible to physical and sexual violence than their male counterparts. Further exploitation occurs towards the disadvantage of women under undesirable social conditions like when there are pandemics, violence or extreme poverty. Women are often less prioritized than men in getting an education and are forced into domestic labor and household duties. This implicit discrimination has dire consequences in their adulthood, as social norms and uneven opportunities in education assign them to the tasks of maintaining the household and child-rearing, placing them in the informal labor sector (Antonopoulos, 2011).

Ezemenari et al (2002) examined studies on how various external shocks affect outcomes between men and women. Their findings show that in the face of shocks like economic crisis and natural disasters, the welfare of women in the household often is the first to be disregarded in terms of employment, health and education.

The disadvantage of women in social protection programs is exhibited in what the Asian Development Bank (ADB) developed as Social Protection Index (SPI), which is the ratio of total expenditure on social insurance, assistance and labor market programs to total intended beneficiaries. Based on this SPI, women benefited less from social protection policies with an SPI of 0.046 or 1.15% of GDP as compared to men with an SPI of 0.064 or 1.6% of GDP in Asia and the Pacific (Handayani, 2014). A comprehensive breakdown of this index reveals that disparities between SPI of men and women are largely found in social insurance. This was attributed to poor representation of women in the formal sector, which leads to less social insurance benefits as compared to men. Meanwhile, expenditures on social assistance and labor market programs are markedly less compared to social insurance and show minimal disparity across gender. Women are more vulnerable too. A study by ADB showed that as of 2012, 6.503 million out 14.757 million women (44.5%) are under vulnerable employment, as compared to the 8.797 million out of 24.617 million of men (39%), showing a gender gap in the vulnerable employment sector.

Table 4.1. Examples of Gender-differentiated Impacts of Shocks

Country	Type of Shock	Outcome Indicator	Individuals most affected
Argentina	Economic	Unemployment	Women are more likely than men to become unemployed
		School attendance	Girls are more likely to drop out from school
		Violence and accidents	Men are more vulnerable to violence and accidents
		Health risks	Women are more vulnerable to health risks (childbirth)
Ethiopia	Drought	BMI	Women in poorest households absorb shocks Disproportionately compared to men
India	Drought	Survival probability	Survival rates for girls (in landless households) decline
	Rainfall	Survival probability	Increase in girl survival probability
	Seasonality	Calorie consumption	During lean season: pro-son bias
			During surplus season: pro-women or girl bias
Zimbabwe	Drought	BMI	Decrease in BMI in women with children out of wedlock, women who are separated, divorced, and returned to natal home

Source: Behrman (1998); Cerruti (2000); World Bank (2000); Dercon and Krishnan (2000); Hoddinott and Kinsey (2000); Rose (1996)

Women's access to social protection is largely tied to their employment status. Most social insurance schemes cover only those who are formally employed because the law requires it. Therefore, people who are in the informal sector, unemployed or not in the labor force are unlikely to be protected by social insurance programs. Women are more likely to be part of the informal sector than men. There are also more unpaid family workers among women than men. A greater proportion of women of working ages are also not in the labor force. Historical data show that not only has labor participation rate for women been decreasing through the years (i.e. from 50 percent in 2005 to 46 percent in 2017), but that the gap between male and participation rates is alarmingly high, with almost a 30 percentage points gap (see Figure 4.1). About one-third of women of working age are economically inactive because of their household or family duties while only 2 percent of men are in similar circumstances.

More women engage in the informal sector than men. The data show stark disparities in the share of formal (private/government establishment) and informal (self-employed, household, family business) employment between men and women. In 2017, about 31 million male workers are formally employed, while only about 25 million are under informal employment. In comparison only 15 million female workers are formally employed, whereas 39 million are under informal employment. Likewise, 2017 data shows that the share of male workers are higher than that of women as an employer in a family business and employment under a private establishment. On the other hand, there is a greater share of female workers in the categories, particularly of unpaid family business, employment in private households, and self-employment.

Figure 4.1. Labor force participation rate (% of working age population) by sex
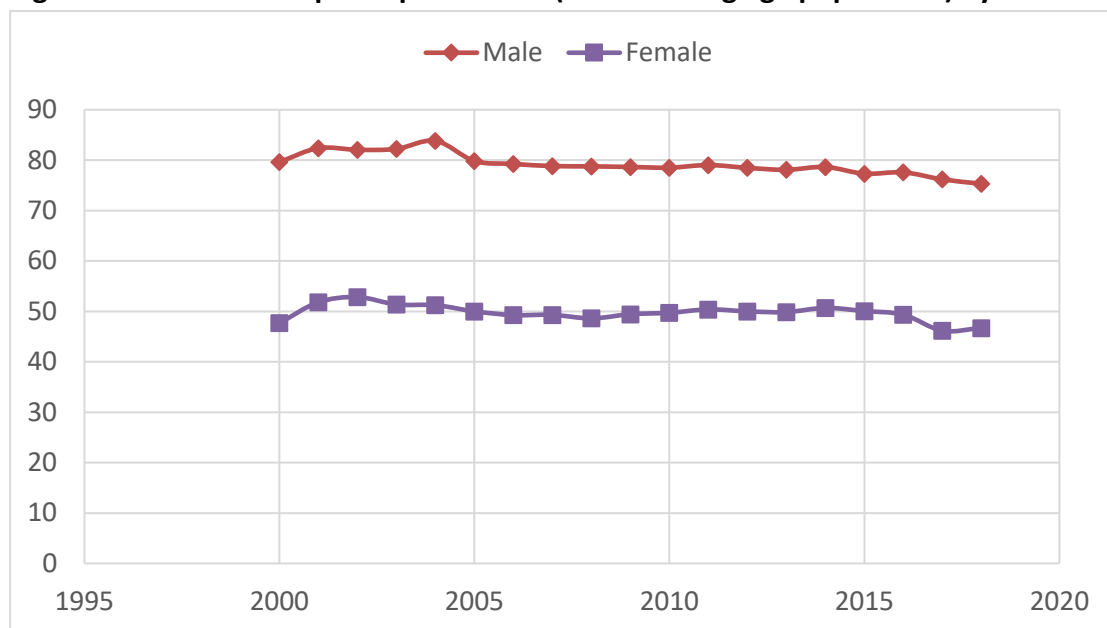
Source: Labor Force Survey (LFS), PSA

Figure 4.2. Economically inactive due to household/family duties (% of working age population) by sex
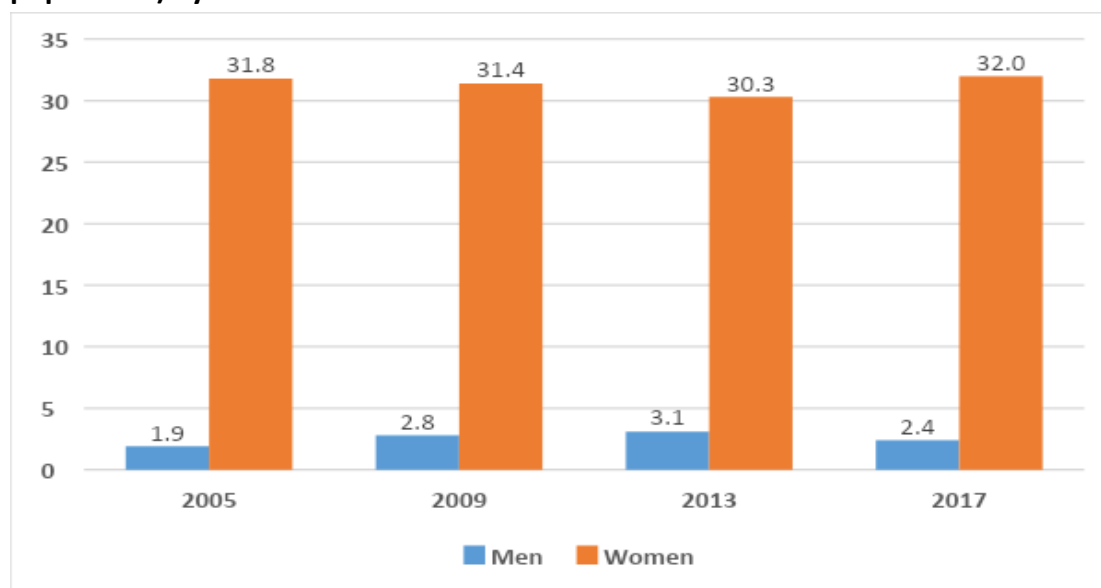
Source: Labor Force Survey (LFS), PSA

Figure 4.3. Number of workers, by type of employment, by sex (2017)

Source: Authors' calculations, basic data from LFS, PSA

Figure 4.4. Share of male and female workers, by class of worker (2017)
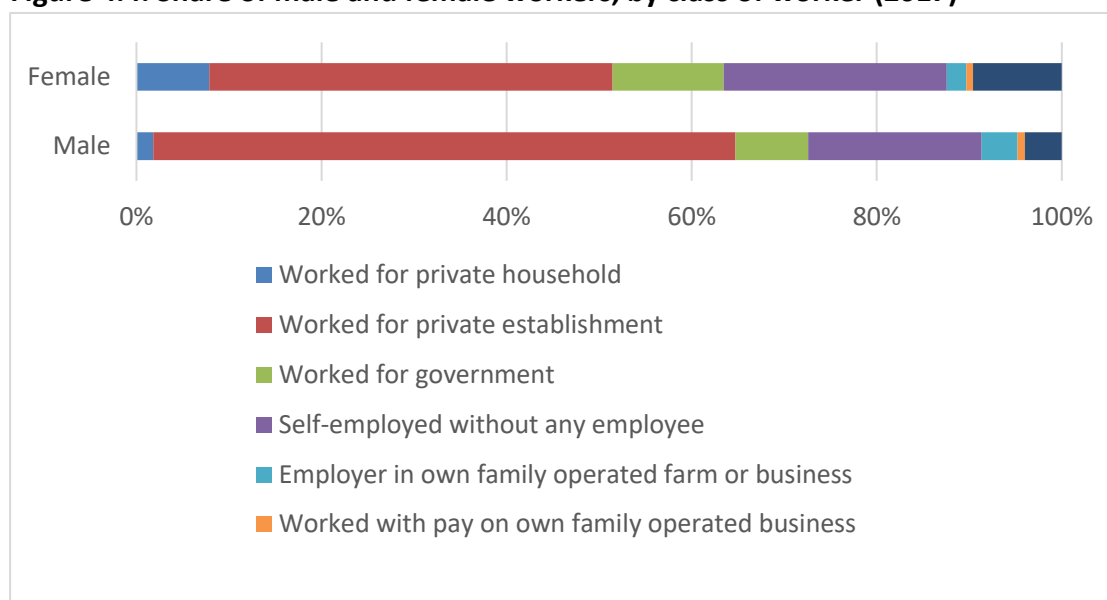
Source: Authors' calculations, basic data from LFS, PSA

The gender inequality in labor force participation between male and female starts at a young age. Youth (i.e. those aged 15 to 24) labor force participation rate among women is only at 29.7 percent or 2.8 million out of about 9.6 million female youth. That of their male counterpart is significantly higher at around 50 percent. This gap between the two groups has slightly widened through the recent years. The rate of those not in education and employment (NEE) is also higher for girls aged 15 to 24, nearly twice that of their male counterpart. Further analysis must be carried to understand the barriers of young women in entering the workforce. Furthermore, interventions must be designed to account for the employment needs of the youth. If an individual is not able to get the necessary training for work at an early age, it is likely that he or she will encounter job-related problems in the future.

Figure 4.5. Youth labor force participation rate by sex
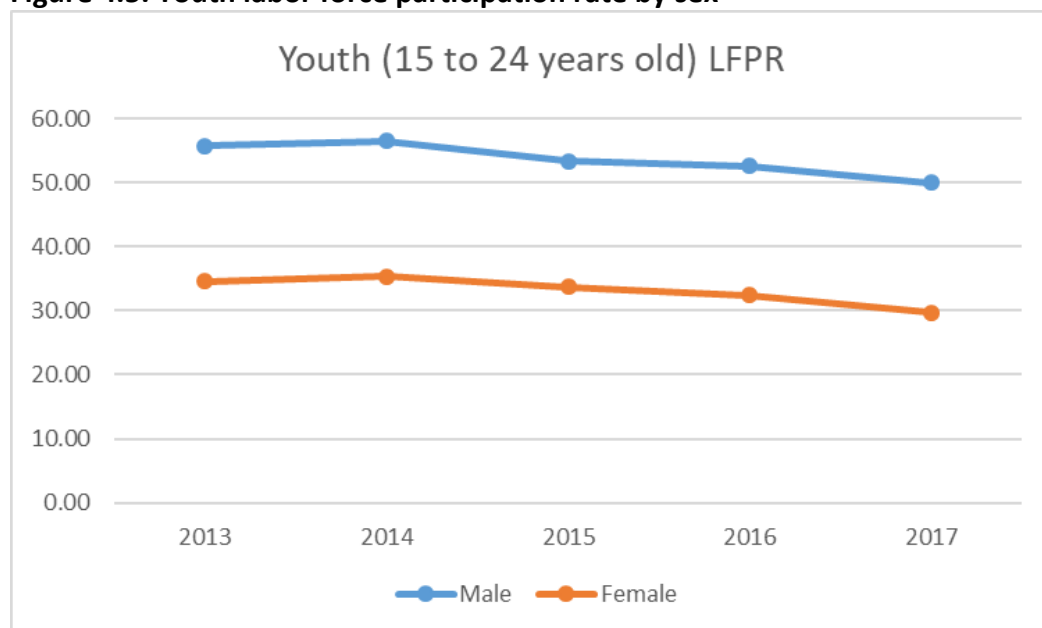
Youth (15 to 24 years old) LFPR

Source of basic data: Gender Statistics on Labor and Employment, Philippine Statistics Authority

Figure 4.6. Youth not in education and employment (NEE) by sex
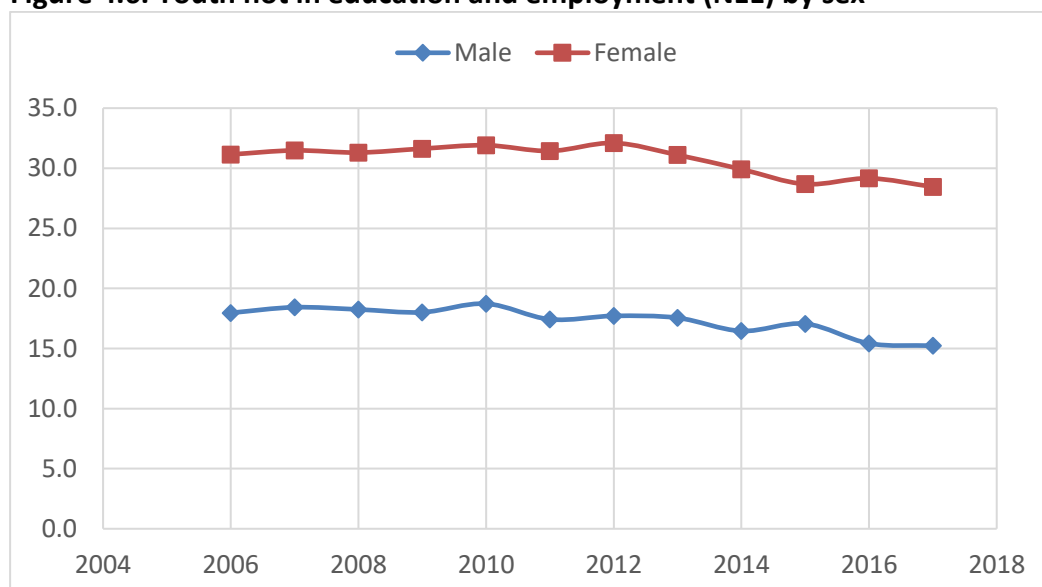
Source of basic data: PSA LFS

The aspect where women have an advantage over men is on the price of labor - wage. The average daily basic pay of wage and salary women workers is higher than that of men (see Figure 4.7). In 2017, the average basic pay of women is at P428.83 while that for the male counterpart is at P407.09. Disaggregating this information by type of worker, the only type where men outperform women is for those workers in private households, that is the ratio of men's pay is 1.4 that of women. Figure 4.8 shows that for other types of workers (i.e. workers in private establishments, in the government, and in own family-operated business), the ratio is below parity. A parity (i.e. 1) means that men's average basic pay is at the same level as women.

Figure 4.7. Average daily basic pay of wage and salary workers by sex
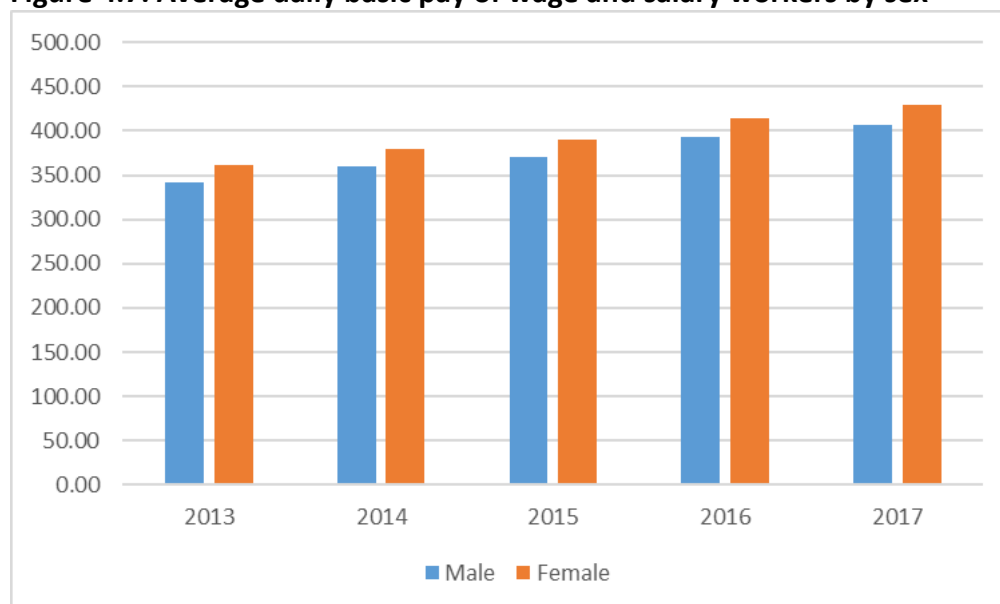
Source of basic data: Gender Statistics on Labor and Employment, Philippine Statistics Authority

Figure 4.8. Ratio of average daily basic pay of wage of male to female workers by type

Source of basic data: Gender Statistics on Labor and Employment, Philippine Statistics Authority

While the higher wages of women present an opportunity for them to afford social insurance and other needs and there is a higher proportion of employed women with social insurance compared to men, the key issue is more of the low labor force participation rate and the nature of jobs that women that serve as significant barriers for women's ability to access social insurance.

Meanwhile, there is also a need to examine the composition of men without access to social protection for purposes of drawing useful insights for the improvement of access by both men and women. This paper examines the gender disparities, probing more deeply into the circumstances of not only women but also men who are deprived of adequate protection from

risks throughout the life cycle. The succeeding sections provide the results of empirical analysis by employment status. Owing to the different structure of employment of men and women, this paper looks at different classes of workers, the unemployed, and those not in the labor force.

5. Social Insurance: Empirical results from PSA's Labor Force Survey and Annual Poverty Indicator Survey

There are slightly more men (18%) than women (14%) who have access to both social insurance schemes SSS/GSIS and PhilHealth. But in terms of number, there are roughly the same, with 9.9 million each, men and women without social insurance based on the 2017 LFS-APIS merged data. However, a closer look shows a stark disparity in the composition. For women, majority (54%) of those who do not have social insurance are not in the labor force while among men, 7 in 10 who do not have social insurance are employed.

Figure 5.1. Access to social protection (SSS/GSIS/PhilHealth) by employment status and sex
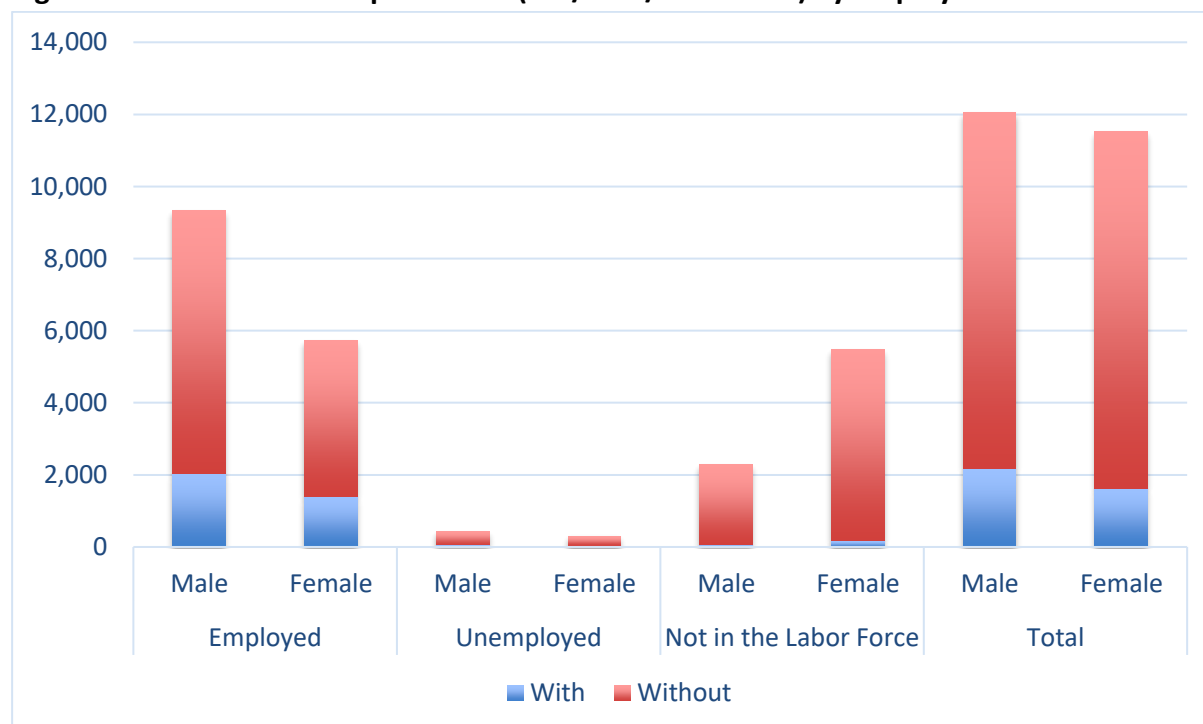
Source of basic data: 2017 LFS-APIS, PSA

Figure 5.2. Persons aged 15 and above without access to both SSS & PhilHealth
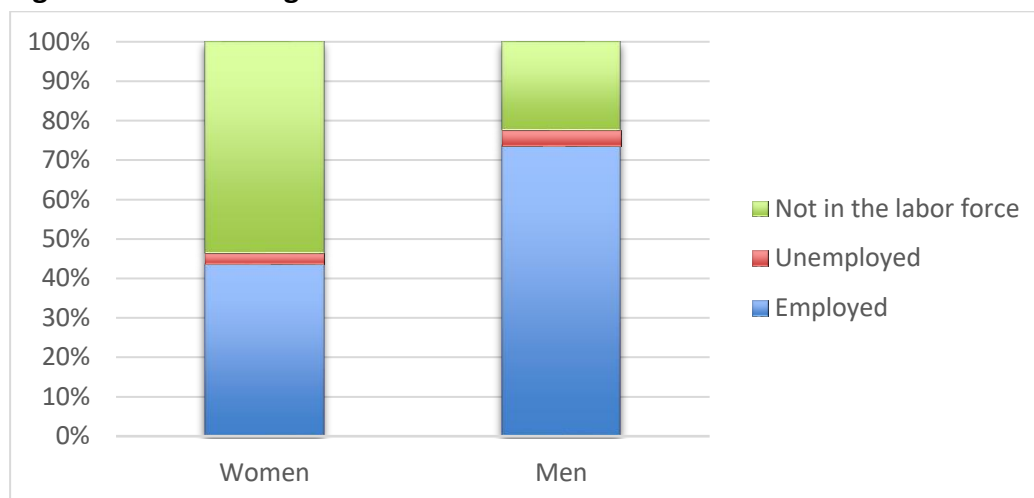
Source of basic data: 2017 LFS-APIS, PSA

It is important to consider the differences between men and women in their composition as workers. Seventy percent of men are wage and salary workers, while only 61 percent of women are. Forty percent of women while 30 percent of men are categorized as one of the following - self-employed without any paid employee, employer in own family-operated farm or business, and unpaid worker in own family-operated farm or business. Moreover, three out of four household workers are women; and 61% of unpaid family workers are also women.

Figure 5.3. Class of workers by sex, percent to total (2017)
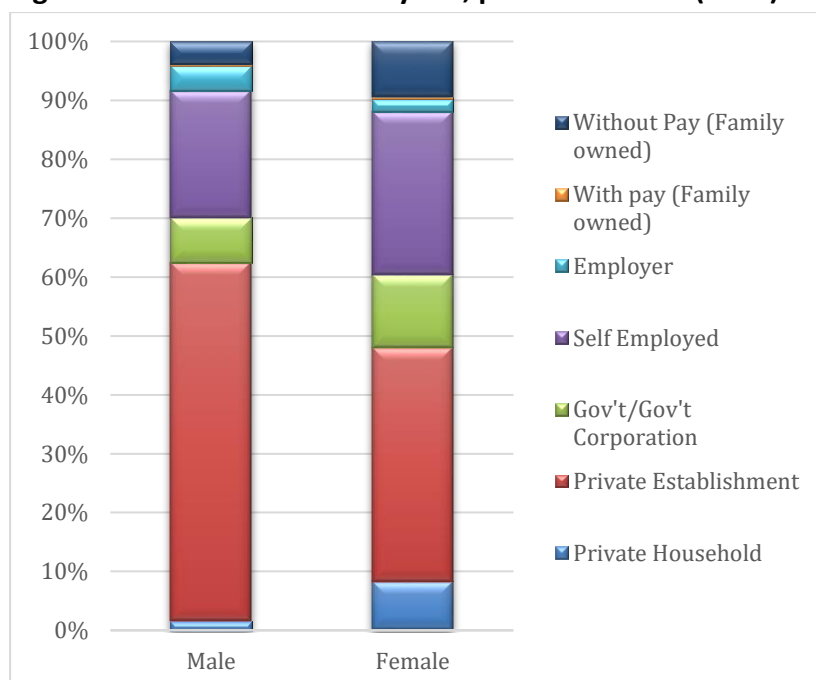
Source of basic data: 2017 LFS-APIS, PSA

In 2017, there are an estimated 8.3 million women workers, 69 percent of total, who do not have both SSS/GSIS and PhilHealth membership. Though this is lower than the estimate for 2016 at 75 percent (9.9 million), it is a sizable proportion. Yet, when compared to men, women as a group is relatively in a better place – as men's proportion of those without social insurance is at almost 72 percent or 13.7 million out of the 19 million. These magnitudes are overwhelming, and they warrant the need for more concerted effort as not even half of all employed workers have protection. Among women, the highest proportion of those without social insurance (SI) are the private household workers at 98%, followed by unpaid family workers at 95% and then self-employed at 92%. Among men, in contrast, the unpaid family workers have the highest at 97%, followed by paid family workers with 95% and then the self-employed at 92%.

Table 5.1. Workers without access to social insurance (SSS/GSIS/PhilHealth) by class of worker and sex

Class of worker	2017		2016	
	Male	Female	Male	Female
Private Household	73.3	98.1	80.1	96.4
Private Establishment	64.4	48.1	72.5	56.8
Gov't/Gov't Corporation	50.3	44.1	50.4	44.7
Self Employed	92.2	91.5	93.9	95.4
Employer	86.7	82.6	88.4	76.1
With pay (Family owned Business)	94.8	64.9	92.7	80.3
Without Pay (Family owned Business)	97.0	94.9	97.1	97.1
Total	71.7	68.9	78.2	74.9

Source of basic data: 2016 and 2017 LFS

Over one-third of women without social insurance (35 to 37%) are self-employed, and another one-third are employed in either government or private establishments. A quarter of such women workers are working either in private households (12 to 13%) or working for their own family enterprises without pay (13 to 14%). The three classes of workers with the highest proportions of those without social insurance in 2016 and 2017 (above 90%) are workers in the private households, unpaid family workers, and the self-employed. In contrast, majority (55%) of men considered in need of adequate social insurance are in the private sector. The other large category, albeit lower than that of women, is also self-employed at 28%. Government workers comprise only 5.3%, the rest have a combined share of only 12 percent.

Figure 5.4. Employed persons in need of adequate social insurance by sex (i.e. SSS/GSIS and PhilHealth)

Employed persons without social insurance (% to total)

	Male	Female
Without Pay (Family owned Business)	5.13	13.01
With pay (Family owned Business)	0.36	0.3
Employer	5.2	2.56
Self Employed	27.73	36.76
Gov't/Gov't Corporation	5.34	7.95
Private Establishment	54.61	27.71
Private Household	1.63	11.71
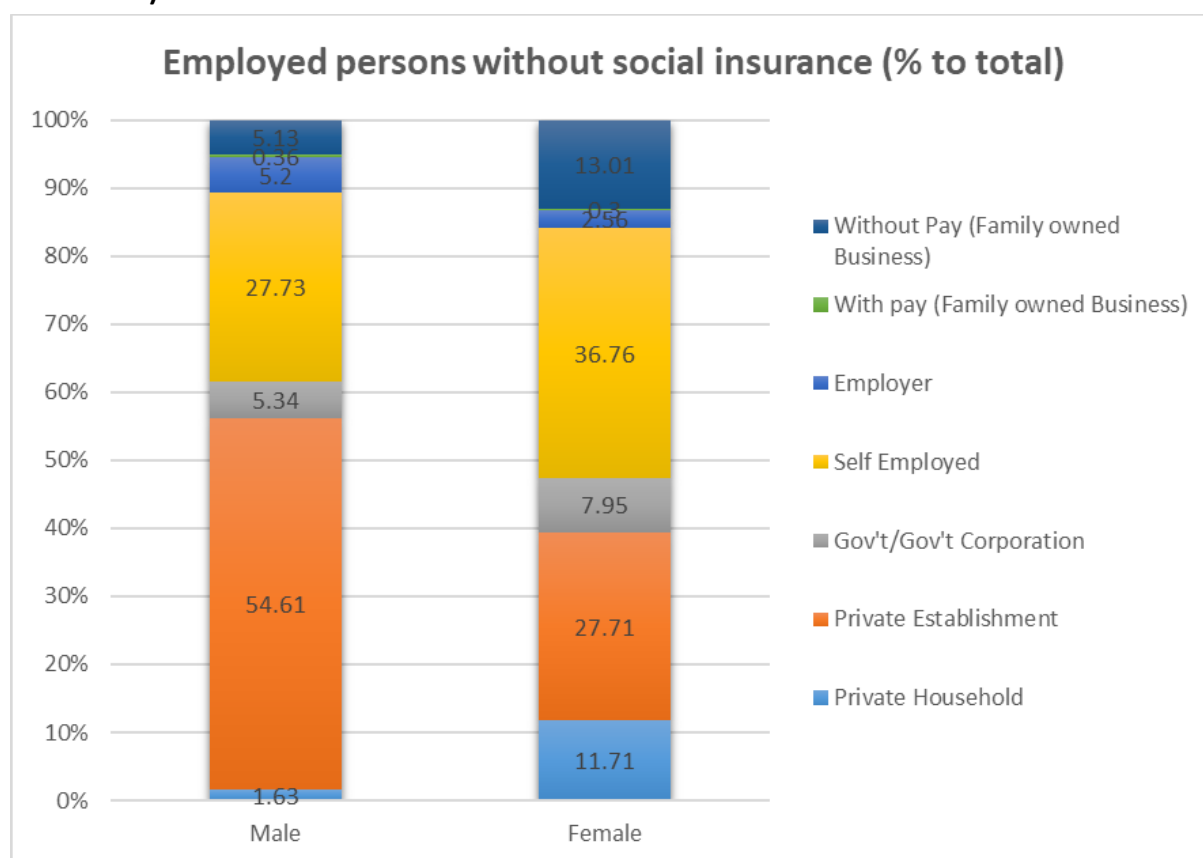
Source of basic data: 2016 and 2017 LFS

In terms of the major sector where the workers belong, we pooled the 2016 and 2017 LFS data to come up with larger sample for each of the major sector. The proportion of those unable to avail both of SSS/GSIS membership and PhilHealth is highest among agricultural workers, at 98 percent of women while 95 percent of men. This proportion is lowest for women in the industry sector where only 55 percent did not have social insurance. Meanwhile, 70 percent of women working in the services sector were also deprived of social insurance during the same period.

Table 5.2. Proportion of workers without social insurance by sex and sector

Sector	Male	Female	All
Agriculture	95.2	97.8	95.9
Industry	72.0	54.9	68.3
Services	64.8	69.6	67.2

Source of basic data: Pooled 2016-2017 LFS, PSA

5.1. Workers for government and government-controlled corporations

Government Service Insurance System (GSIS)

The 2017 merged LFS and APIS data shows that an estimated 2.9[6] million persons worked for the government and government-controlled corporations where there are slightly more women (51%) than men (49% of total). Of these, only 48 percent are GSIS members. A greater percentage among women, 54%, are GSIS members; a slightly lower percentage, 43 percent, of working men are. Over a quarter of all non-members belong to the bottom 30% of all Filipino families. Those without GSIS in the bottom 30% are estimated at 393,000 wherein 57% are men and 43% are women. Women working for the government who are non-GSIS members comprise of barangay health workers (BHW), barangay clerical workers, daycare workers, and primary/secondary school teachers, and sweepers. On the other hand, their male counterpart comprises of barangay officials and security workers called *tanod*, LGU staff, and public school and hospital workers. Amongst workers in the bottom 30% with no GSIS, 15% come from Eastern Visayas, followed by CALABARZON (11%), Zamboanga Peninsula and Northern Mindanao (10% each). It is notable that 81 percent of these workers reside in rural areas, while only 19 percent are in urban communities.

Table 5.3. GSIS membership among workers for the government, by sex

Category	Male	Female	Total ('000)
Total	49.1	50.9	2,967.2
Member	43.4	56.6	1,432.9
Non-member	54.5	45.5	1,534.2
Non-member, bottom 30%	57.3	42.7	392.9

Source of basic data: Pooled 2016-2017 LFS, PSA

PhilHealth

Fifty-nine out of 100 government workers are paying members of PhilHealth. Of the 41 non-members, 19 are beneficiaries of sponsored PhilHealth program. In total, two-thirds of all government workers are members of the PhilHealth program. There remains though some 970,000 government workers without PhilHealth membership and 48% of these are women, 52% are men. Among these non-members, a quarter belong to the poorest households. Again, as in the non-members of GSIS, the poorest non-members of PhilHealth are barangay health workers and daycare workers for women while LGU staff and barangay officials for men. Out of 100 workers in this category, 14 come from CALABARZON, 12 are from Eastern Visayas while 10 are from Northern Mindanao. Most of these workers are in rural areas (79%) with only 21% being found in urban communities.

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[6] This estimate is not necessarily consistent with the official estimate of the 2017 LFS of persons who worked for the government and government-controlled corporations during that year because some of the observations in the dataset

Table 5.4. PhilHealth membership among workers for the government, by sex

PhilHealth	Male	Female	Total ('000)
Total	49.1	50.9	2,967.2
Member, paying	47.2	52.8	1,758.2
Member, sponsored/non-paying	50.7	49.3	234.1
Non-member	52.2	47.8	974.9
Non-member, bottom 30%	53.8	46.2	242.9

Source of basic data: Pooled 2016-2017 LFS, PSA

5.2. *Workers in private establishments*

Social Security System

Among some 16.5 million workers in private establishments estimated in 2017,[7] not even half (i.e. 48%) are SSS members. This means that majority or some 8.5 million workers are non-members.[8] Seven out of ten private establishment workers are men. Women, on the other hand, though they comprise 29% of the total workers, the share of SSS members is higher at 35%. Only 44 percent of men in this class are SSS members while 58% of women are. Among the non-members, 39 percent belong to the poorest families. Of this group, 8 out of 10 are men. Of the women without SSS belonging to the bottom 30%, 49% reported that they have permanent jobs, some 41% have short-term jobs and the rest (10%) have different employers. Sixty-eight percent are paid on a daily basis, 11% on a monthly basis, and 10% are commission-based workers. Among men, majority (55%) of those without SSS in the poorest groups have permanent jobs, 34% have short-term jobs while 10% have different employers. Out of every 100 men in this situation (that is, no SSS membership and poorest), 66 are paid on a daily basis, 17 are commission-based workers, and only 8 are paid on a monthly basis. While 14% of the women want more hours of work, twice of this or 28% of men expressed wanting more hours of work. Also, women in this dire situation received only P192 as average basic daily pay while men received P264. Of all non-members belonging to the poorest households, 12% are found in NCR and CALABARZON respectively, trailed by Central Luzon, (11%) then both Central and Western Visayas (8%). 57% of these workers are found in rural areas, while 43% reside in urban communities.

Table 5.5. SSS membership among workers in private establishments by sex

Category	Male	Female	Total ('000)
Total	70.7	29.3	16,468
Member	64.7	35.3	7,942
Non-member	76.2	23.8	8,526
Non-member, bottom 30%	80.4	19.6	3,340

Source: Authors' estimates based on PSA's LFS and APIS 2017

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[7] Note that this estimate may be lower than the official estimate and this is because the authors used the version that is consistent with the APIS data. In the process of merging the LFS and the APIS, some observations were dropped from the sample simply because these observations did not contain both LFS and APIS information.

[8] Though a very small percentage (0.7%) of these SSS non-members are members of private insurance companies, it is uncertain whether these insurance schemes protect them for old age, unemployment and sickness. For now, we treat them as belonging to those in need of social insurance.

PhilHealth

Based on 2017 estimates, only 44% of the 16.5 million workers in private establishments are paying members of PhilHealth, while 7% are sponsored or non-paying members. In terms of sex disaggregation, 65% of PhilHealth members are male, while 35% are female. This leaves 7.9 million workers without access to health insurance. Of the non-members, 23% are women, whereas 77% are men. Moreover, 36% of these non-members below to the poorest of households in the country. Amongst the female workers in this condition, 49% have permanent jobs, 40% have short-term jobs, while other women have different employers (11%). 70% of these female workers are paid on a daily basis, 10% on monthly basis and 9% paid on commission. On the other hand, 54% of male workers have permanent jobs, 36% are in short-term jobs, while the rest (10%) have different employers. Among said male workers, 69% are paid on a daily basis, followed by 15% on commission basis and 8% on a monthly basis. Only 13% of these women want more hours work, less than half of the number of men that want the same (28%). Of all these poor, non-member workers, 13% are found in Western Visayas, 10% in Northern Mindanao, and 9% in Central Visayas. 71% are found in rural areas, while 28% are in urban communities.

Table 5.6. PhilHealth membership among workers in private establishments, by sex

PhilHealth	Male	Female	Total ('000)
Total	65.3	34.7	8536
Member, paying	63.2	36.8	7237
Member, sponsored/non-paying	77.2	22.8	1313
Non-member	76.5	23.5	7932
Non-member, bottom 30%	80.9	19.12	2862

Source: Authors' estimates based on PSA's LFS and APIS 2017

5.3. *Workers in private households*

Social Security System

A total of 1.3 million work in private households according to 2017 data estimates. Majority of these workers comprise of women (77%) while men make up 23%. Of these workers, only 13% are members of SSS, of which 58% are male and 42% are female. This leaves about 1.1 million household workers with no access to insurance. Of these non-members, 82% are female household workers. 45% of household workers belong to the bottom 30% of families in terms of income. 9 out of 10 non-member workers belonging to this are women. 55% of these females have permanent jobs, 35% have short-term employment, and 11% have different employers. These female workers are more often paid by month (51%), then per day (41%) then "pakyaw" or per task (4%). Conversely, poor male household workers are usually short-term or permanently employed (48% each) with some having different employers (4%). 56.8% are paid on a daily basis, 39% on a monthly basis, and 2% on "pakyaw" or by task. 25% of poor male household workers with no SSS membership want more hours of work, almost twice as much as 13% of their female counterparts. Among these poor, non-member household workers, 17%

are found in CALABARZON, 12% in Eastern Visayas, and 11% in Central Visayas. 65% reside in rural communities, while 35% are found in urban communities.

Table 5.7. SSS membership among workers in private households by sex

Category	Male	Female	Total ('000)
Total	23.4	76.6	1305
Member	57.6	42.5	164
Non-member	18.5	81.5	1140
Non-member, bottom 30%	13.3	86.7	510

Source: Authors' estimates based on PSA's LFS and APIS 2017

PhilHealth

Of the 1.3 million estimated household workers in the country, only 28% are members of PhilHealth. A closer examination of the composition of these members show that half are paying members, while the other half are sponsored or non-paying members. Though females comprise the majority of PhilHealth members amongst household workers (71%), they also account for 79% of non-members. Furthermore, 41% of household workers without PhilHealth belong to the poorest households in the country, where women again hold the bigger share at 83%. Across female household workers in this condition, 52% have permanent jobs, 37% have short term jobs, while 10% have different employers. 51% of these workers are paid on a monthly basis, followed by daily payment (41%), then "pakyaw" or by task (3%). On the other hand, poor male household members with no PhilHealth are usually short-term workers (49%), followed by permanent jobholders (47%), while 10% have different employers. 58% of these workers are paid on a daily basis, 38% on a monthly basis and 2% by "pakyaw" or per task. 13% of poor female nonmembers want more hours of work, while 25% of poor male nonmembers want likewise. Of all the workers facing this condition, 15% are in CALABARZON, 12% in Central Visayas, and 11% in Western Visayas. Moreover, 59% are found in rural areas, while 41% are found in urban communities.

Table 5.8. PhilHealth membership among workers in private households, by sex

PhilHealth	Male	Female	Total ('000)
Total	28.5	71.5	360
Member, paying	57.14	42.86	178
Member, sponsored/non-paying	0.61	99.39	185
Non-member	21.5	78.5	945
Non-member, bottom 30%	17.3	82.8	386

Source: Authors' estimates based on PSA's LFS and APIS 2017

5.4.   Paid family workers

Social Security System

According to 2017 data estimates, there are about 92 thousand paid workers in family businesses in the country. 57% of these workers are male while 43% are female. Among these, 22% are members of SSS, leaving about 71 thousand family workers with no insurance. Of those with no insurance, 66% are male while 34% are female. 13% of family workers belong to the poorest households in the country, wherein majority are male (84%). All poor, non-member females that work in family businesses have short term arrangements and are paid on a per commission basis. Comparatively, poor male family workers lean towards permanent jobs (58%) than short term arrangements (42%). Majority of them get paid on a daily basis (63%), while others on a monthly period (37%). Notably, neither male nor female family workers want more hours of work. The data shows that large concentrations of poor non-member family workers are found in Bicol (35%), Northern Mindanao (31%), Davao (17%) and Eastern Visayas (16%). Likewise, 69% of such workers are in rural communities, while 31% are in found in urban areas.

Table 5.9. SSS membership among paid workers in family businesses by sex

Category	Male	Female	Total ('000)
Total	57.1	42.8	92
Member	27.0	73.0	20
Non-member	65.8	34.2	71
Non-member, bottom 30%	83.7	16.3	9

Source: Authors' estimates based on PSA's LFS and APIS 2017

PhilHealth

Among the 92 thousand paid family workers estimated in 2017, the share of PhilHealth members is 29%, wherein 22% are paying members while 7% are sponsored or non-paying members. Of these non-members 62% are male while 38% are female. 14% of non-member family workers are part of the bottom 30 percentile of households in terms of income, of which majority are male (84%). The poor, non-member females are most likely short-term workers who receive their wage on a by commission basis. On the other hand, males are either permanent workers (58%) or in short-term arrangements (42%). Majority of male family workers receive their wage daily (63%) while the rest are paid on a monthly basis (37%). Neither male nor female family workers want more hours of work. Most vulnerable, non-member workers are found in Bicol (35%), Northern Mindanao (31%), Davao (17%) and Eastern Visayas (16%). Moreover, 69% of such workers are in rural areas, while 31% are in found in urban communities.

Table 5.10. PhilHealth membership among workers in in family businesses, by sex

PhilHealth	Male	Female	Total ('000)
Total	28.5	71.5	27
Member, paying	29.3	70.7	20
Member, sponsored/non-paying	100.0	0	7
Non-member	61.7	38.3	65
Non-member, bottom 30%	83.7	16.3	9

Source: Authors' estimates based on PSA's LFS and APIS 2017

5.5. Self-employed workers

Social Security System

Of the 7.5 million self-employed workers, only 18 percent, or 1.3 million have SSS membership. Of those without SSS, 81 percent are married while 11 percent are single. A slightly greater percentage among women, 18.3%, are SSS members whereas 17 percent of men are. It is disturbing that 43 percent of the self-employed without SSS belong to the poorest families. Most of these workers are men (63% of the total). Of the men without SSS and considered poorest, only 5 percent have reached college. In terms of industry, 73 percent of these workers are in the agriculture sector. Some 27% of them expressed wanting more hours of work. For the women in the same category (i.e. without SSS and poorest), a slightly higher proportion than that of men, 10 percent, have some college education. The occupation of majority of them are in the provision of retail services like small sari-sari store and personal services. Twenty-two percent of these want more hours of work. Majority of the self-employed in dire need of social security coverage because they do not have the means come from W. Visayas, SOCCSKSARGEN, Eastern and Central Visayas, and Northern Mindanao

Table 5.11. SSS membership among self-employed workers by sex

Category	Male	Female	Total ('000)
Total	55.4	44.6	7,493
Member	53.6	46.4	1,325
Non-member	55.4	44.6	6,168
Non-member, bottom 30%	63.2	36.8	2,681

Source: Authors' estimates based on PSA's LFS and APIS 2017

PhilHealth

There are some 1.01 million self-employed workers with PhilHealth paying membership which is only 13.5 percent of the total. Of the non-members under the paying scheme, some 1.27 million are covered under the sponsored scheme. In total, 30 percent (nearly 2.3 million) of all self-employed have health insurance protection from the PhilHealth. More concerted effort however is required as 5.2 million self-employed remains without any health coverage and it is quite unfortunate that 40 percent of these belong to the bottom 30 percent of the families.

Of the poorest and in need of health insurance protection, 62% are men while 38% are women. Again, an overwhelming proportion, 82%, comprise of married individuals. Majority of these come from W. Visayas, SOCCSKSARGEN, Central and Eastern Visayas, and Northern Mindanao. As in the profile of those without SSS, the poorest workers in need of health insurance among men are those engaged in the agricultural sector (70%). For women, these are mostly retail sales operators like the sari-sari stores. More than a quarter of the men (26%) want more hours of work while 21% of women do.

Table 5.12. PhilHealth membership among self-employed workers by sex

Category	Male	Female	Total ('000)
Total	55.4	44.6	7,493
Member, paying scheme	55.7	44.3	1,011
Member, non-paying scheme	60.9	39.1	1,259
Non-member	53.6	46.4	5,223
Non-member, bottom 30%	61.5	38.5	2,082

Source: Authors' estimates based on PSA's LFS and APIS 2017

5.6. Unpaid women in family-owned businesses

Social Security System
Estimates for 2017 show that 1.87 million workers do not get paid in their own family-operated farms and businesses. Out of every 10 workers in this class, 6 are female and 4 are male. Only around one-tenth are SSS members, with slightly more women being members (12% of total) than men (8%). The remaining 90 percent, or 1.7 million, are unable to benefit from SSS membership, and 46 percent of these are considered poorest based on their family's per capita income. Majority of those without SSS and poorest are women (56%). Of the workers that comprise this poorest group, majority come from only four regions - Western Visayas, Eastern Visayas, Zamboanga Peninsula and SOCCSKSARGEN. Out of 100 unpaid male workers belonging to the poorest families, 92 are single. An overwhelming 87% of men without SSS and at the same time poorest are engaged in agricultural activities (most of which as rice, corn and coconut farmers). Among women who are unpaid family workers, 72 percent are married while only 24 percent are single, which is a significant contrast to that of their male counterpart. Unpaid poor women without SSS also engage mostly in agricultural activities (81%).

Table 5.13. SSS membership status among unpaid family workers by sex

Category	Male	Female	Total ('000)
Total	38.7	61.3	1,874
Member	30.2	69.8	198
Non-member	39.8	60.2	1,676
Non-member, bottom 30%	44.0	56.0	776

Source: Authors' estimates based on PSA's LFS and APIS 2017

PhilHealth

Of the 1.87 million unpaid family members, only 124,000 or a mere 6.6 percent are contributory members of PhilHealth. Another 203,000 are covered through the PhilHealth sponsored program, where an overwhelming majority (83%) are women. These members sum to only 17 percent of the total unpaid workers having access to PhilHealth. There remain some 1.5 million non-members in need of protection from illness. A significant proportion, 43 percent, of this group belong to the bottom 30 percent of families. Majority of those in this category are concentrated in Western Visayas (19%), Eastern Visayas (10%), SOCCSKSARGEN (10%), Zamboanga Peninsula (9.8%), and Bicol (9.5%). Almost all male unpaid workers in the poorest families without any PhilHealth coverage are single (93%). Most of those (88%) in this situation are engaged in agricultural activities as laborers or helpers. Eighty-six out of every 100 are young male under the age of 30. In contrast, 68% of their female counterpart are married while only 27 percent are single. Three-quarters of these women also work in the farm as helpers while the rest work as helpers in sari-sari stores. These women are relatively older with 63% of them over 30 years old.

Table 5.14. PhilHealth membership status of unpaid family workers by sex

Category	Male	Female	Total ('000)
Total	38.7	61.3	1,874
Member, paying scheme	23.3	76.8	124
Member, non-paying scheme	17.4	82.6	203
Non-member	42.8	57.2	1,547
Non-member, bottom 30%	49.7	50.3	673

Source: Authors' estimates based on PSA's LFS and APIS 2017

5.7. Employers in own family-operated farm or business

Social Security System

The 2017 LFS-APIS merged data shows that 1.083 million workers are employers of their own family-operated farm or business. This group is dominated by men where they comprise 73 percent of the total. Of all employers, only 284,000 are SSS members while the greater majority (74% or 799,000) are non-members. Some 27 percent of the non-members are considered poorest (i.e. bottom 30 percent of families). This group is comprised of more men (82%) than women (18%). It is noteworthy that 62 percent of these employers are concentrated in Cagayan Valley (15%), SOCCSKSARGEN (14%), CALABARZON (12%), W. Visayas (10%), and CAR (10%). Nearly 8 out of every 10 male employers are engaged in growing paddy rice (34%), growing coconut (25%), and growing corn (18%). Women in the category of poorest employers without SSS coverage, on the other hand, are mostly engaged in retail sale in non-specialized stores (27%), growing of corn (20%), manufacture of products of bamboo and others (12%), and growing of paddy rice (9%).

Table 5.15. SSS membership status among employers in own family-operated farm/business by sex

Category	Male	Female	Total ('000)
Total	76.0	24.0	1,083
Member	72.7	27.3	284
Non-member	77.2	22.8	799
Non-member, bottom 30%	82.4	17.6	219

Source: Authors' estimates based on PSA's LFS and APIS 2017

PhilHealth

Of all the 1.083 million employers, only 24% are members of the contributory scheme of PhilHealth; another 16% are covered through the non-contributory scheme bringing the total proportion to 40%. This means that most employers, or 644,000, are without PhilHealth membership. One-fifth of those without insurance coverage belong to the poorest segment. In terms of geographic location, those most deprived come from SOCCSKSARGEN (16%), Cagayan Valley (15%), CAR (12%) and Western Visayas (9%). Again, most of the male in this situation comprise of those engaged in growing of paddy rice (36%), growing of coconut (29%), and growing of corn (15%). This pattern is quite similar to the activities of most women which are growing of corn (28%), manufacture of products of bamboo and others (25%), and retail sale in non-specialized stores (12%).

Table 5.16. PhilHealth membership status of employers in own family-operated farm/business by sex

Category	Male	Female	Total ('000)
Total	76.0	24.0	1,083
Member, paying scheme	74.3	25.7	262
Member, non-paying scheme	77.5	22.5	178
Non-member	76.3	23.7	644
Non-member, bottom 30%	87.9	12.1	134

Source: Authors' estimates based on PSA's LFS and APIS 2017

To summarize, the inability of female workers to access social insurance may be associated with their lack of capacity to pay for premiums which is likely the case of self-employed, unpaid workers in family enterprises, and the household workers. Self-employed workers have irregular income streams and may not be able to pay off the premium on a regular basis, more so in the case of unpaid family workers. Also, in instances where the employer co-pays the premium, there is also the issue of changing employers which may be the case of household workers. Changing employers entail paper works. It is also quite challenging to access social insurance with short-term jobs or contracts. Ensuring these types of workers have access to social insurance perhaps requires a different strategy than the employer-employee mandatory contributory system because of the nature of short jobs and the fast turn-over in household workers.

Interventions that seek to improve women's access to social protection must prioritize women in agricultural sector, the self-employed, unpaid family members, and household workers. Notwithstanding this, there is also a need to ensure that all employed workers are provided

access to social insurance as 48 percent of women working in private establishment and 44 percent of government workers still do not have social insurance.

Persons Not in the Labor Force

One of the root causes as to why women do not have social insurance is because they are not employed. The fact that many are not attempting to get themselves employed is a huge blunder not only in women's access to social protection but also in improving their welfare and that of their families. The disturbing problem of women's low labor force participation rate is something that requires in-depth analysis and effective interventions. We therefore characterize women who are not in the labor force. Using the merged files of LFS and APIS for 2016 and 2017, we observe that women not in the labor force are somewhat older and only slightly less educated than their male counterpart. There are twice as many women not in the labor force who are married than men. Roughly 7 in every 10 men not in the labor force are single while only a third of women not in the LF are. Women who are economically inactive live in households that have lower average per capita income than the households of men who are not economically active. Among the persons not in the LF who are not head of their households, women have less educated heads. Interestingly, there is a higher proportion of women not in LF who have worked at any time before, 60 percent of them, compared to men's mere 43 percent. Many of these were previously engaged in farming and other agricultural activities, some were domestic helpers and sales lady or salesclerks in their previous occupation.

Table 5.17. Characteristics of persons not in the labor force by sex

Persons not in the Labor Force	2016			2017		
	Male	Female	All	Male	Female	All
Age, mean	33.1	37.2	35.9	33.9	37.8	36.6
Years of schooling, mean	9.9	9.6	9.7	10.0	9.8	9.8
Marital status, distribution						
Single	68.9	33.0	44.1	67.3	33.9	44.2
Married	24.5	54.5	45.3	26.2	52.3	44.2
Widowed	5.6	11.2	9.5	5.5	12.1	10.0
Others	1.0	1.3	1.2	1.1	1.8	1.6
Worked at any time before, proportion	42.9	61.7	55.9	43.1	59.2	54.2
Household per capita income (in Pesos)	33,614	28,622	30,159	37,314	32,839	34,219
Head's mean years of schooling (for non-head members only)	9.3	9.0	9.1	9.5	9.2	9.3
Observations	3,320	7,478	10,798	3,324	7,454	10,778

Source of basic data: Pooled 2016-2017 LFS, PSA

The abovementioned characteristics of women not in the labor force suggest that women face multiple barriers in exercising their right to employment, and in turn their access to social insurance. Most of these are married and have had previous work experience; hence their fulfillment of their socially defined roles of looking after the needs of their families may be forcing them to not participate in formal employment.

Women can still access social protection even without labor force participation if they have adequate resources. Unfortunately, aside from their inability to partake in the economy, they are also less capacitated in terms of financial ability as shown by the lower per capita income of women not in LF than men. Though being not in the labor force is a problem of all income classes, there is a higher proportion of women not in LF in poorer households than in richer households. The bottom five deciles (poorest to 5th) have an average proportion of 54 percent of persons aged 15 and above as not economically active. The upper deciles (i.e. 6th to richest) have only around 41 percent. Among population aged 15 and over in the poorest income group, majority (58%) of the women are not in the labor force, only 20 percent of men in the same income category are. In the richest decile, women too have higher proportion of inactive individuals at 34 percent compared to men's 23 percent.

Table 5.18. Proportion of persons not in the labor force by sex and income decile (%)

Income decile	Women	Men
Poorest	58.2	19.8
2nd	56.5	19.9
3rd	52.2	19.6
4th	52.4	20.6
5th	50.9	21.3
6th	46.2	20.2
7th	43.8	23.2
8th	40.7	23.2
9th	39.0	24.6
Richest	34.3	22.7

Source: 2016 LFS and APIS, PSA

It was earlier mentioned that economic inactiveness starts early for women, as the rate of those not in education and employment are way higher for girls than boys. To probe more deeply, we examined the reasons for their non-participation. The results reveal a distinction between boys and girls. The most common reason for girls, as 38% of them identified this reason, is related to marriage or family matters which reflects that early marriage and girl's traditional role in the family limit their ability to develop their skills and talents, and consequently their employability (see Table 5.19). While employment is also one key reason for girls (20%), this is the most common reason for boys (33%) which reflects their interest to engage in the labor force early on. It also suggests their inability to continue in higher education. A significant proportion of boys, 24 percent, signified lack of interest which may be due to peer influence and relatively poor academic performance and also because of financial issues as noted in one (David, Albert & Vizmanos 2018). Marriage/family matters is also a reason for 15 percent of boys, but this percentage is not even half that for girls. There is a non-negligible percentage of both boys and girls who are constrained by the high cost of education or their lack of capacity to meet the financial requirements of schooling.

Table 5.19. Reasons for not attending school by sex (aged 15 to 24), 2017

Reasons of not attending school	Girls	Boys
Accessibility of school	0.3	0.6
Illness/disability	1.7	2.1
Marriage/Family matters	37.6	15.2
High cost of education/Financial concern	12.8	15.5
Employment/looking for work	19.5	33.0
Finished schooling or finished post- secondary	18.9	9.4
Lack of personal interest	8.0	23.5
Problem with school record/birth certificate	0.3	0.5
Others	0.9	0.4

Source: Taken from David, Albert & Vizmanos (2018) based on 2008, 2014, and 2017 APIS, PSA

6. Factors That Influence Access to Social Protection

In order to expound on the barriers that women face in accessing social protection, this paper uses a logistic regression model in estimating correlations between membership in a social protection program and various individual and household characteristics. The dependent variable in the regression analysis takes the value of one (1) if the person is a member or beneficiary of SSS/GSIS and is a paying member of PhilHealth, and zero (0), otherwise. The analysis uses the pooled datasets of the Annual Poverty Indicator Survey 2016 and 2017, alongside their corresponding Labor Force Survey information. The factors examined include variables that are available in the abovementioned surveys. Furthermore, the analysis involves individual members aged 15 to 59 years old. The sample is divided into the employed persons on one hand, whether they are employed in the formal or informal sector, and the unemployed persons, on the other. As far as the sample allows, the regression analysis used subsets of the sample like male, female, urban, and rural population.

6.1. Variables

The individual-person explanatory variables are age, marital status, sex, and estimated years of education. The squares of age and number of years of education are included to distinguish non-linear correlations the said variables may have on access to social insurance. We also included a variable for being 'formally employed' which is narrowly defined as being employed in the private establishment or in the government as there is no official variable for being formally employed in the survey data being used. It is also not possible to know the existence of employee-employer relationship. The major sector of the primary employment of the person is also controlled for. The hypothesis of the paper is that women are likely to have lower access to social insurance as compared to mem. Furthermore, the paper posits that being in "formal" employment greatly increases the likelihood that a person has social insurance, given the fact that social insurance is mandatory in formal employment.

The household-level explanatory variables used are the log of per capita income, family size, share of agricultural income to total household income, share of overseas remittance income (because international migration is such a salient aspect of the country's economic

development) to total income, whether the household is located in NCR and whether a household is in a rural or urban environment. The paper posits that richer households have greater capacity to pay for social insurance premiums and therefore have more access to them. It is quite uncertain whether dependence in agricultural income would have a positive or negative effect although it is likely to give a negative influence because many of those in the agricultural sector belong to the lower income classes. Meanwhile, remittances from international labor migration is posited to have a negative effect on having social insurance, as remittances have been shown to act as an insurance on its own. Additionally, the interaction of the share of agricultural income and sex is included in the regression to provide further insight on difficulties that women in the agricultural sector may have with regards to access to social insurance. Finally, the NCR dummy is added to the regression to control for geographic disparities. Also, a variable that indicates whether a household is in a rural or urban setting is included to control for the differentiation in the economic structure and opportunities between rural and urban areas.

Table 6.1. Description of variables

Variable	Description
Individual Characteristics	
With social insurance	With SSS/GSIS AND paying member of PhilHealth
Age, years	Age in years
Age- squared	Square of age
Female	Female=1, Otherwise=0
Married	Married=1, Otherwise=0
Years of education	Total years of schooling
Years of education, squared	Square of total years of schooling
Formally employed	Works in either private establishment or the government
Employed in service sector	Employed in service sector=1, otherwise=0
Employed in industry sector	Employed in industry sector=1, otherwise=0
Employed in agricultural sector	Employed in agricultural sector=1, otherwise=0
Household Characteristics	
Log of per capita income	Log of per capita income
Family size	Total family members
Share of overseas remittances to total income	Total remittances from abroad divided by total household income
Share of agricultural income to total income	Total household income from agriculture divided by total household income
Agricultural income*female	Interaction between female dummy and share of agricultural income to total income
Location and period	
Rural	Rural=1, Urban=0
NCR	Being in NCR =1, Otherwise=0
2017	2017=1, Otherwise=0

The summary statistics of the variables used in the model are described in Table 6.2. Of the 29,098 pooled 2016 and 2017 sample, about 23% have either an SSS or GSIS and are paying members of PhilHealth. The average age of the sample group is 37 years old. About 61% of the sample are male; 68% are married. On average, the sample has 9 years of education. Six out of ten are formally employed, that is - working in either a private establishment or the government. Most of the members of the sample work in the service sector (52.2%), followed by agriculture (24.7%) and industry (17.3%). The average number of members in the family is 5. The average share of remittances to total income is about 3.8 percent per household, while the share of income from agriculture to total income is 10.3 percent. Of all the households in the sample, 56% are in rural locations while 14.8% reside in the NCR.

Table 6.2. Summary statistics of the variables, employed persons

Variable	Obs	Mean	Std. Dev.	Min	Max
Individual Characteristics					
With social insurance	29,098	0.23	0.42	0.00	1.00
Age, years	29,098	36.70	11.74	15.00	59.00
Age, years, squared	29,098	1484.87	886.84	225.00	3481.00
Female	29,098	0.39	0.49	0.00	1.00
Married	29,098	0.68	0.47	0.00	1.00
Years of education	29,098	9.29	3.45	0.00	20.00
Years of education, squared	29,098	98.21	58.96	0.00	400.00
Formally employed	29,098	0.61	0.49	0.00	1.00
Employed in service sector	29,098	0.52	0.50	0.00	1.00
Employed in industry sector	29,098	0.17	0.38	0.00	1.00
Employed in agricultural sector	29,098	0.25	0.43	0.00	1.00
Household Characteristics					
Log of per capita income	29,098	10.05	0.80	7.19	14.85
Family size	29,098	5.11	2.30	1.00	21.00
Share of overseas remittances to total income	29,098	0.04	0.12	0.00	0.98
Share of agricultural income to total income	29,098	0.10	0.22	0.00	1.00
Location Characteristics					
Rural	29,098	0.56	0.50	0.00	1.00
NCR	29,098	0.15	0.35	0.00	1.00
Time Characteristics					
2017	29,098	0.46	0.50	0.00	1.00

Table 6.3. Summary statistics of the variables, unemployed and not in the labor force

Variable	Obs	Mean	Std. Dev.	Min	Max
Individual Characteristics					
With social insurance	15,314	0.03	0.17	0.00	1.00
Age, years	15,314	27.80	12.71	15.00	59.00
Age, years, squared	15,314	934.22	871.18	225.00	3481.00
Married	15,314	0.43	0.50	0.00	1.00
Female	15,314	0.69	0.46	0.00	1.00
Years of education	15,314	9.56	2.87	0.00	20.00
Years of education, squared	15,314	99.58	48.80	0.00	400.00
2017	15,314	0.48	0.50	0.00	1.00
Household Characteristics					
Log of per capita income	15,314	9.95	0.76	6.62	14.85
Family size	15,314	5.51	2.29	1.00	21.00
Share of overseas remittances to total income	15,314	0.09	0.21	0.00	1.00
Share of agricultural income to total income	15,314	0.09	0.21	0.00	1.00
Location and Period					
NCR	15,314	0.17	0.37	0.00	1.00
Rural	15,314	0.52	0.50	0.00	1.00
2017	15,314	0.48	0.50	0.00	1.00

6.2. Regression Results

6.2.1. Employed persons

The results of the logistic regression model on workers show that women are less likely to be covered by social insurance than men. This correlation becomes larger and more significant as more variables are controlled for. The relationship is even more pronounced in rural than urban areas. Specifying the regression model by major sector of employment, men in the services and agricultural sector have a higher likelihood of having social insurance than women. Among industry sector workers, female workers are more likely to be enrolled under social insurance policies than their male counterparts.

Age positively correlates with access to social insurance at the lower age segments but negatively associated with it at higher age levels. Being married is also positively correlated with social insurance coverage. Education is a key factor in the likeliness of having social insurance, with likelihood increasing by the number of years a person is educated. It is noteworthy that some iterations of the model show that increased years in education in the latter part of a person's schooling correlates negatively with likelihood of being enrolled in a social insurance program. Furthermore, formal employment in a private establishment or the government also greatly increases the likelihood of having social insurance, noting that those employed in the service and industry sectors are more likely to have social insurance than those in the agricultural sector.

Household variables also show various correlations with regards to access to social insurance. As expected, the level of income in a household shares a positive trend with being enrolled in a social insurance program. Members of larger families are also more likely to have social insurance policies. The likelihood that members of a household are enrolled in social insurance program inversely correlates with the share of overseas remittances the household receives as a share of total income. This is attributable to the notion that the income from such remittances already acts as a social safety net and income augmentation that makes the perceived necessity for social insurance less urgent. Likewise, those from households that have higher shares of agricultural income to total income are also less likely to be covered by social insurance programs. This finding contributes to the notion that most agricultural households in the country are informally employed and/or have limited means to avail of social insurance. Note that the dependent variable is 1 if the person is covered by both SSS/GSIS and PhilHealth contributory schemes (not the sponsored programs). In terms of area, household members in rural communities are less likely to be enrolled in social insurance programs.

Further specification of the regression model to focus on women particularly add further nuance to the factors that affect their access to social insurance programs. As in the estimation of the entire sample of workers, the likelihood of having social insurance increases with years of age for younger women, while decreasing for older women. Married women are also less likely to be enrolled in social insurance. Furthermore, women who are more educated positively correlate with having social insurance, though interestingly, the data shows that the correlation becomes negative as women go further into their education. As in the previous estimation, women who are formally employed, particularly in the service and more so the industry sector, are more likely to have social insurance. Household variables like per capita income and family size also have positive correlations with access to social insurance. On the other hand, women are less likely to have social insurance if they are in agricultural or rural households.

The data goes on to show that, ceteris paribus, women are generally less likely to be enrolled under social insurance programs than men. In both sexes, explanatory variables such as age, education, formal employment and income consistently have positive correlations with access to social insurance. It is noteworthy that the effect of age has a stronger effect on men than women, as well as employment in the services and agricultural sector, supporting results from the regression applied to all workers. Unlike men, being married for women has a negative correlation with being enrolled under a social insurance policy. Furthermore, overseas remittances have no effect on the likelihood of women having access to social insurance in comparison to men, who are less likely to enroll as the share of overseas remittances to total income increases.

Table 6.4. Logistic regression results, employed persons

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age, years	.079***	.080***	.084***	.085***	.083***	.078***
Age, years, squared	-.001***	-.001***	-.001***	-.001***	-.001***	-.001***
Married	0.024	.248***	.244***	.247***	.242***	.257***
Female	-.135***	-.134***	-.140***	-.139***	-.132***	-.136***
Years in education	.295***	.355***	.360***	.362***	.351***	.305***
Years in education, squared	0.004	-.005*	-.006*	-.006*	-.005*	-0.002
2017	0.048	-0.000	-0.004	-0.007	0.000	0.008
Formally employed	1.829***	1.941***	1.94***	1.93***	1.85***	1.83***
Employed in service sector	1.225***	.870***	.854***	.835***	.687***	.586***
Employed in industry sector	1.194***	.910***	.896***	.880***	.733***	.615***
Log of per capita income		1.100***	1.140***	1.16***	1.129***	1.000***
Family size			.032***	.033***	.032***	.021**
Share of overseas remittances to total income				-.627***	-.663***	-.556***
Share of agricultural income					-2.158***	-1.352***
Share of agricultural income*female					0.177	0.214
NCR						0.048
Rural						-.671***
_cons	-8.803***	-19.416***	-20.048***	-20.210***	-19.575***	-17.643***
Number of observations	29,098	29,098	29,098	29,098	29,098	29,098
Pseudo R2	0.299	0.349	0.350	0.350	0.355	0.365

***P-value <0.001; **P-value<0.01; *P-value<0.05

6.2.2. Unemployed persons and not in the labor force

The same logistic regression model was applied this time to the unemployed and inactive of sample, sans explanatory variables related to employment, like formal employment and employment in a particular major sector of labor. The results on gender gaps are consistent with the previous analysis, women have lower likelihood of being covered than men by social insurance programs among the unemployed. Please note that for the purposes of brevity in the discussion – this section lumps all persons not employed together as unemployed – covering

the officially determined unemployed and those not in the labor force. Like the previous estimation on employed persons, there is a positive correlation between the number of years of age and likelihood of having social insurance for young people in the sample, with the correlation becoming negative for older people. Meanwhile, education positively correlates with access to social insurance linearly; the square of education is not significant based on the full sample of unemployed persons.

Household variables in the estimation share both similarities and differences with the previous regression. Per capita income once again establishes a positive correlation with social insurance access. In contrast to the previous estimation however, family size is negative and significant but only for urban households. The unemployed sample is affected differently by increasing overseas remittances, exhibiting a positive correlation to social insurance access. The share of agricultural income to total income and its interaction with being female negatively correlates with access to social insurance. In terms of location being in a rural area lessens the likelihood of having social insurance, while, interestingly, residing in NCR also produces negative effect for the unemployed.

While estimation on unemployed women generally follows the trends in the previous estimation, key divergences are the effects of marriage and family size on unemployed women's access to social insurance, which have both proven to be insignificant. For men, being married has a positive and significant influence while for women, there is no significant association. Family size negatively associates with social insurance access but only for men, this is not significant for women. Education is not significant among unemployed men while it is for unemployed women, higher educational attainment is correlated with having access. Dependence on remittances seems to encourage women to avail of social insurance, this is not significant for men. Both men and women estimations show that dependence on agriculture is negatively correlated with social insurance coverage. Women are also more affected by location variables than men.

Table 6.5. Logistic regression results, all unemployed and not in labor force

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age, years	.255***	.285***	.278***	.263***	.257***	.253***
Age, years, squared	-.003***	-.003***	-.003***	-.003***	-.003***	-.003***
Married	0.302	.410*	.423**	.402*	.410**	.413**
Female	-.391**	-.328*	-.338**	-.329*	-.341**	-.333**
Years in education	.433**	.422**	.414**	.383**	.342**	.336**
Years in education, squared	-0.006	-0.012	-0.011	-0.010	-0.008	-0.008
2017	0.078	0.038	0.0488	0.076	0.082	0.076
Log of per capita income		.893***	.835***	.757***	.713***	.679***
Family size			-.081**	-.062*	-.064*	-.069*
Share of overseas remittances to total income				1.011***	.963***	.949***
Share of agricultural income					-2.127**	-1.746*
Share of agricultural income*female					-7.649*	-7.058*
NCR						-.291*
Rural						-.530***
_cons	-12.796***	-21.569***	-20.452***	-19.446***	-18.529***	-17.803***
Number of observations	15,314	15,314	15,314	15,314	15,314	15,314
Pseudo R2	0.298	0.349	0.350	0.350	0.355	0.365

***P-value <0.001; **P-value<0.01; *P-value<0.05

7. *Pantawid Pamilyang Pilipino* Program: How do girls fare compared to boys?

Not all children in 4Ps families attend school. This is perhaps because the 4Ps provide cash grants only to a maximum of three children aged 0 to 18 years. It is noteworthy that older children are the ones usually not participating. Among girls, the school participation rate is almost 100 percent for those aged 6 to 14. This rate starts to go down among teen-agers aged 16 years, wherein only 91 percent of them attend school. The rate decreases further among those aged 17 years with 75 percent and then among girls aged 18-years at 67 percent. Among boys, though, the decrease in school participation rate starts earlier, at around 13 years old when only 94 percent go to school. Only 91 percent of the 16-year old teen-agers, 80 percent of 17-year old ones and 66 percent of the 18-year old boys in 4Ps families do attend school.

Figure 7.1. Girls in 4Ps families by schooling status, 2016
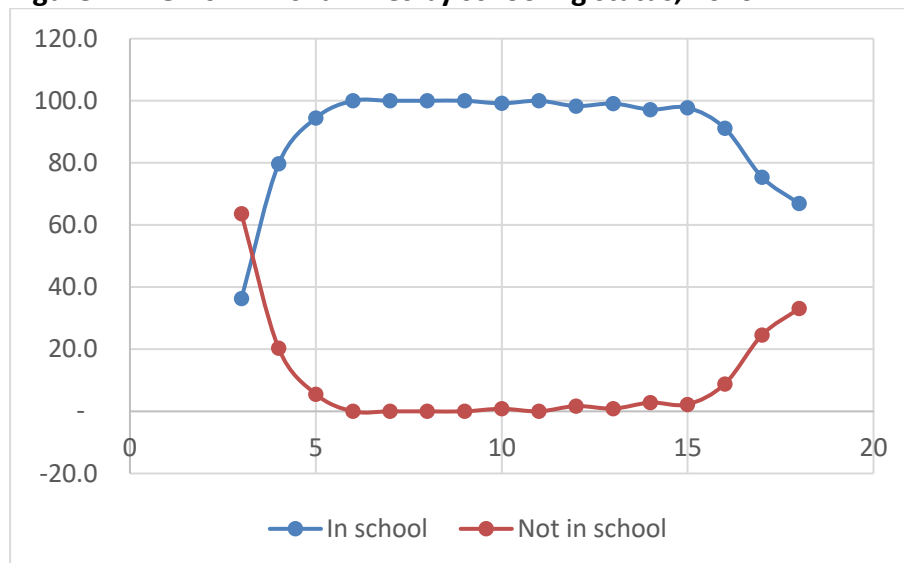
Source of basic data: APIS 2016, PSA

Figure 7.2. Boys in 4Ps families by schooling status, 2016
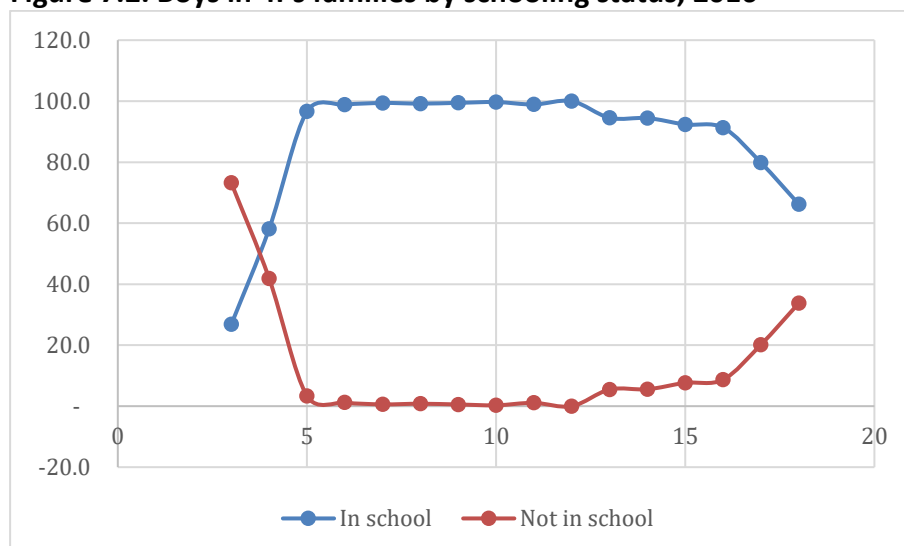
Source of basic data: APIS 2016, PSA

The reasons for not attending school varies by age group. Older children's key constraint is the high cost of education. Some of them also seek employment perhaps to augment their income, which reflects the financial concern in higher education. The lack of personal interest is more prevalent among younger ones (i.e. 6 to 15 years versus 16 to 18). These data on the school participation of 4Ps families' children suggest that 4Ps as a program is not able to motivate beneficiary-families to send all their children to school. This has adverse implication on their employability as well as on the effort to reduce inter-generational poverty.

Table 7.1. Reasons of 4Ps children for not attending school, 2017

Reasons of not attending school	2014			2017		
	6 to 12	13 to 15	16 to 18	6 to 12	13 to 15	16 to 18
Illness/disability	61.6	7.2	16.6	12.7	8.7	2.5
High cost of education/financial concerns	9.4	24.3	45.0	8.4	-	57.7
Employment/looking for work	-	4.2	9.8	-	12.1	5.0
Lack of personal interest	29.0	51.1	28.6	50.9	79.2	34.9
Problem with school record/birth certificate	-	9.6	-	-	-	-
Accessibility of school	-	3.7	-	-	-	-
Others	-	-	-	28.0	-	-

Source: Taken from David, Albert & Vizmanos (2018) based on 2008, 2014, and 2017 APIS, PSA

7.1.   *PhilHealth Access of 4Ps family-beneficiaries*

The LFS-APIS merged file for 2017 estimates some 2.35 million heads or spouses of 4Ps families. Of these, 7 percent are paying members of the PhilHealth. Of the 2.2 million who are not members of the contributory scheme, 54 percent (or 1.193 million) are covered by the sponsored or non-contributory scheme. There are also those who were covered by the non-contributory PhilHealth program despite their being paying members already, though this is a very small proportion of the total beneficiaries at 0.55%. Although most have already been covered, the data show that some 993,000 4Ps families' heads/spouses who were yet to be covered in 2017.

To examine the circumstances of these individuals, 80 percent are spouses of the head and 89 percent are women. Of these women, half are employed, and half are not in the labor force. Most have low level of education as 94 percent are at best graduate of post-secondary, non-tertiary courses which means only 6 percent have reached college. Moreover, most of them come from Western Visayas (14%), Ilocos Region (11%), ARMM (10%), Caraga (8%), and SOCCSKSARGEN (7.7%).

Figure 7.3. Access to PhilHealth by heads/spouse of 4Ps families, 2017

Table 7.2. Profile of 4Ps heads/spouses without any PhilHealth membership by sex, 2017

	Total ('000)	Sex disaggregation (%)	% of Head	% of Spouse	% not in the labor force
All	993	100.0	19.5	80	44.9
Male	112	11.3	98.8	1	11.6
Female	881	88.7	9.5	91	49.2

*Sample may not be representative of all 4Ps beneficiaries in 2017

8. Recommendations

The problem of accessing social protection is multi-faceted. The paper shows that social protection is directly linked to three things -1) formal employment; 2) income; and 3) government programs and policy. The importance of formal employment is a given because social insurance (i.e. SSS and PhilHealth) is compulsory to all employed persons with employee-employer relationship. In addition to formal employment, another method in which one can access social protection is through having adequate income so that one can enroll in social insurance like SSS, PhilHealth and other private health maintenance organizations. The third manner by which one can access SP is through government social protection schemes that are non-contributory like the social pension program for indigent elderly, and PhilHealth for the indigent. There is a need to examine people's circumstances and gender inequities that exist in each of these dimensions to be able to draw useful insights.

A clear driver of exclusion for women's access to social protection is their inability to partake in the economy. Filipino women's low labor participation rate is alarmingly low compared to that of men. Women often tend to be confined in their unpaid work at the expense of engaging

in a gainful job. Such reality is the outcome of prevailing informal institutions like social conventions that the role of caregiving and looking after the household is meant for women. The low labor force participation rate is a problem that manifests early on. At younger ages, women's LFPR is way lower than men's, and they have higher tendency of not being in education and employment. The problem, again, is perhaps attributed to women's traditional roles which prevent them from continuing their studies and improving their employability. The problem of low labor force participation rate that is tied to lack of education/skills/employability among the youth, therefore, must be addressed or this will carry on as women age.

When women are in the labor force, a significant proportion of them work in areas that may be considered 'informal' where social insurance is optional because earnings are unstable and usually low. Also, one cannot guarantee if all the formally employed indeed have social insurance. There is no way to examine whether all formally employed do have access to social protection because the surveys currently being conducted today do not provide a way to separate the formally or informally employed. Coming up with an official and accurate definition of formal/informal employment in the PSA surveys is therefore crucial. Also, for many women, the lack of access to social protection coincides with vulnerability, instability and poverty. A much greater percentage of women compared to men are household workers, self-employed workers, and unpaid family workers. Their income insecurity is rooted not just from mere low income but also from the constraints they face in many aspects. "Women workers, especially in the informal economy, continuously face discrimination in accessing credit, benefits, and opportunities to improve their lives and that of their families" (ILO 2014, p.1). In accessing financial products, going through many documentary requirements are additional constraints on the part of the self-employed.

Because of the constraints that many people face in accessing social protection, the government has rolled out various social protection programs. In the Philippines, the biggest social protection program is the *Pantawid Pamilyang Pilipino* Program (4Ps). Although this paper does not examine the 4Ps in detail, we found that through the 4Ps, many have been covered by the sponsored PhilHealth program although there are still quite a significant number of 4Ps beneficiaries who are yet to be covered at least based on 2017 data. We likewise noted that the children who are supposed to be attending school as the program requires are indeed in school. However, not all 4Ps children attend school and this is perhaps because the program covers only a maximum of three 4Ps children. Among 4Ps children, it is usually the older ones who are not attending school and the most common reason is high cost of education and lack of interest. The 4Ps as a program is not able to motivate beneficiary-families to send all their children to school, with older children more likely to drop out of school, and this has adverse implication on their employability. It is therefore important that appropriate interventions be developed to ensure that all children of poor families, particularly the older children who are more likely to be out of school, do stay in school until they have obtained adequate skills for their livelihood needs. For this, the varying circumstances of boys and girls not in school may require differentiated interventions. Ensuring that all children in poor families have equal educational opportunities is crucial to the achievement of breaking of the intergenerational poverty which the 4Ps programs is sought to accomplish. Additional interventions therefore are needed to ensure that all children of the poorest families in the country are given the opportunity

to improve their skills and employability whether through other modes of delivery of education services or trainings.

While effective social protection programs are crucial, there may be aspects in the implementation and design which requires further scrutiny with respect to its unintentional consequences. Social welfare programs like the 4Ps may tend to exacerbate gender inequalities although this is not necessarily the intention. It is noted that "when designed without due consideration of sociocultural contexts, some social protection programs can deter women from seeking access to benefits. Social norms that restrict women's mobility outside the home, for instance, can hinder the delivery of payments to them (Ulrichs, 2016). A lack of child-care services can prevent women from participating in public employment programs (Holmes and Jones, 2010)" (Report on the World Social Situation 2018, p.19). An example of such in the Philippines' context is when women are expected to look after their children, bring them to medical check-up, and attend Family Development Sessions (FDS) which is likely the case in the *Pantawid Pamilya.* Because such responsibilities take up a great deal of time from the women in the households, they are prevented from engaging in economically gainful activities that can uplift their own welfare and that of their families. While this argument is rather conceptual, it is important to examine the data of *Pantawid Pamilya* if this is indeed the case. If so, it would be unsurprising to see the labor force participation rate of women grantees to not increase over time if not decrease. This may not be because the households are grown more dependent on the grant but perhaps because the ones ensuring that conditionalities are met are already overburdened and find it difficult to participate in economic activities. Furthermore, the *Listahanan* from which DSWD draws its beneficiaries for the 4Ps must also be reviewed regularly to ensure that only those who are needy are covered in sponsored PhilHealth programs and conditional grants. Improving the efficiency of such program can help free up resources for other social welfare schemes that are equally important.

The problem with men's access to social insurance emanates again from the nature of their jobs – mostly short-term, paid on a daily basis or commission basis. It is important to deepen future studies as to why men employed by private establishments are unable to access social insurance. Is this an implementation problem of the mandatory social insurance benefits or are they mostly employed without the employee-employer relationship? This study is limited in this sense and therefore cannot make definitive recommendations. Meanwhile, many of the male workers without social insurance access are unpaid family workers are usually young and single working for the agricultural sector.

Efforts to improve women's access to social protection requires a more holistic and integrative approach, while that for men may benefit from more targeted mechanisms. The inability to improve one's capacity to protect himself or herself from risks and uncertainties would further increase the government's expenditure on social welfare for the elderly and future generations. Uplifting a persons' education/skills and employability is the key for improving access to social protection in the long term.

This, however, is just one dimension. Apart from the efforts to improve the employability of women and men and other reactionary measures like provision of cash transfers and subsidies,

innovative schemes that are truly inclusive and long-term interventions that facilitate job expansion are essential elements. It is crucial that the government exert more effort and devise more effective ways to motivate the economically inactive segment of the population to actively participate. Much of the problem of many economically inactive women is non-economic in nature. So long as women are viewed as the persons responsible for looking after their family and household needs, the problem of low labor force participation rate will persist. Between formal work and family, many women would rather care for their family members. Social insurance schemes therefore must not be tied with having a formal work or registered business. Innovative schemes must be developed to care for the social protection needs of the working age population regardless of their labor force status.

Labor market interventions seem to be the least priority of the government among the social protection components and this is something that needs to be changed because much of the constraints not only in the access to social protection but also in improving one's access to other important services is the lack of job opportunities. This then leads to the necessity of implementing effective industrial development strategies which requires a facilitative and enabling policy environment for attracting more local and foreign direct investments. The long-term solution for ensuring adequate social protection for all is an integrative framework that improves skills and employability of the people, but at the same time, foster an environment that allows for robust development of the agriculture, services and industry sectors so that people can obtain decent jobs.

In the short run, however, efforts must focus on creating social insurance schemes that people in the informal sector can afford. New technologies have become the source for livelihood for many; social insurance schemes therefore must not be discriminatory on one's nature of employment. Numerous requirements and lengthy processes must be streamlined and simplified so that the workers in the informal sector and home-based enterprises can access social insurance.

In terms of monitoring, there are no official estimates of the population working in the informal sector. For a workforce that is heavily reliant on the informal sector, this is a significant barrier, because policies and programs are blind to the magnitude of the problem. As mentioned earlier, accurate information on the informal sector is essential in program and policy design. If there are no reliable estimates, especially with respect to the different segments of informal workers, it is difficult if not impossible to design effective interventions.

This paper offers some specific recommendations in program design. The current unit of targeting in most social assistance programs is at the household level which does not account for the differences between the roles of men and women dictated by the society. The problem of accessing social insurance by women has also some distinct characteristics vis-à-vis that of men. For instance, targeting household workers will significantly reduce the number of women without social insurance because most household workers are women. The challenge, however, is in finding these workers because many of them are in short-term work agreements and they change employers quite frequently. Targeting women working for the local government will also help bring down the magnitude of underserved. These workers are also relatively easier to target (because they are not difficult to find) compared to household workers. Barangay health workers and barangay nutrition scholars who are mostly women and who work as volunteers comprise the majority of workers for the government without social protection belonging to the

poorest families. Since these are the frontline workers in preventive healthcare, which is a domain of women because of their role as caregivers, such must have adequate social protection so that the quality of their service delivery is ensured.

Meanwhile, men working for the government as barangay officials and as staff-level employees of local government units (LGUs) are often without social insurance. This group can also be easily targeted by some government efforts to improve the social insurance access of government workers. More importantly, it is essential to examine why many privately-employed workers do not have social insurance. Innovative schemes must be developed to ensure that even the short-term, daily-paid and commission-based workers gain access to social insurance.

There are workers that may be targeted by social protection programs regardless of their sex. Agricultural workers are considered informally employed because of the seasonality of their livelihood; poverty rate among these workers are also the highest. Hence, smallholder agricultural workers must be prioritized by government social protection efforts. Agricultural development and enhancement of non-farm income opportunities in agricultural areas must also be part of the agenda of improving access to social protection.

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Annexes

Table A.1. Employed workers ('000) with access to social insurance by class of worker and sex, 2017

Class of worker in primary occupation	Employed workers			SSS/GSIS Members			PhilHealth (Paying)			PhilHealth (Non-paying)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Wage and salary workers	13,455	7,377	20,832	5,861	3,699	9,560	5,510	3,683	9,193	1,140	599	1,739
Worked for private household	305	1,000	1,305	95	70	164	102	76	178	1	184	185
Worked for private establishment	11,640	4,828	16,468	5,140	2,802	7,942	4,572	2,665	7,237	1,013	300	1,313
Worked for government and government-controlled corporation	1,457	1,510	2,967	621	812	1,433	830	928	1,758	119	116	234
Worked with pay in own family-operated farm or business	52	39	92	6	15	20	6	14	20	6	-	6
Self-employed without any paid employee	4,129	3,364	7,493	711	615	1,325	563	448	1,011	780	495	1,275
Employer in own family-operated farm or business	823	260	1,083	207	78	284	194	67	262	138	40	178
Worked without pay in own family-operated farm or business	726	1,148	1,874	60	138	198	29	95	124	36	171	207
TOTAL	19,134	12,147	31,282	6,838	4,529	11,367	6,296	4,293	10,590	2,094	1,305	3,399

Source: Authors' estimates based on PSA LFS-APIS 2017

Table A.2. Logistic regression results, workers, rural only

Variable	Model 1	Model 2	Model 3	Model 5	Model 6
Age, years	.0609**	.06628633***	.06951563***	.0704786***	.06980577***
Age, years, squared	-.0005*	-.00078398**	-.00081905**	-.00083354**	-.00082506**
Male	.2324***	.21302792**	.21193684**	.21290963**	.20553617**
Married	0.0917	.27857717***	.27178629***	.27366992***	.26312259***
Years in education	.13054*	.19790071**	.20176424**	.20595466**	.20315568**
Years in education, squared	.01218***	0.00253562	0.00216461	0.00197959	0.00210148
2017	0.0165	-0.03380708	-0.03960211	-0.043085	-0.03522912
Formally employed	1.5264452***	1.627008***	1.6256394***	1.6154062***	1.5394496***
Employed in service sector	1.3769809***	1.0837165***	1.0717691***	1.055268***	.91940761***
Employed in industry sector	1.0505497***	.85183928***	.84233339***	.83132829***	.70004557***
Log of per capita income		1.0954728***	1.1311517***	1.1484199***	1.1418983***
Family size			.03078176*	.03141375*	.03183502*
Share of overseas remittances to total income				-.53675744*	-.60647104*
Share of agricultural income					-1.2801077***
Share of agricultural income*male					-0.29062061
_cons	-8.3950545***	-18.85606***	-19.416245***	-19.587094***	-19.226304***
Number of observations	16,320	16,320	16,320	16,320	16,320
Pseudo R2	0.3013	0.3502	0.3506	0.351	0.3544

Table A.3. Logistic regression results, workers, urban only

Variable	m1	m2	m3	m4	m5
Age, years	.08036116***	.08230434***	.08455521***	.08533187***	.0845499***
Age, years, squared	-.00098372***	-.00109093***	-.00111854***	-.00112655***	-.00111734***
Male	.10266586*	.11982953*	.12091941*	.11807906*	.11594843*
Married	0.069437	.24345367***	.24269383***	.24452306***	.24501455***
Years in education	.31827341***	.37404305***	.37742969***	.37863529***	.37023366***
Years in education, squared	0.00260993	-0.00526403	-0.0055268	-0.00553795	-0.00515157
2017	0.06554951	0.02835321	0.02720537	0.02537803	0.02820834
Formally employed	1.9299149***	2.0307575***	2.0319517***	2.0245892***	1.9914805***
Employed in service sector	.58931601***	.3786088***	.37088295***	.35667105***	.29739682**
Employed in industry sector	.65998978***	.50335446***	.49697821***	.48322028***	.42310142***
Log of per capita income		.87544332***	.89810379***	.91006432***	.90288928***
Family size			0.01657747	0.01722262	0.01658301
Share of overseas remittances to total income				-.50632355*	-.51863529*
Share of agricultural income					-1.9849399*
Share of agricultural income*male					0.52179785
_cons	7.9177181***	-16.639291***	-16.99817***	-17.11398***	-16.880585***
Number of observations	12,778	12,778	12,778	12,778	12,778
Pseudo R2	0.2425	0.2765	0.2767	0.2771	0.2781

Table A.4. Logistic regression results, workers, male only

Variable	m1	m2	m3	m4	m5	m6
Age, years	.08281835***	.0853166***	.08904624***	.09006628***	.08927529***	.08515525***
Age, years, squared	-.00093611***	-.0011068***	-.00115294***	-.00116538***	-.00115504***	-.00108707***
Married	.26287457***	.5686671***	.56702415***	.57174822***	.55269633***	.55593956***
Years in education	.24572381***	.30423579***	.30831837***	.31383554***	.30528161***	.26348953***
Years in education, squared	.00536247*	-0.00346769	-0.00382288	-0.00405541	-0.00359821	-0.00093777
2017	0.07435054	0.02349491	0.02047414	0.01863774	0.02799503	0.03824555
Formally employed	1.6311852***	1.794833***	1.796951***	1.7903031***	1.671321***	1.633088***
Employed in service sector	1.3458911***	.97943561***	.96511534***	.93933584***	.75662982***	.61007148***
Employed in industry sector	1.0465385***	.76868778***	.75517339***	.73114801***	.56225037***	.42656527***
Log of per capita income		1.0414858***	1.0729541***	1.0947838***	1.071598***	.92809077***
Family size			.02454793*	.02594849*	.02577011*	0.01471232
Share of overseas remittances to total income				-.89379673***	-.91650225***	-.7555205***
Share of agricultural income					-2.4365937***	-1.6518793***
NCR						0.09262966
Rural						-.71913054***
_cons	-8.4021393***	-18.570346***	-19.072796***	-19.294457***	-18.675154***	-16.567402***
Number of observations	17,770	17,770	17,770	17,770	17,770	17,770
Pseudo R2	0.2682	0.3154	0.3157	0.3168	0.3214	0.3342

Table A.5. Logistic regression results, workers, female only

Variable	m1	m2	m3	m4	m5	m6
Age, years	.07342121***	.07113573***	.07519625***	.07595212***	.07312796***	.0678679***
Age, years, squared	-.00085466***	-.00096117***	-.00100308***	-.00101246***	-.00097279***	-.00088864***
Married	-.31134944***	-.22100421**	-.22841813***	-.22807348***	-.2137157**	-.18878351**
Years in education	.65773149***	.68067173***	.68654784***	.68976875***	.67238796***	.63658776***
Years in education, squared	-0.00998392	-.01846689**	-.01899302**	-.01909285**	-.01829001**	-.01620262*
2017	0.00730588	-0.03649086	-0.04169342	-0.04457502	-0.03751467	-0.03554041
Formally employed	1.9956232***	2.0417547***	2.0381947***	2.027666***	1.9933094***	1.9948515***
Employed in service sector	1.056937***	.69564566***	.68141189***	.67085643***	.57915594***	.54800115***
Employed in industry sector	1.8631416***	1.4933826***	1.4904051***	1.4814842***	1.3687878***	1.2698517***
Log of per capita income		1.2225934***	1.2820894***	1.2914577***	1.2603236***	1.176638***
Family size			.04983489***	.05020408***	.04774864***	.04004705**
Share of overseas remittances to total income				-0.31058477	-0.35302109	-0.32742064
Share of agricultural income					-1.7788445***	-1.1817355***
NCR						-0.07213241
Rural						-.53450084***
_cons	-10.760961***	-22.150489***	-23.079455***	-23.183414***	-22.552857***	-21.211834***
Number of observations	11,328	11,328	11,328	11,328	11,328	11,328
Pseudo R2	0.3592	0.4179	0.4189	0.419	0.4218	0.4267

Table A.6. Logistic regression results, unemployed and not in the labor force, rural only

Variable	m1	m2	m3	m4	m5
Age, years	.26687497***	.29109026***	.28804093***	.27168363***	.26205449***
Age, years, squared	-.0027257***	-.00323516***	-.00321018***	-.00300035***	-.00289788***
Male	0.07938698	0.19070768	0.21019653	0.20847538	0.21525095
Married	.59473245*	0.44137031	0.44950147	0.42899639	.50460915*
Years in education	.86999633*	.85107672*	.84788386*	.79976456*	.75362174*
Years in education, squared	-0.02417633	-0.02960379	-0.0292873	-0.02737492	-0.02554826
2017	0.08119028	0.02430816	0.03574868	0.07358718	0.08269301
Log of per capita income		.97473362***	.93645143***	.84785895***	.79755277***
Family size			-0.04832433	-0.02906772	-0.02791706
Share of overseas remittances to total income				1.0951206***	.99894745**
Share of agricultural income					-1.4373722
Share of agricultural income*male					-10.043494
_cons	-16.089359***	-25.21229***	-24.538001***	-23.348675***	-22.234835***
Number of observations	7,956	7,956	7,956	7,956	7,956
Pseudo R2	0.1599	0.2054	0.2062	0.2148	0.2253

Table A.7. Logistic regression results, unemployed and not in the labor force, urban only

Variable	m1	m2	m3	m4	m5
Age, years	.24011133***	.27246196***	.26343104***	.24904382***	.24779451***
Age, years, squared	-.00253773***	-.00303331***	-.00292147***	-.00273331***	-.00271941***
Male	.43447748*	.51459831**	.51776064**	.48871821**	.49187475**
Married	0.2622971	0.2611046	0.26984828	0.26233734	0.26741739
Years in education	0.22196813	0.23623036	0.22190342	0.19674164	0.18334301
Years in education, squared	0.00150371	-0.00379423	-0.00294246	-0.00205834	-0.00154669
2017	0.05825144	0.04041728	0.04802566	0.07198899	0.07677947
Log of per capita income		.7524599***	.67398976***	.59317736***	.58744548***
Family size			-.10496767**	-.08823438*	-.08876084**
Share of overseas remittances to total income				.99317859***	.98008031***
Share of agricultural income					-1.620432
Share of agricultural income*male					-4.384274
_cons	-10.807864***	-18.663282***	-17.126737***	-16.106417***	-15.923698***
Number of observations	7,358	7,358	7,358	7,358	7,358
Pseudo R2	0.1407	0.17	0.1742	0.1836	0.1848

Table A.8. Logistic regression results, unemployed and not in the labor force, male only

Variable	m1	m2	m3	m4	m5	m6
Age, years	.32570159***	.33546241***	.32643379***	.32496984***	.3146751***	.31281351***
Age, years, squared	-.00352462***	-.0037007***	-.00361649***	-.00359103***	-.00348922***	-.00346594***
Married	.69785495**	.72880899**	.79113715**	.76212104**	.76995305**	.77232045**
Years in education	0.36566273	0.36858888	0.36749975	0.35706149	0.31822835	0.31365086
Years in education, squared	-0.00776479	-0.01132153	-0.01090695	-0.01048741	-0.00901804	-0.00886625
2017	0.09773295	0.05522411	0.06715728	0.0716788	0.08227618	0.07994225
Log of per capita income		.61465762***	.52770932**	.51710909**	.45755901**	.44111206**
Family size			-.1060663*	-.09958913*	-.09742147*	-.09998977*
Share of overseas remittances to total income				0.29764055	0.2831715	0.28187518
Share of agricultural income					-9.8419135**	-9.2979425**
NCR						-0.07700738
Rural						-0.25239058
_cons	-12.894525***	-18.94596***	-17.396465***	-17.275649***	-16.116335***	-15.765912***
Number of observations	4,775	4,775	4,775	4,775	4,775	4,775
Pseudo R2	0.2298	0.2478	0.2521	0.2527	0.2631	0.2642

Table A.9. Logistic regression results, unemployed and not in the labor force, female only

Variable	m1	m2	m3	m4	m5	m6
Age, years	.23199***	.26981147***	.26388453***	.23625333***	.23337247***	.22803984***
Age, years, squared	-.0024***	-.00308584***	-.00301643***	-.00266367***	-.00262984***	-.00255164***
Married	0.0887	0.21242845	0.21022247	0.22936168	0.23811328	0.23810079
Years in education	.46247833**	.44076768*	.43195974*	.39628958*	.35605275*	.35288223*
Years in education, squared	-0.00614316	-0.01199349	-0.01141725	-0.01011006	-0.00845434	-0.00834732
2017	0.06318476	0.03114309	0.04059916	0.08052917	0.0849624	0.07315802
Log of per capita income		.99463178***	.94339552***	.83660986***	.79955254***	.76235964***
Family size			-.07336321*	-0.05366973	-0.0565666	-0.0616823
Share of overseas remittances to total income				1.1961154***	1.1403379***	1.1217152***
Share of agricultural income					-1.961956**	-1.5246823*
NCR						-.39166267*
Rural						-.64144164***
_cons	-12.459702***	-22.216395***	-21.195635***	-19.708132***	-18.950381***	-18.122602***
Number of observations	10,539	10,539	10,539	10,539	10,539	10,539
Pseudo R2	0.1319	0.1865	0.1884	0.2014	0.2057	0.2128