



REPUBLIC OF THE PHILIPPINES

NATIONAL ECONOMIC AND DEVELOPMENT AUTHORITY

Determinants of female labor force participation in the Philippines

Emily Christi A. Cabegin and Rebecca S. Gaddi

August 2019

Abstract. The female labor force participation rate in the Philippines is among the lowest in the ASEAN region while the gender gap in the labor force participation is among the widest, despite the Philippines' reversal of the gender gap in education. The aim of this research report is to identify the factors that explain the labor force participation and employment states of Filipino women using both quantitative and qualitative approaches. The low labor force participation of Filipino women is attributed to multidimensional factors including stereotyped gender roles that assign women to domestic and reproductive roles and men to economic and productive roles; religious restrictions on the types of occupation that women can undertake; lack of access by women to skills training for virtual jobs and e-commerce that are more compatible with domestic responsibilities; occupational gender segregation; employer discriminatory practices; and undercounting of women's economic activities. The paper recommends policy and program reforms that account for these labor market supply and demand side dimensions including strengthening programs to eliminate gender stereotypes, increase the e-skill capacities of women with young children, improve workplace environment for working parents with young children, enactment of laws that prohibit discrimination in all its forms in employment, and extend the paternity leave to foster more equal conjugal sharing of home production, and changes in data collection method to capture more fully women's engagement in economic activities.

Keywords: female labor force participation, gender, stereotypes, discrimination, occupational segregation, fertility, time allocation

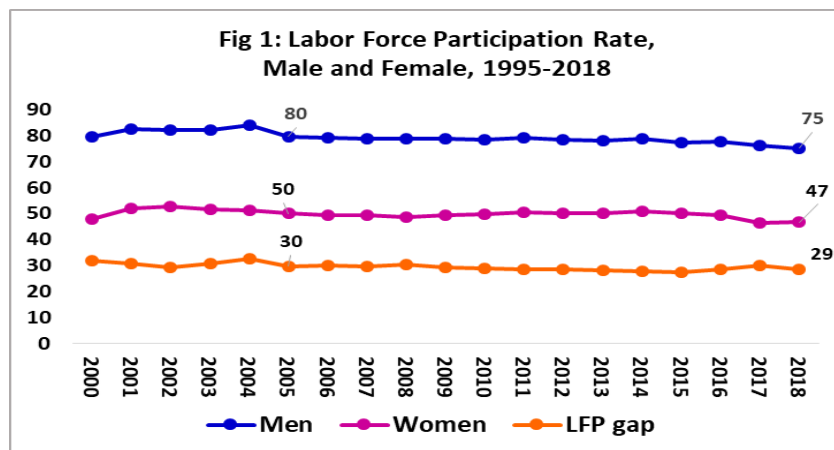
Determinants of Female Labor Force Participation in the Philippines

Page 1 of 73

1. Background

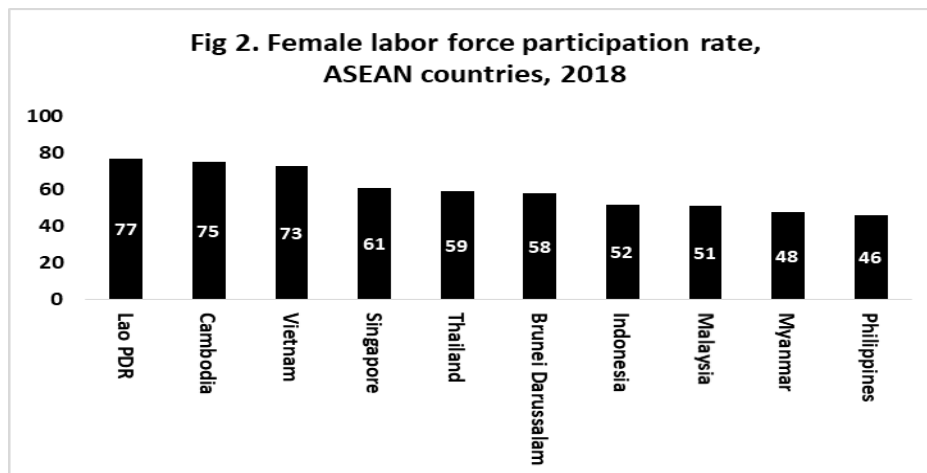
The Philippines was among the 193 member states of the United Nations that adopted in 2015 the 2030 Agenda for Sustainable Development that includes the achievement of gender equality and of full and productive employment and decent work for all women and men. Having fully closed the gender gap in educational attainment, the Philippines maintains its lead rank in the world in achieving gender equality in education but takes 106th place out of 149 countries in gender equality in labor force participation (World Economic Forum, 2018). This makes the Philippines the third worst country in the ASEAN region in terms of gender inequality in labor force participation, next to Indonesia and Myanmar which were ranked 118th and 109th, respectively.

The labor force participation rate of Filipino women largely stagnated at 49 to 50 percent for most of the past two decades (Figure 1). Changes in the statistical definition of work and unemployment resulted in slight increases in labor force participation rate in 2001 and some decreases in 2005. In 2001, the Labor Force Survey included a follow up question on whether the household member has another job or business during the survey reference period of the past week, which may have explained the increases in the share of self-employed and unpaid family workers especially among the female workers. In 2005, the reduction in unemployment rate or the number unemployed may be partly due to the inclusion of the availability criterion¹ in defining unemployment. In 2018, both the female and the male labor force participation rates experienced a slight dip (from 78 percent in 2016 to 75 percent in 2017 for the males and from 49 percent to 47 percent for the females), primarily due to a growing working age population that is coupled with a zero or negative employment growth rate. The more recent substantial declines in labor force participation rates were observed in the ages of 15 to 19 years old which may be attributed to more students staying longer in school as a result of the K to 12 program that extends the secondary education from four years to six years.



The modeled ILO estimates of the female labor force participation rates for 2018 indicated that the Philippines had the lowest female labor force participation rate in the ASEAN region at 46 percent. This rate was lower than the predominantly Muslim neighboring countries of Malaysia at 51 percent, Indonesia at 52 percent and Brunei Darussalam at 58 percent (Figure 2), and was way below that of Cambodia, Lao PDR, and Vietnam which had female labor force participation rates of at least 73 percent in 2018. Thailand and Singapore also had higher female labor force participation rates at 59 and 61 percent, respectively.

¹ Apart from the usual without work and seeking work criteria of defining the unemployed, the availability criterion was added to determine whether the household member was also available and willing to take up work during the reference period of the past work and or would be available and willing to take up work within two weeks from the interview date.



The gender gap in labor force participation rate of 30 percent for the Philippines remains the largest in the ASEAN region. In the 2018 Global Gender Gap Report, the ratio of female to male labor force participation rate was only 0.65 in the Philippines compared with at least 0.91 in the countries of Cambodia, Lao PDR and Vietnam, and 0.82 in both Thailand and Singapore. The female to male ratio in the Philippines was also lower than the majority Muslim ASEAN countries of Malaysia and Brunei Darussalam.

It is noted that statistics on female labor force participation rates do not account for the participation of women in overseas labor markets. The Philippine Statistical Authority (PSA) estimates the number of overseas Filipino workers at 2.34 million during the survey period of April to September 2017, of which 54 percent or 1.26 million are women. In the PSA guidelines which follows international standards, overseas Filipino workers are not counted as part of the country's working age population and therefore not part of the domestic labor force. If the estimated 1.2 million female overseas workers in 2017 were added to both the working age population and the labor force, the participation rate of Filipino women in overseas and domestic labor markets would have increased from 46 percent to 48 percent in 2017. The effect of overseas work on female's participation in the labor market varies by region. Female participation rates in economic activity would have been increased by 4 to 5 percentage points in the regions of Cagayan Valley and Ilocos, and by 2 to 3 percentage points in the Cordillera Autonomous Region, SOCCSKSARGEN, Autonomous Region of Muslim Mindanao, CALABARZON and Central Luzon.

Regardless of whether female economic participation is measured for the domestic labor market or expanded to include the overseas labor market, the rates still pale in comparison to that of most of the ASEAN neighboring countries. The low labor force participation rate of Filipino females is also corroborated by other Philippine studies (ADB, 2013; Albert and Vizmanos, 2017). This has been perplexing in the light of changes in the social and regulatory structure that should have augured well for increased participation of women in the labor market. The total fertility rate declined from 3.5 in 2003 to 3.0 in 2013 and 2.7 in 2017. Filipino women are getting better educated with the percent of females 25 years old and over with at least some secondary education increasing from 49 percent in 2000 to 66 percent in 2010 and 76 percent in 2018.

2. OBJECTIVES OF THE STUDY

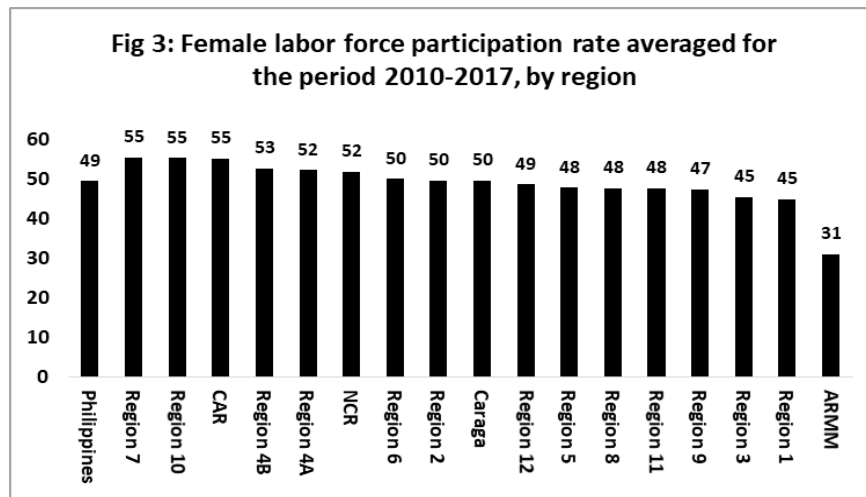
This study aims primarily to identify the factors that determine a woman's decision to participate in the labor market using both quantitative and qualitative approaches. Other than aggregate labor force participation rates, the paper also examines gendered differences in the type of employment (e.g. salaried employment, informal sector employment) to distinguish between quantity and quality of employment.

Specifically, the study aims to:

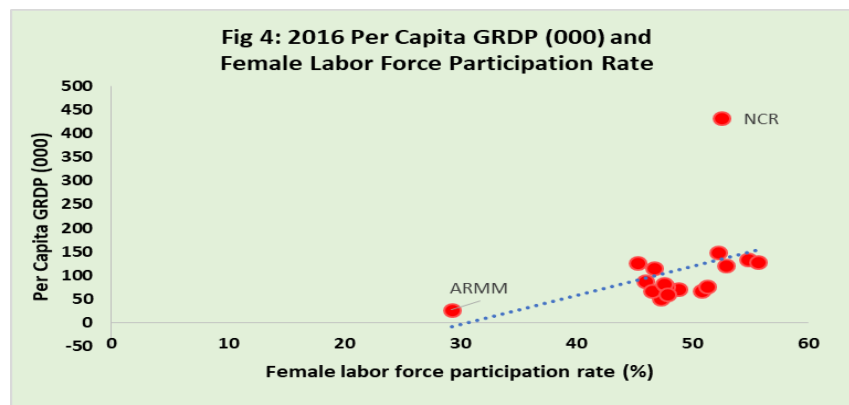
1. Describe the trends and patterns in female and male labor force participation and employment across regions.
2. Assess the micro-determinants of labor force participation and type of employment (e.g. salaried work in the government, private establishments and private households and informal sector employment) of Filipino men and women.
3. Determine the effects of cultural factors and social norms that may constrain the participation of women in the labor force using the National Demographic and Health Survey and qualitative data collected from Focused Group Discussions and Key Informant Interviews.
4. Identify the statistical issues in fully capturing the contribution of women in the national economy including the conduct of a national time use survey to collect data on the different types of work such as own-use production activities, unpaid work in home production and community service.
5. Provide recommendations for policy and program reforms.

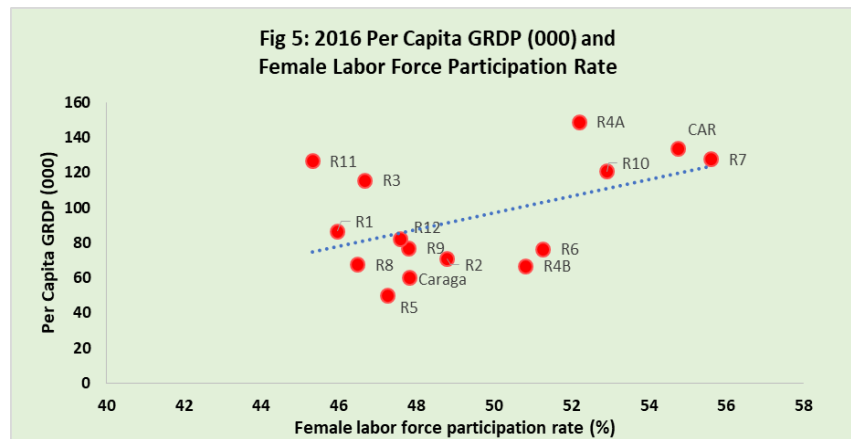
3. REGIONAL LABOR FORCE AND EMPLOYMENT PATTERNS

The national figures on female labor force participation rates camouflaged some important cross-regional differences. The Autonomous Region of Muslim Mindanao (ARMM) has been an outlier with female labor force participation rate averaging 31 percent for the period 2010-2017. Female labor force participation rates were highest (more than 50 percent) in Central Visayas, the Northern Mindanao Region, the Cordillera Administrative Region, MIMAROPA and CALABARZON, and the National Capital Region and lowest (less than 48 percent) in the Eastern Visayas Region, Central Luzon Region, Ilocos Region, and the ARMM (Figure 3).



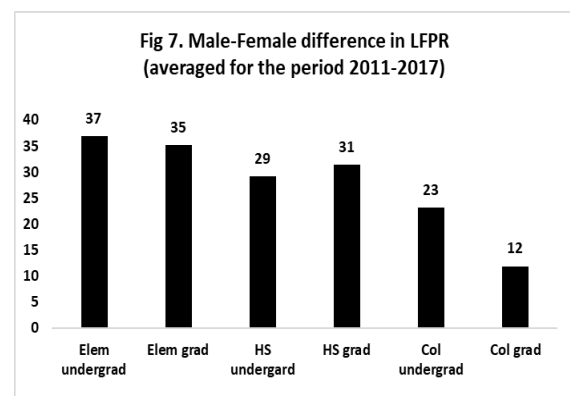
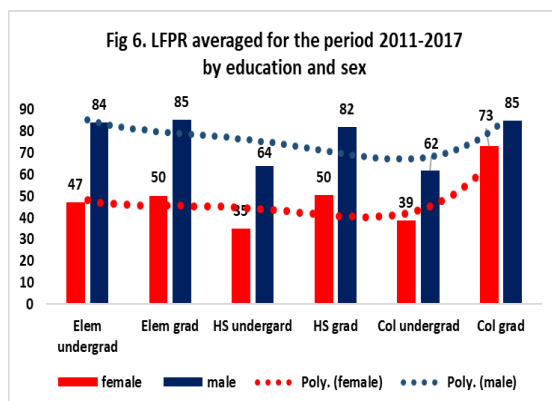
There appears to be a positive relationship between a region's per capita income and female labor force participation rate (Figures 4 and 5). ARMM has both the lowest per capita GDP and female labor force participation rate while the National Capital Region which has about four times the per capita GDP than the rest of the country also has above average female labor force participation rate. Some salient features and variations are worth noting. Region XI (Davao), Region X (Northern Mindanao) and Region VII (Central Visayas) have about the same GRDP per capita but vary significantly in female labor force participation rates with Region XI at 45 percent in 2016 (which is below the national average of 49 percent) and Regions X and VII having female labor force participation rates above the average at 53 percent and 56 percent respectively. Region IV-B (MIMAROPA) is another interesting case as it has among the lowest GRDP per capita but with female labor force participation of 51 percent which is above the national average 49 percent in 2016.





3.1 Labor force participation across education levels

Acquisition of a diploma increases the likelihood of a female's participation in the labor market with the most significant uptake observed for those who have completed a college education. Female labor force participation rate (averaged for the period 2011-2017) increased slightly from 47 percent for the elementary undergraduates to 50 percent for the high school graduates and surged to 73 percent for those with a college diploma (Figure 6). This is differentiated from the pattern for the males where the labor force participation rates were above 80 percent for the least educated as well as those with a high school or a college diploma. It appears that while a high level of education is not a requisite for most men to participate in the labor force, a completed college education seems to be critical for women to be at least 70 percent more likely to participate in the labor force.



The gender gap in labor force participation rate was highest at the bottom of the education ladder where female labor force participation rates among those below high school is 50 percent or lower while the corresponding rates for the males were 84 to 85 percent, resulting in a gender gap of 35 percent for the elementary graduates and 37 percent for the least educated. The gender gap in labor force participation rate generally decreased with increasing education and was least among the college educated at 12 percent.

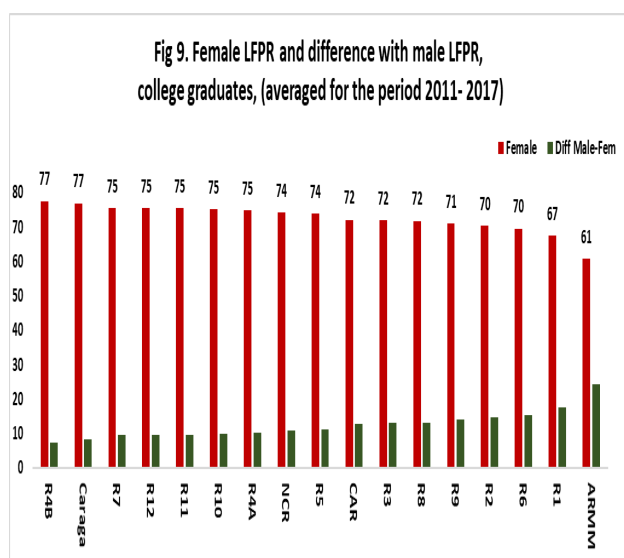
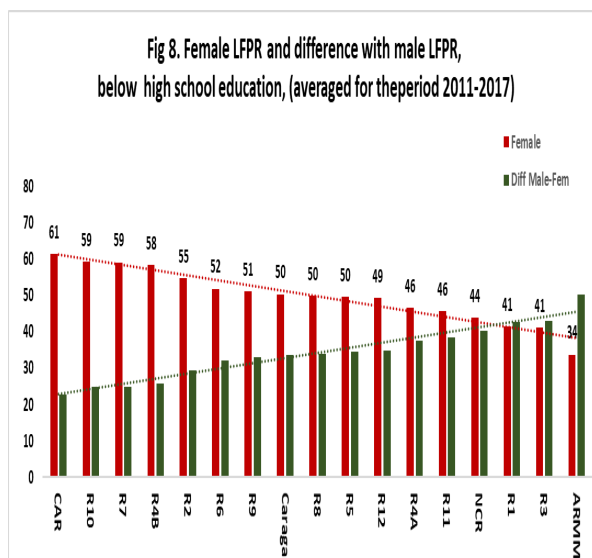
The wider divergence in male and female labor force participation rates among the least educated may be partly explained by educational assortative mating where men and women

choose partners within the same level of education. Least educated couples are more likely to have more children than the better educated couples, engendering a need for one member to specialize in labor market activity while the other member specializes in taking care of the children and doing the household chores. If lower education is also associated with more traditional values of gender roles, then husbands among the lower educated couples were more likely to be working while their wives stay at home to care for the children.

The magnitude in the gender gap in labor force participation rate among the least educated varied across regions. The Cordillera Administrative Region, Central Visayas, Northern Mindanao and MIMAROPA had the highest female labor force participation rate among those with less than secondary education at 58 percent or more (Figure 8). The ARMM, Central Luzon, Ilocos, Davao and the National Capital Region had the lowest female labor force participation rates among the lowest educated.

The variation in labor force participation rates among the female college graduates was not as wide relative to the least educated. It ranged from 70 to 78 percent for most of the regions, and with the Ilocos Region, the Cagayan Valley Region and the ARMM having the lowest participation rates of between 61 percent and 67 percent, respectively (Figure 9).

Given the almost comparable labor force participation rates between the least and the most educated among the males, the variation in gender gap in participation rates across regions appears to be significantly driven by the variation in labor force participation of the least educated females. It would be important to uncover the determinants of relatively higher labor force participation among the least educated females in some regions and the very low labor force participation in others.



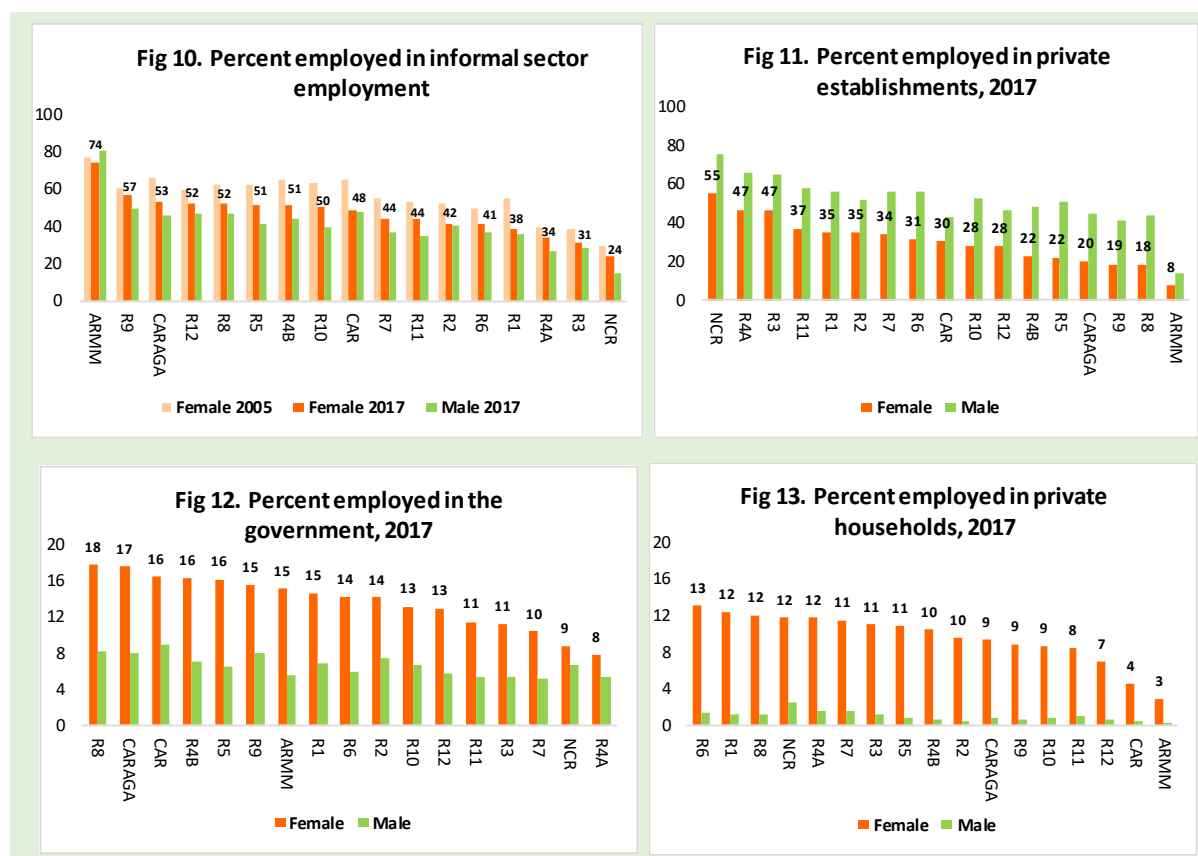
3.2 High rates of informal sector employment

Informal sector employment is a diminishing but persists as a salient feature of the Philippine

labor market, and which is more prominent for women than men. Informal sector employment is characterized by a lack of social protection, low remuneration and poor working conditions. Women are largely overrepresented in informal sector employment. In 2000, close to half of men and women workers were in informal sector employment. This figure dropped to 40 percent for women and 36 percent for men in 2017. The informal sector refers to household unincorporated enterprises owned and operated by own-account workers, which may employ unpaid family workers, intermittent or seasonal workers, or employ workers on a continuous basis (National Statistical Coordination Board, 2002). In this paper, informal sector workers comprise of unpaid workers in own-family operated farm or business and own-account workers, which is classified further into self-employed workers with no paid employee and employers in own family-operated farm or business.

The incidence of informal sector employment has declined but remains to be a significant feature of the Philippine labor market, accounting for half of workers in 2005 and down to 40 percent for women and 36 of men workers in 2017. The drop in female informal sector employment is attributed primarily to the reduction in the proportion of unpaid family workers from 18 percent in 2005 to 9 percent in 2017, as the proportion of female self-employed workers remained largely the same for the same period. For the male workers, the decline in informal sector employment was a result of both the decline in self-employment by 7 percentage points and unpaid family work by 4 percentage points. Unpaid family workers were concentrated in the agricultural sector which experienced a declining growth rate in both gross value added as well as in employment. The agriculture sector accounted for 70 percent of female unpaid workers in 2005 and 57 percent in 2017 while the corresponding figures for male unpaid workers was 78 percent in 2005 and 66 percent in 2017. The number of unpaid family workers in the agriculture sector declined by about 5 percent annually for the period 2005-2017.

Across regions, informal sector employment was highest in the Autonomous Region of Muslim Mindanao and accounted for 74 percent of total female employment and 81 percent of total male employment in 2017 (Figure 10). Only in the ARMM was informal sector employment the greater source of employment for men than for women. For the rest of the country, women were more likely than men to be employed in the informal sector. The lowest incidence of informal sector employment was observed in the more developed regions such as the National Capital Region where the percent of informal sector employment in 2017 was at 24 percent of employed women and 15 percent of employed men; the Central Luzon region and CALABARZON region with both regions having less than 35 percent of workers in informal sector employment. Informal sector employment was the major source of female employment (accounting for more than 50 percent of women workers) in the less developed regions such as the regions of Zamboanga Peninsula, CARAGA, SOCCSKSARGEN, Eastern Visayas, Bicol and MIMAROPA.

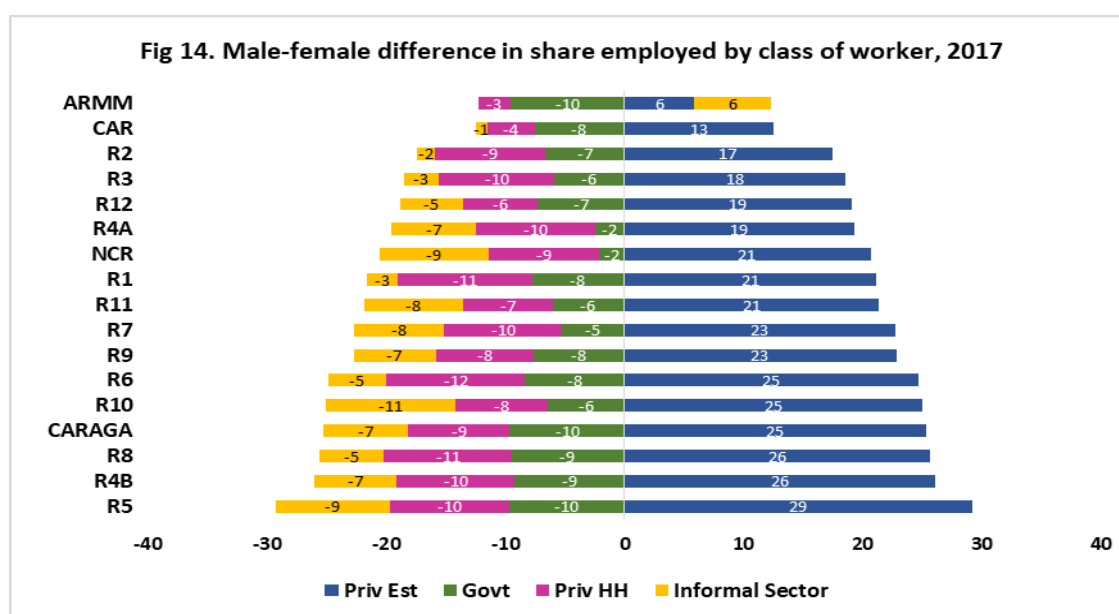


Private establishments are the largest employers for the male labor force and the biggest employer for the female workers outside of the informal sector. Women were less likely than men to work in private establishments, and more likely to work in government agencies and in private households. About 37 percent of women workers were employed in private establishments in 2017 compared to 57 percent for men. By comparison, 11 percent of women workers were employed by private households compared to only 1 percent for the men. The government is also an important source of female employment absorbing 12 percent of women workers in 2017 compared with 6 percent for men workers.

The incidence of female employment in the private establishments across regions follows a reverse pattern observed for the informal sector employment. The ARMM, CARAGA and Zamboanga Peninsula had the lowest share of women workers employed in private establishments while the more developed regions of NCR, CALABARZON and Central Luzon had the largest share of women workers working in private establishments. Government units have absorbed a higher share of female workers of more than 15 percent in Eastern Visayas, CARAGA, CAR, MIMAROPA and Bicol while private households are relatively important sources of female employment in Western Visayas, Ilocos, Eastern Visayas, NCR and CALABARZON. Women in the ARMM and the Cordillera Administrative Region are the least likely to be working in private households.

The gender gap in the share accounted for by classes of work reflect a highly segmented labor market with large concentration of men workers in private establishments and the women workers

in government units, private households and the informal sector (Figure 14). This is most pronounced in the Bicol region where the gender gap in the share of workers in private establishment was close to 30 percentage points in 2017 (private establishments accounted for 51 percent of male workers and 22 percent of female workers in Bicol). The other regions with relatively higher gender segmentation in class of work indicated by the a gender gap of 25 to 26 percentage points for employment in private establishments included MIMAROPA, Eastern Visayas, CARAGA, Northern Mindanao and Western Visayas. The concentration of female employment in private households was more pronounced in Western and Eastern Visayas regions, while there was more clustering of female employment in the informal sector in Northern Mindanao. For CARAGA and MIMAROPA, there is relatively more bunching up of female employment in both government units and private households.



The least gender segmented labor market was observed in the Autonomous Region of Muslim Mindanao where the bulk of women and men workers were in informal sector employment and in the Cordillera Administrative Region where women were as likely to be in informal sector employment as the men, and the gender gap in private establishment employment was among the least at 13 percentage points.

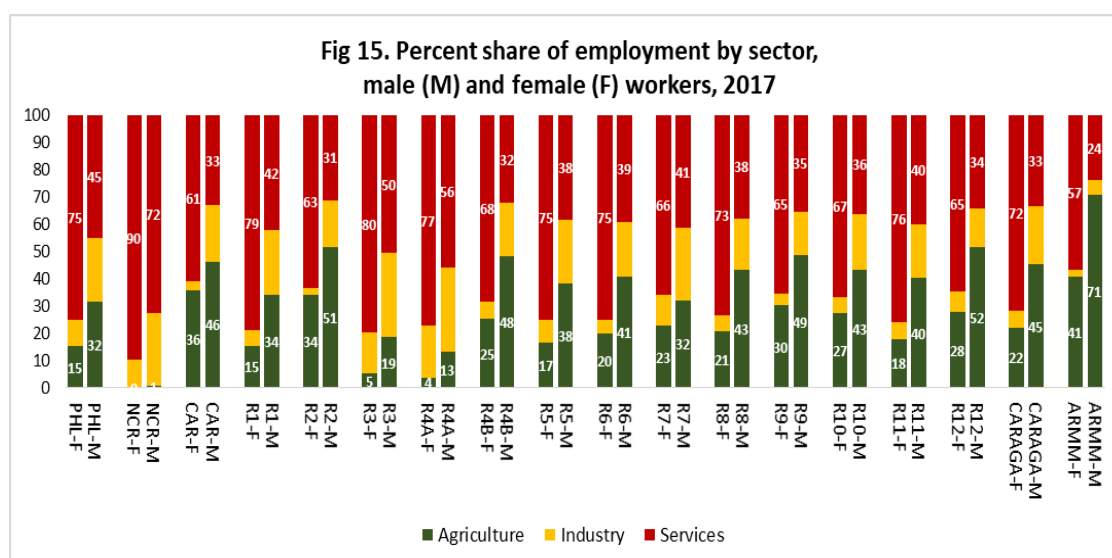
3.3 Gender segregation in industry

As in the class of work, women and men also vary in the way they sort themselves across industry. Women workers congregated themselves towards the services sector while men tended to cluster in both the agriculture and industry sectors. In 2017, 75 percent of women workers were in the services sector while 45 percent of the men workers were similarly identified. Men were more than twice likely than women to be working in the agriculture sector (which accounted for 32 percent of the men workers and 15 percent of the women workers in 2017) and the industry sector (23 percent of men workers and 10 percent of women workers).

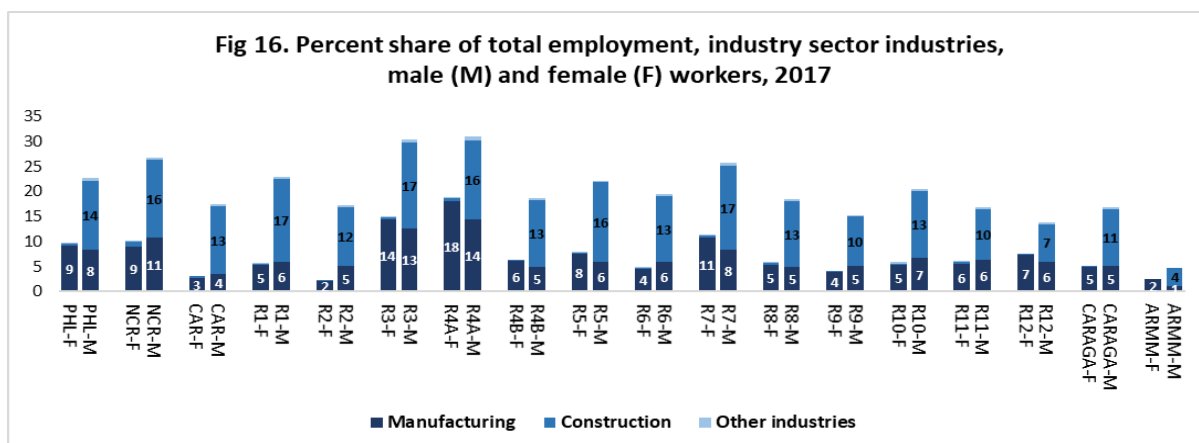
Women were also concentrated in a narrower range of industries with almost one third (31 percent)

of the women workforce working in the retail and wholesale trade and repair of motor vehicles industry in 2017 and another 13 percent were working in the other services category which include service activities in private households. Men workers were more dispersed with 27 percent of them working in the farming, hunting and forestry sub-sector, 14 percent in construction, 13 percent in trade and repair of motor vehicles and another 12 percent in the transport and storage subsector.

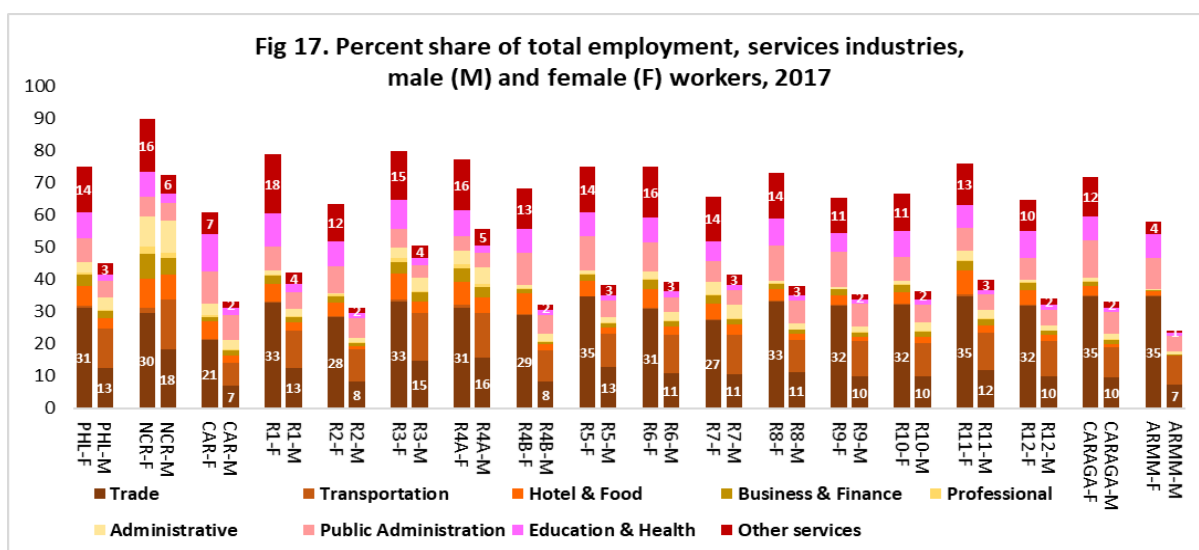
Across regions, the concentration of women workers in the services sector was highest in the more developed non-agricultural regions led by the National Capital Region where 90 percent of women workers were employed in the services sector in 2017, and Central Luzon with 80 percent share of female employment in the services sector (Figure 15). CALABARZON also had above average female services employment share at 77 percent. Regions with the lowest share of female services employment were the most agricultural regions including the ARMM where the agriculture sector accounted for 41 percent of the female employment and 71 percent of male employment and the Cordillera Administrative Region and Cagayan Valley region where more than one third of female workers were absorbed in the agriculture sector employment.



Within the industry sector, the gender gap in the share of industrial employment is driven by the construction industry which is dominated by men workers. The lowest gender gap at less than 7 percent was observed in the regions with the lowest employment in the construction industry and also the least developed Mindanao regions, namely, the ARMM and SOCCSKSARGEN. In contrast, the National Capital Region, Ilocos and Central Luzon regions which had among the highest share of male employment in the construction industry also had the highest gender gap in the share of industrial employment (the share of male industrial employment was higher by 17 percentage points compared to that for females). Although the regions of CALABARZON and Central Visayas and Bicol had high shares of male employment in the construction sector at 16-17 percent, these were offset by the higher shares of women than men employment in the manufacturing sector resulting in a lower gender gap in industrial employment relative to the NCR and Ilocos regions. However, their rates were still higher than the national average at 14 percentage points.



The gender gap was reversed for services sector employment where the share of female employment was 19 percentage points higher than that for male in the wholesale and retail trade, 11 percentage points higher in other services which include service activities in private households, 6 percentage points higher in education and health and 2-3 percentage points higher in public administration and in food and accommodation services (Figure 17). The only services subsector where the share of male employment was significantly higher than that for female employment was the transportation and storage subsector where the share of male employment was 12 percentage points higher than that for females.



Across regions, the share of employment in the wholesale and retail trade and other services industries primarily drive the wedge between male and female employment. The regions of Bicol, CARAGA and Davao had the highest share of female employment in the trade subsector at 35 percent followed by Ilocos and Western Visayas at 33 percent. These regions also had the highest gender gap in the share of services sector employment at 36-39 percentage points higher for females than males. The gender gap in the share of services sector employment is least in the more developed regions of NCR and CALABARZON which also had the highest share of male employment in wholesale and retail trade and in transportation and storage.

4. DATA AND METHODS

4.1 EMPIRICAL MODELS

4.1.1 Male and female labor force participation and employment status

The probit model of labor force participation

The paper estimates a probit model of the micro-determinants of labor force participation Filipino men and women in the working age group of 15 to 65 years old using the 2015 merged files of Labor Force Survey and the Family Income and Expenditure Survey. Following Green (2003) and Wooldridge (2002), the econometric specification is as follows:

$$y_i^* = X_i\beta + R_i\gamma + \varepsilon_i \quad [1]$$

$$y = \begin{cases} 1 & \text{if } y^* > 0 \\ 0 & \text{otherwise} \end{cases} \quad [2]$$

where y is the labor force participation outcome of the latent variable y^* and which assumes a value of 1 if the individual is participating in the labor force ($y^* > 0$) or zero otherwise, and ε is the normally distributed error term, $\varepsilon \sim N(0, 1)$. X_i is a vector of socioeconomic and demographic characteristics of the individual and household characteristics, including dummies for age and highest grade completed (elementary graduate; high school undergraduate; high school graduate; college undergraduate; college graduate; with elementary undergraduate as the reference category), school attendance status, marital status (single, separated/annulled/widowed/others and with currently married as the reference category), per capita household income deciles, household size by age group of household members (number of household members 3 years old and below; between 4 and 6 years old; 7 to 12 years old; and 13 years old and above), and place of residence (urban and rural). R_i is a vector of region-specific variables that reflect the labor demand, including regional unemployment rates, the female-male gender gap in regional unemployment rates, the gap in industry-agriculture output shares, and the gap in services-agriculture output shares.

The multinomial probit model of employment states

A labor force participant i , is assumed to choose among five employment outcomes, j , as follows: (1) unemployed; (2) paid employee in government; (3) paid employee in private establishments; (4) paid employee in private households or family business or farm; and (5) employed in the informal sector. If U_j^* is the level of the latent utility of employment state j , then a utility maximizing individual will sort himself/herself into alternative j only if it generates to the individual the highest utility across the five alternative employment states:

$$U_i = j \text{ if } U_{ij}^* = \max(U_{i1}^*, U_{i2}^*, U_{i3}^*, U_{i5}^*, U_{i5}^*) \quad [3]$$

$$\text{where} \quad U_{ij}^* = X_i\beta_j + R_i\gamma_j + \varepsilon_{ij} \quad [4]$$

The coefficients and standard errors of the model are estimated by multinomial probit model, where the vectors X and R are as defined in equation [1]. The error terms in equation [4] follow a

multivariate normal distribution and are correlated across the different employment states. To identify the model, the unemployed workforce is made as the base category.

4.1.2 Cultural determinants of female employment status

This section utilizes the 2017 National Demographic and Health Survey (NDHS) to determine the effect of cultural factors and patriarchal social norms on female labor force participation rate. The 2017 NDHS collects data not only on women's health and fertility but also on women's employment, education, household wealth, husband's/partner's demographic and socioeconomic characteristics, religion and women's views on gender relations and decision making.

The 2017 NDHS uses a two-stage stratified sampling where the first stage consisted of the systematic selection of 1,250 primary sampling units and the second stage is the systematic random sampling of 20 housing units for each primary sampling unit. The 2017 NDHS is a nationally representative survey of 27,496 households and 25,690 women of reproductive ages between 15 and 49 years old. Of these respondents, 37 percent or 8,971 respondents were never married.

This paper presents estimates of the following model separately for currently married sample and the all women sample:

$$Y_i = X_i\beta + C_i\delta + M_i\gamma + Z_i\gamma + \varepsilon_i \quad [5]$$

where the dependent variable Y denotes whether or not the woman is participating in the labor force, X refer to individual-level demographic and socioeconomic variables, C is an indicator of culture and is indicated by religion (e.g. Roman Catholic, Protestant/Other Christian, Iglesia ni Kristo, Islam, Aglipay and Others). In addition to religion, a patriarchy index is constructed by principal component analysis for the currently married sample using the following decision-making questions:

Who usually decides on the following, is it mainly the respondent, mainly the respondent's husband/partner, or the respondent and husband/partner jointly?

- how respondent's husband's/partner's earnings will be used
- major household purchases
- visits to respondent's family or relatives
- respondent's health care

M is exposure to media which can be a mediating variable in the negative effect of traditional cultural values of gender relations and female labor force participation. It is indicated by the frequency of exposure (e.g. not at all; less than once a week; at least once a week; almost every day) of the respondent to newspaper, radio, TV and the internet. The media exposure index is constructed by principal component analysis. Z is a vector of regional-level variables, such as those enumerated in equation [1]. The paper will estimate separate multivariate analysis of the all women sample and the currently married sample.

4.2 QUALITATIVE SURVEY

4.2.1 Focus group discussion (FGD) of women groups.

The study conducted FGDs of women in varied religious denomination, ethnicity and labor force status in six regions across the country and with representations from Luzon, Visayas and Mindanao. In consultation with NEDA, the six regions identified for the study include the following:

- (a) the National Capital Region which has the highest GRDP per capita and a female labor force participation rate above the national average;
- (b) the Autonomous Region of Muslim Mindanao which has the both the lowest GRDP per capita and female labor force participation rate;
- (c) Region VII (Central Visayas) which has the highest female labor force participation rate;
- (d) Region XI which has among the lowest female labor force participation rate in spite of a relatively higher GDP per capita;
- (e) Region IV-B (MIMAROPA) which is a low-income region but with higher than national average female labor force participation rate; and
- (f) Region X (Northern Mindanao) that is like Region XI, in terms of GRDP per capita yet presents a contrasting feature in terms of a high female labor force participation rate.

The FGDs also included women leaders of local governments, civic groups and non-government organizations. A total of 12 FGDs of women groups were conducted: 2 FGDs in Metro Manila; and 8 FGDs in a rural municipality and an urban city for the rest of the five regions.

4.2.2 Focus group discussion (FGD) and interviews of government officials and key informants.

FGDs were also conducted for government officials from the various government offices including the following: (a) the Philippine Commission on Women; (b) Department of Trade and Industry at the national office and selected regional offices; (c) Department of Labor and Employment; (d) House of Representatives; and (e) the Philippine Statistics Authority.

In addition to government officials, the study also conducted a focus group discussion with heads of human resource departments in the private sector and a key informant interview was conducted with a Muslim Ustadz, a religious leader of Islam.

5. RESULTS

5.1 Determinants of labor force participation and employment status

This section discusses the results of the probit model of labor force participation status and the multinomial probit model of employment status for the male and the female samples in the working ages of 15 to 65, using the 2015 merged data sets of the Family Income and Expenditure Survey and the Labor Force Survey. These generated a total sample of 63,327 males and 61,387 females.

Table 1 presents the descriptive statistics on the variables that are used in the models. The main variable of interest is the labor force participation and employment status. The Philippine labor force

comprises of the unemployed and the employed workforce. A person who is 15 years and over is considered unemployed if he/she has not worked for at least an hour during the reference week period but is currently available for work and either seeking for work or not seeking for work because of any of the following reasons: (a) believed no work is available; (b) awaiting rehire, job recall or results of previous job application; (c) temporary illness or disability; and (d) bad weather. An employed person is one who has worked for at least an hour during the reference week period or has a job or business even if not at work during the reference period.

For those who are employed, the paper distinguishes between four employment states, as follows: (a) paid employment in private establishments; (b) paid employment in the government; (c) paid employment in private households and in family farm or business; and (d) informal sector employment. The informal sector includes the following classes of workers: (a) self-employed without any paid employee; (b) employer in own family-operated farm or business, and (c) unpaid family workers. About half of the female sample and 73 percent of the male sample were participating in the labor force. Of those in the labor force, less than 3 percent of males and females were unemployed. Men workers were more likely than women workers to be concentrated in paid employment in private establishments while there was a higher share of women workers in informal sector employment and in paid employment in the government and in private households.

Table 1: Descriptive Statistics

Variable	Female (N= 61,387)	Male (N=63,327)
Labor force participation/employment status	<u>100%</u>	<u>100%</u>
Not in labor force	51.35	26.70
Unemployed	1.18	1.72
Paid employment – private establishments	15.86	38.41
Paid employment – government	6.02	4.86
Paid employment – private households, family farm	5.70	1.25
Informal sector employment	19.89	27.06
Age group		
15-19	16.68	17.85
20-24	12.82	14.15
25-29	10.7	10.86
30-39	19.03	18.48
40-49	18.55	18.18
50-65	22.22	20.49
Education		
Elementary undergraduate	11.24	16.71
Elementary graduate	11.48	12.50
High school undergraduate	16.51	17.76
High school graduate	27.55	26.65
College undergraduate	13.52	12.09
College graduate	19.71	14.30
Whether currently attending school		
No	85.79	86.35
Yes	14.21	13.65
Marital status		
Married	58.21	53.82
Never in union	33.56	42.70
Separated/annulled/widowed/others	8.23	3.48
Per capita HH income decile		
First	12.03	12.91
Second	11.77	12.24
Third	10.78	11.25
Fourth	10.19	10.73
Fifth	9.73	10.05
Sixth	9.48	9.44
Seventh	9.12	9.23
Eighth	9.17	8.75
Ninth	8.83	7.98
Tenth	8.91	7.41

Place of residence		
Rural	62.74	64.53
Urban	37.26	35.47
Continuous variables		
HH members 3 years old and below	0.39	0.36
HH members 4 to 6 years old	0.31	0.29
HH members 7 to 12 years old	0.67	0.67
HH members 13 years old and above	4.31	4.36
Regional unemployment rate, 2014	6.31	6.27
Female-male gap in unemployment rate, 2014	-0.58	-0.56
Industry –Agriculture output share gap, 2014	13.78	13.67
Services-Agriculture output share gap, 2014	29.86	29.56

The average age was 34 years for the males and 35 years for the females. The share of youth between 15 and 24 years was slightly higher for the men than the women sample (32 percent vs. 30 percent) while the older ages of 40 and above accounted for a larger share of the women than the men sample (41 percent vs. 39 percent). The women were better educated than the men. About 20 percent of the women had a college degree compared with only 14 percent for the men. Close to half of the men (47 percent) did not complete a secondary education while 39 percent of the women were similarly categorized. There were about 14 percent of men and women who were attending school at the time of the survey.

Majority of the males and females in the sample were currently married, with a higher share of men who were never in marital union compared to women (43 percent vs. 33 percent). Average family size was close to 6 for both samples. About 30 percent of women and 28 percent of the men had very young household members aged 3 years old and below. One-fourth of the male and female samples had household members in the pre-school ages of between 4 and 6 years old and 45 percent had household members in the school ages of 7 to 12 years old.

Women belong to slightly better off households compared with the men as indicated by the larger share of women in the highest three household income deciles and the lower share of those belonging to the lowest three income deciles. More than one third of the men and women were living in the urban areas and were on average faced with similar regional unemployment rates and output share gaps between agriculture on one hand, and the industry and services sectors on the other.

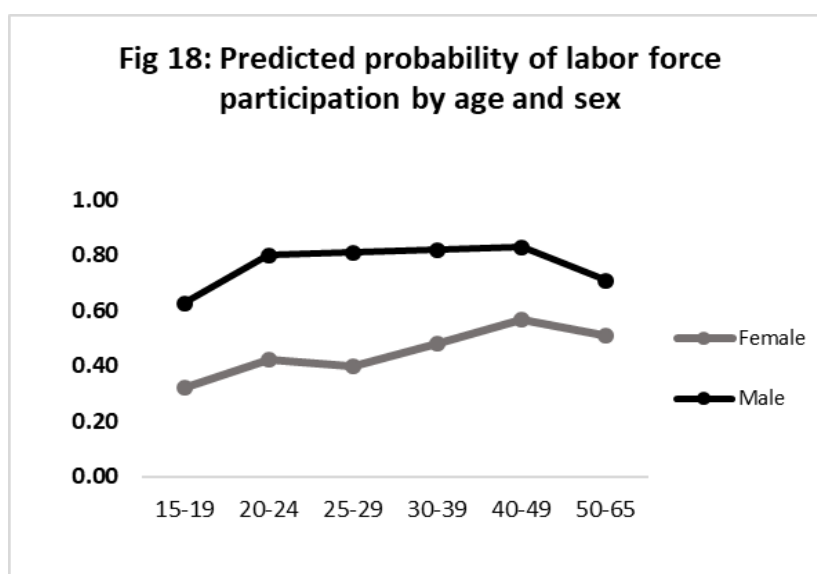
5.1.1 Determinants of female and male labor force participation

The marginal effects of the socioeconomic individual, family and regional characteristics estimated from the bivariate probit model of labor force participation, are reported in Table 2 for the male and female samples. The dependent variable is labor force participation status which takes on the value of 1 if the individual is either employed or unemployed and zero otherwise.

Age

The men's labor force participation rates are consistently higher than that of women across the working life cycle, with the widest gaps observed in the women's childbearing ages of 20 to 39 years old. Relative to the youngest age group of 15 to 19 years old where most young people are still in school, the marginal effects of older ages on the labor force participation are positive and statistically significant. However, the marginal effects are not uniform across the ages and varied

between men and women. There is a sharp uptake in labor force participation as people aged 20 to 24 years old completes school and transitions to employment or looking for work (Figure 18). While this high level of participation is largely maintained for the men until it declines in the age period towards compulsory retirement, the pattern for the women exhibits a decline in labor force participation rate in the peak childbearing period of 25 to 29 years old. This may indicate the higher likelihood of women to withdraw from the labor force for marriage, childbirth and childrearing. The disruption in active economic participation during this phase of the life cycle is observed only for women and not for men. Female labor force participation rates peak at the age group of 40-49 years old when children are likely to be older and allowing the mothers to return to active participation in the labor force. The gender gap in labor force participation narrows down in the forties and attaining greater convergence in the phasing out years to retirement.



The disruption in active economic engagement created by marriage and childbearing or childrearing is expressed by FGD participants:

“Noon po kasi ay nagtatrabaho po ako. Kaya lang hindi po kami magka-anak. Apat na taon na kaming magkasama, hindi kami nagka-anak. Kaya noong nagkaroon na ng regular na trabaho ang asawa ko ay pina-stop na niya ako sa patatrabaho. Tapos noong nag-stop ako sa trabaho, doon ako nagkaroon ng anak.”

[Housewife participant ID01]

“Regular po ako dati sa Rebisco. Kaso po pinapili ako ng asawa ko. Sabi niya: ‘Ano ang mas pipiliin mo? Ang mga anak mo o yong trabaho?’ Sabi niya ay isa sa amin ang mag full-time na magbabantay ng mga bata...Nag resign po talaga ako para sa mga bata. Pero noong lumalaki na sila, nandoon na ang sisihan kasi ang hirap na. Naranasan ko ang hirap sa kakulangan ng budget, yung walang wala. Nakakaiyak po talaga yon. Tapos maiisip mo na sana hindi na lang ako nagresign. Siguro hindi ganito ang buhay namin.”

[Housewife participant ID02]

“Single mother po ako. Dati ako ay nagtatrabaho pero nag-end ang contract ko. Noong nabuntis ako, hindi na ako nag-renew ng contract kasi nag-aalaga na ng anak.

Nagpapadala naman po yong father niya, buwan buwan po... Hindi rin po [sapat]. Kasi siempre kapag may sakit po. Nagbabalak nga po akong mag-abroad sana.”

[Single mother participant ID03]

“Gusto niya may dadatnan siya pag-uwi.” [Housewife participant ID02]

“Minsan nagagalit siya, hindi raw ako naghahain sa pagkain.” [Housewife participant ID01]

Table 2: Average marginal effects from the probit model of labor force participation

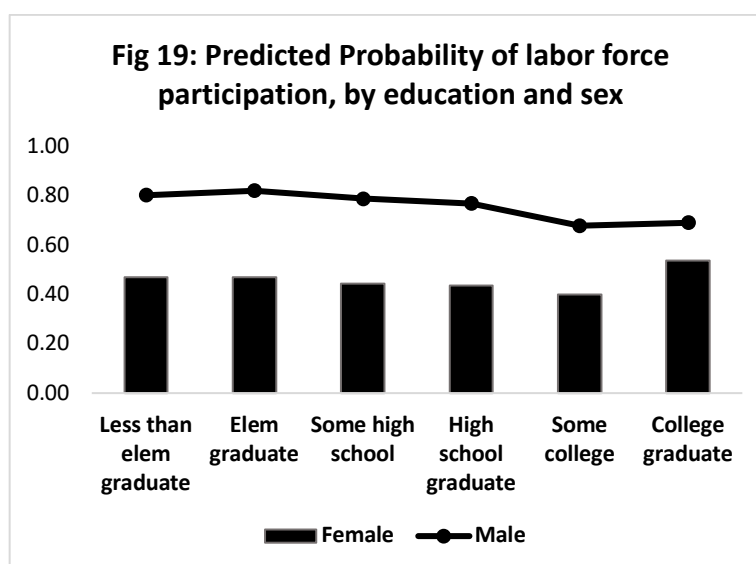
Variable	Female		Male	
	Coeff	se	Coeff	se
Age group				
15-19 (Reference category)				
20-24	0.098***	0.010	0.173***	0.008
25-29	0.073***	0.011	0.182***	0.009
30-39	0.155***	0.010	0.192***	0.009
40-49	0.245***	0.010	0.203***	0.010
50-65	0.186***	0.011	0.083***	0.011
Education				
Elementary undergraduate (Ref. category)				
Elementary graduate	7.6E-06	0.009	0.018***	0.007
High school undergraduate	-0.026***	0.009	-0.014**	0.007
High school graduate	-0.034***	0.008	-0.034***	0.006
College undergraduate	-0.072***	0.010	-0.124***	0.009
College graduate	0.067***	0.009	-0.111***	0.008
Whether currently attending school				
No (Reference category)				
Yes	-0.465***	0.005	-0.627***	0.007
Marital status				
Married (Reference category)				
Never in union	0.108***	0.007	-0.143***	0.006
Separated/annulled/widowed/others	0.082***	0.008	-0.091***	0.011
Per capita HH income decile				
First				
Second	0.009	0.009	-0.010	0.008
Third	0.034***	0.009	-0.014*	0.008
Fourth	0.047***	0.010	-0.029***	0.008
Fifth	0.041***	0.010	-0.032***	0.009
Sixth	0.060***	0.010	-0.042***	0.009
Seventh	0.065***	0.011	-0.063***	0.009
Eighth	0.076***	0.011	-0.081***	0.010

Ninth	0.106***	0.011	-0.104***	0.011
Tenth	0.166***	0.012	-0.093***	0.011
Place of residence				
Rural (Reference category)				
Urban	-0.037***	0.005	-0.032***	0.005
Continuous variables				
HH members 3 years old and below	-0.061***	0.004	0.005	0.003
HH members 4 to 6 years old	0.003	0.004	0.003	0.004
HH members 7 to 12 years old	0.012***	0.003	0.003	0.002
HH members 13 years old and above	-0.003**	0.001	-0.016***	0.001
Regional unemployment rate, 2014	-0.036***	0.002	-0.011***	0.002
Female-male gap in unemployment rate, 2014	-0.015***	0.003	0.002	0.003
Industry –Agriculture output share gap, 2014	0.001***	0.000	-9.4E-05	0.000
Services-Agriculture output share gap, 2014	0.002***	0.000	0.001***	0.000

*statistically significant at .10 level; **at .05 level; ***at .01 level

Education and school attendance

Attainment of a secondary or higher level of education does not increase the labor force participation of men. Compared with those who have not completed primary education among the men, those with secondary education are 2-4 percentage points less likely to participate in the labor force and those with tertiary education are 12 percentage points less likely to do so. Only those with an elementary diploma have a statistically significant higher likelihood of labor force participation by 1 percentage point than those with lesser education. The diminishing labor force participation with increasing education for men is also presented in Figure 19, with the more pronounced declines observed for men with some tertiary education.



For women, the relationship between education and labor force participation follows a U-shaped pattern with the least and the most educated having the higher rates of labor force participation.

Labor force participation declines as education increases from primary to secondary education and is lowest among those with some college education. Attainment of a college degree is associated with an upsurge in labor force participation rate. A college educated woman's likelihood to participate in the labor force is 7 percentage points higher relative those with primary education, about 10 percentage higher compared to those with high school education and 14 percentage points higher relative to those with some college education. As expected, school attendance has a strong and statistically significant negative marginal effect on labor force participation with larger effects for men than women.

The higher labor force participation rates of the less educated may be attributed to the relatively greater availability of jobs requiring elementary skills and a shortage of middle-skilled jobs, making it more difficult for the better educated men and women with higher reservation wages to find employment. The fast pace of technological change may have also made some jobs obsolete and created new jobs requiring higher level of skills and more advanced training and education. Males who are disproportionately represented in the STEM (Science and Technology, Engineering and Math) disciplines, may be affected more by the fast pace of technology that requires them to stay in school longer and delay the transition into the labor force.

Labor force participation rates of women are consistently lower than that of men across all levels of education, with the gender gap narrowing down for those who have completed tertiary education. The effect of a tertiary education on increasing labor force participation is significantly stronger for women than for men. The wide gender gap in labor force participation rates for the less educated may indicate a higher clustering of male workers in lower-skilled occupations. In 2015, women comprised only one-third (32 percent) of salaried laborers and unskilled workers which in turn contributed 35 percent of all paid employees. There is a larger concentration of unskilled workers in private establishments for men and in private households for women. About 82 percent of unskilled workers in private establishment are men and 89 percent of unskilled workers in private households are women. Employment growth in salaried unskilled occupations for the period 2010-2015 has favored men much more than women (2.5 percent annual growth for men and -0.3 percent for women), or in private establishments (2.2 percent annual growth) than for private households (-0.1 percent annual growth).

Marital status and the presence of young children

The relationship between marital status and participation in the labor force varies between men and women. Relative to currently married persons, the marginal effects for those who are never in marital union and those who are separated, annulled or widowed are highly statistically significant but are in opposite directions for men and women. Currently married men are more likely to participate in the labor force by 11 percentage points more compared to never married men and 5 percentage points more compared to men who are separated, annulled or widowed. By contrast, currently married women have a lower likelihood to participate in the labor force by 12 percentage points relative to never married women and by 10 percentage points relative to women who are separated or widowed.

The presence of young children aged 3 years and below is associated negatively with the labor force participation of women but not significantly related to men's labor force participation. There is a positive marginal effect of children in the school ages which may indicate the need for women to augment family income to defray for educational expenditures.

The lower labor force participation of currently married women and those with very young children, reflects the operation of stereotypical norms that expect women to stay at home to care for the

spouse and children while the men participate in the labor market to provide for household needs, which was also expressed by a number of FGD participants:

“Parang sa kultura natin ay pag lalaki, nagtatrabaho. Sa mga bata, ang nanay talaga kailangan.”
[Husband participant ID05]

“By nature, mothers have an important role in childrearing. Even our in-laws give importance to the role of mothers in childrearing.”
[HR personnel ID05]

“Kahit na ikaw ay graduate, ng anong kurso, kung ikaw ay tinawag ng anak mo na may sakit, hindi ka po makapagtrabaho. Sa lalaki talaga ang trabaho. Ayoko iwan ang anak ko.... kasi pag ikaw ay tinawag ng anak mo, ayaw niyan sa ibang tao, ikaw pa rin ang hihingan ng tulong, ang asawa mo ang magtatrabaho. Hands on po ang babae. Yakapin mo ang anak mo gagaling, parang may feelings po kasi ang babae pagdating sa ganyan. At saka maiksi ang pasensiya ng lalaki.

[Housewife participant ID01]

“Mahirap talaga mag-alaga sa pamilya. Sa akin, napilitan lang talaga ako mag-alaga dahil ang misis ko ay nasa abroad...Siempre, alangang kukuha ka ng katulong wala ka naman ipapasahod, Noong una, nagagalit ang asawa ko, kasi noong una di ko alam kung papaano. Nakikita niya na hindi ako marunong lalo na pag lalagnatin ang bata. Natataranta ako, talagang hindi ako makatulog nun. Nag-aabang ako sa thermometer...Tapos lagi ko mino-monitor and thermometer. Kung tumaas o bumaba..hindi ako makatulog.”
[Husband participant ID05]

“Iba po kasi ang lalaki. Ang lalaki naghihingi pa ng tulong, puro salita din. Pero ang babae ang gumagalaw sa pag-aasikaso sa anak. Kagaya noong nasa ospital kami, yong asawa ko sabi sa akin ‘Puntahan mo yong anak mo, paki ano mo sa nurse’. Ako ang inuutusan niya. Siya hanggang salita lang, pero siya yong matapang. Natataranta din ako pero ako yong gumagalaw..lakad ng lakad kung saan, bili ng gamot.”

[Housewife participant ID01]

“Ang typical, lahat halos na na-encounter ko sa iba’t-ibang community, pagka lalaki, gusto nila taga provide lang sila ng pera. Yung makapagbigay sila ng pera sa asawa, sapat na iyon. Lahat gawain ng babae.”

[Community leader, entrepreneur and husband participant ID06]

“Sa kultura namin, nakakabakla ang lalaking gumagawa ng gawaing bahay. Ang asawa ko, talagang hindi yon maglalaba. Pag nabakla siya, hindi siya rerespetuhin ng ibang tao. Kasi kita nila na ang galaw niya ay ganoon.”
[Housewife participant ID04]

Sa iba po nakakababa sa isang lalaki ang gumawa ng gawaing bahay. Ang asawa ko po ganyan. Sa kanya po, siya ang magtatrabaho. Akala mo madali lang dito sa bahay. Kasi feeling niya kapag day off niya, day off talaga. Sa kalagayan namin, walang day off. Sabi ko, 'Akala mo lang di pwede akong matulog. Tatlo yang anak mo, may gagalaw na isa, iyong isa matutulog, yong isa gagalaw ng posporo. Nakakatakot po iyong ganoon. Mamaya magsindi ng posporo....Iniiwan ko yan minsan sa bahay..ang kalat..ang damit nakakalat...ang hugasan. Napakaswerte po ng mga babae na may asawang hands-on din po sa bahay. Nakakainggit po, sa totoo lang."

[Housewife participant ID01]

"There is this mentality among women employees that they should be the one to take care of their children. So, they absent themselves from work to take their children to the clinic for vaccination. So, I tell them that it does not make them less of a mother if they let their mother-in-law bring their children to the clinic."

[HR personnel ID04]

The limited availability of more affordable and trusted childcare services is also cited as a reason for mothers choosing to withdraw from the labor force to take care of their children.

"Mahirap po kumuha ng mapagkatiwalaan." [Housewife participant ID01]

"Kasi ngayon ang hirap talaga ng katulong, lalo na yung mga walang kasamang parents. Mahirap ng maghanap ng katulong ngayon." [HR personnel D01]

"Kumukuha ng katulong. Marami ng nababalita na hindi maganda ngayon," [Husband participant ID05]

"Nalusutan ako sa kabila. Ilang taon na yon sa akin, apat na taon, pinagkatiwalaan ko talaga...Para ko na talagang anak, pero hindi naman siya maraming trabaho kasi hindi naman araw-araw maglalaba, isang linggo, isang beses kasi tatlo kami sa bahay, hindi naman masyado marami ang damit.... Ang kinuha niya sa akin, 60 Thousand at saka isang bangle ko."

[Housewife participant ID04]

"Dati po nagpa-alaga kami. Sinasahuran ko. Kaya lang nagkasakit ang pangalawa kong anak ng pneumonia. Kasi napabayaan yung likod. Naiisip ko rin na hihinto na lang ng trabaho, kasi ang sahod ko nauwi lang sa ospital."

[Housewife participant ID01].

"I know of husbands who are working in the BPO industry. They do not have household help so their spouses sacrifice working in the labor market to take care of the children. Otherwise the wages that the woman earns just go to paying the domestic worker. There is also lack of trust and fear that they may hurt the children. So the husbands asked their wives to give up their spouses' work so they can take care of the baby."

[HR personnel ID01].

The high cost of commuting to work and heavy traffic, which reduces real wages and increases the cost of travel time to work, also discourages participation in the labor force, especially for mothers

who are burdened with the high cost of childrearing and thereby raising their reservation wages and the value of mother's time at home.

“Di ko naisip magtrabaho sa isang company..Mahal ang pamasaha. Walang natitira po. Minsan nagre-rent ka ng boarding house. Kung saan ka titira depende sa kung saan ka magtatrabaho.”
[Never married participant ID07].

“Noong ako ay nagtatrabaho, naranasan ko na hindi mag MRT kasi siksikan ang MRT. Nagcommute ako sa bus, alas dose ang time ko, pero alas dos na nakarating sa Taguig, late na rin po. Automatic absent na or automatic kaltas na yon. Buti hindi na ako nagtatrabaho ngayon kasi nakikita ko, pagbaba ko pa lang ng hagdan, sukong-suko na ako. Buntis pa ako nun sa panganay ko, walang nagbibigay ng upuan sa MRT.”
[Housewife participant ID01].

Demand side factors

There is a negative relationship between regional unemployment rate and the labor force participation of both men and women with larger negative effects for women than men. A one percent increase in regional unemployment rate decreases labor force participation by 4 percentage points for women and 1 percentage point for men. In addition, the higher female to male gap in unemployment rates has no statistically significant effect on male labor force participation but negatively affects the female labor force participation. Higher output share of industry sector and the services sector relative to the agriculture sector also increases the labor force participation of women, with larger positive effects for the services sector than for the industry sector.

Because the Philippine labor market is highly gender segregated with the agriculture and construction sectors dominated by men while the women are largely concentrated in the services sector and the manufacturing sector, there is need to encourage more investments in industries with a higher absorptive capacity for women workers.

“Bataan ecozones have employed many women workers.”

[Daluyong Women's Coalition, Key informant, ID81]

“The share of women workers in the Mactan Export Processing Zones in Lapu-lapu City is 70-80 percent.”
[Region VII Key informant]

A key informant also suggested the adoption of new technologies that would make the work in male-dominated industries less physically demanding and allow more absorption of women workers.

“In agriculture, the nature of work requires upper body strength which naturally fits the men. If only women-friendly technologies can be part of the government's provisions in the farm, more women farmers will find farm work much easier.”

[Daluyong Women's Coalition, Key informant, ID81]

The larger positive effect on female labor force participation of higher output share of the services sector than in the industry sector may be attributed to more inflexible work hours and higher educational requirements in the industry sector than in the services sector where micro and small scale enterprises abound.

"There are females willing to work in factories, however, requirements are quite tough for them. For hiring are high school graduates and/ or first year college."

[Daluyong Women's Coalition, Key informant, ID81]

There is a need to link the entrepreneurial activities of women to national and international markets that would increase the demand and value of their products.

"I am a coordinator of the lumad weavers. Most of them are women workers. They have numerous products like baskets and beadwork, but they have difficulty selling the products and the value is so low. This discouraged the women, especially the younger generations, to continue weaving. The market is the biggest problem. They go around walking in the city proper and can only sell a few of their products at a very low price. The DTI provided training for more skills, gave us the funds for materials, and most of all, brought us to trade fairs. The value of our products used to be very low. But after joining trade fairs, our market expanded and the demand for the products increased and the value has improved. More women have regained the interest in weaving."

[Lumad coordinator, ID46]

"The young women have no appreciation of weaving banig before, because it is a lot of hard work with very little income. But after attending DTI skills and entrepreneurial trainings and participating in trade fairs, we have improved the quality of banig products and have tapped the national and international market. The women weavers are now earning much more from weaving, which has encouraged the younger generations to go into weaving. The higher earnings from weaving have increased the confidence of the weavers and empowered them."

[Developer, IP weavers, ID44]

5.1.2 Determinants of female and male employment status

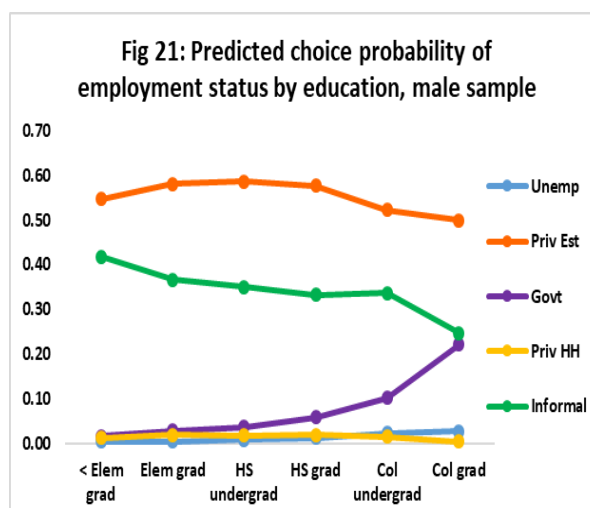
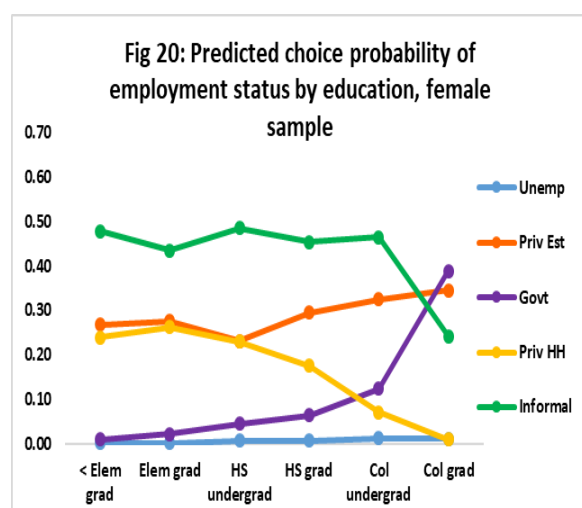
This section examines the type of employment engaged in by Filipino men and women workers and distinguishes five states, namely the unemployed; the paid employed which is further classified into those working in the government sector, the private establishments and those in the private households and own family business; and the last category comprises those in informal sector employment. Disaggregating the labor force into these five states would provide a more comprehensive picture of the employment situation of the female and male labor force. As earlier mentioned, men and women vary in the way they allocate themselves into these classes of work: men workers were more likely to be salaried workers in private establishments and women workers were more concentrated than men in informal sector employment which is characterized by lack of social security, low pay and precariousness of employment. Tables 3.1 to 3.5 present the marginal effects of the socioeconomic individual, family and regional characteristics estimated from the multinomial probit model on employment states for the male and female samples.

Education

The findings reveal that the high likelihood to be in informal sector employment is attributed to insufficient human capital, but more so for the women than for men workers. Among the least educated women in the labor force (i.e. those that have either no education or who did not complete primary education), almost half are likely to be in informal sector employment and 24 percent are likely working in private households which is also characterized by low levels of remuneration and lack of collective representation (Figure 20). Another 27 percent of these women are likely to be in paid employment in private establishment and only 11 percent are likely to be working in government.

The marginal effects show that the more significant dips in the likelihood of informal employment for women is associated with the attainment of a diploma. Compared with the least educated, women who obtained a primary or secondary education diploma are 3-4 percentage points less likely to be in informal sector employment. The magnitude of the negative effect of higher education on informal sector employment is more than six times for those that obtained a college diploma which is associated with a 23 percentage points decline in the likelihood of informal work compared to the least educated. This indicates that completion of tertiary education is very critical to transitioning women from informal sector to formal sector employment.

For the male labor force who had no elementary education diploma, the likelihood of being in informal sector employment is 42 percent which is lower than that of their female counterpart (Figure 21). Unlike the women, where statistically significant declines in the probability of informal sector employment is associated with the attainment of a diploma, that for the males showed statistically significant marginal effects with increasing levels of education. Compared with the least educated, men in the labor force with an elementary diploma are 4 percentage points less likely to be in informal sector employment and those with between some high school and some college education were 6-7 percentage points less likely to be informally employed. The drop in the likelihood of informal sector employment among the male labor force is more pronounced upon obtaining a college diploma, but the magnitude of the drop at 15 percentage points compared to the least educated is lower than that for the female labor force.



The effect of education is reversed for paid employment in the government sector. Workers with lower than college education are less likely to be employed in the public sector. The likelihood of a job in the government sector is less than 2 percent for those with no education or elementary education diploma and less than 10 percent for those who completed secondary education.

Increasing education also significantly increases the likelihood of working in the public sector with the more pronounced uptakes observed for college graduates, and with larger effects for female than male workers. Relative to the least educated, the attainment of a college diploma increases the likelihood of working in the government sector by 32 percentage points for the women and 17 percentage points for the men.

Table 3.1: Average marginal effects from the MNP model of male and female employment states (Informal sector employment)

Variable	Female		Male	
	Coeff	se	coeff	se
Age group				
15-19 (Reference category)				
20-24	-0.051***	0.016	-0.068***	0.010
25-29	0.017	0.018	-0.030***	0.011
30-39	0.119***	0.017	0.029***	0.011
40-49	0.208***	0.017	0.113***	0.012
50-65	0.283***	0.017	0.217***	0.012
Education				
Elementary undergraduate (Ref. category)				
Elementary graduate	-0.038***	0.012	-0.041***	0.008
High school undergraduate	0.002	0.013	-0.058***	0.008
High school graduate	-0.028**	0.011	-0.070***	0.008
College undergraduate	-0.016	0.014	-0.062***	0.010
College graduate	-0.226***	0.012	-0.154***	0.009
Whether currently attending school				
No (Reference category)				
Yes	0.320***	0.023	0.020	14.040
Marital status				
Married (Reference category)				
Never in union	-0.166***	0.010	-0.051***	0.007
Separated/annulled/widowed/others	-0.094***	0.010	-0.061***	0.012
Per capita HH income decile				
First				
Second	-0.069***	0.014	-0.068***	0.009
Third	-0.054***	0.014	-0.101***	0.010
Fourth	-0.070***	0.014	-0.090***	0.010
Fifth	-0.064***	0.015	-0.092***	0.011
Sixth	-0.050***	0.015	-0.098***	0.011
Seventh	-0.052***	0.016	-0.097***	0.012
Eighth	-0.027*	0.016	-0.055***	0.012
Ninth	-0.035**	0.017	-0.032**	0.013
Tenth	-0.102***	0.017	-0.027*	0.015
Place of residence				
Rural (Reference category)				

Urban	-0.049***	0.007	-0.113***	0.005
-------	-----------	-------	-----------	-------

*statistically significant at .10 level; **at .05 level; ***at .01 level

Variable	Female		Male	
	Coeff	se	coeff	se
Continuous variables				
HH members 3 years old and below	0.003	0.006	-0.020***	0.004
HH members 4 to 6 years old	0.014**	0.006	-0.005	0.005
HH members 7 to 12 years old	0.006	0.004	-0.003	0.003
HH members 13 years old and above	-0.019***	0.002	-0.003	0.001
Regional unemployment rate, 2014	-0.015***	0.003	-0.008***	0.002
Female-male gap in unemployment rate, 2014	0.023***	0.005	0.014***	0.003
Industry–Agriculture output share gap, 2014	-2.8E-04	1.8E-04	-0.001***	0.000
Services-Agriculture output share gap, 2014	-3.2E-04	2.4E-04	-0.002***	0.000

*statistically significant at .10 level; **at .05 level; ***at .01 level

Table 3.2: Average marginal effects from the MNP model of male and female employment states (Paid employment in government)

Variable	Female		Male	
	Coeff	se	coeff	se
Age group				
15-19 (Reference category)				
20-24	0.034***	0.005	0.013***	0.003
25-29	0.061***	0.006	0.024***	0.003
30-39	0.068***	0.005	0.031***	0.003
40-49	0.101***	0.006	0.052***	0.004
50-65	0.122***	0.006	0.070***	0.004
Education				
Elementary undergraduate (Ref. category)				
Elementary graduate	0.010***	0.002	0.010***	0.002
High school undergraduate	0.032***	0.004	0.017***	0.003
High school graduate	0.047***	0.003	0.033***	0.002
College undergraduate	0.093***	0.007	0.066***	0.005
College graduate	0.321***	0.008	0.166***	0.006
Whether currently attending school				
No (Reference category)				
Yes	-0.048***	0.016	-0.008	0.011
Marital status				
Married (Reference category)				
Never in union	-0.022***	0.005	-0.002	0.003
Separated/annulled/widowed/others	-0.005	0.006	-0.007	0.004

Variable	Female		Male	
	Coeff	se	coeff	se
Per capita HH income decile				
First				
Second	-3.4E-04	0.008	0.008**	0.003
Third	0.007	0.008	0.008***	0.003
Fourth	0.004	0.008	0.014***	0.004
Fifth	0.015*	0.008	0.020***	0.004
Sixth	0.009	0.008	0.031***	0.004
Seventh	0.023***	0.008	0.037***	0.005
Eighth	0.049***	0.009	0.052***	0.005
Ninth	0.064***	0.010	0.069***	0.006
Tenth	0.057***	0.010	0.088***	0.007
Place of residence				
Rural (Reference category)				
Urban	-0.054***	0.004	-0.014***	0.002
Continuous variables				
HH members 3 years old and below	0.005*	0.003	0.003*	0.002
HH members 4 to 6 years old	0.005	0.003	0.007***	0.002
HH members 7 to 12 years old	0.006***	0.002	0.006***	0.001
HH members 13 years old and above	0.004**	0.001	0.002***	0.001
Regional unemployment rate, 2014	-0.004***	0.002	-0.001***	0.001
Female-male gap in unemployment rate, 2014	0.020***	0.002	0.010***	0.001
Industry –Agriculture output share gap, 2014	2.0E-04**	0.000	1.3E-04***	0.000
Services-Agriculture output share gap, 2014	0.001***	0.000	1.9E-04***	0.000

*statistically significant at .10 level; **at .05 level; ***at .01 level

Table 3.3: Average marginal effects from the MNP model of male and female employment states (Paid employment in private establishments)

Variable	Female		Male	
	Coeff	se	coeff	se
Age group				
15-19 (Reference category)				
20-24	0.065***	0.017	0.068***	0.011
25-29	0.021	0.018	0.034***	0.012
30-39	-0.100***	0.018	-0.027***	0.012
40-49	-0.215***	0.018	-0.123***	0.012
50-65	-0.274***	0.018	-0.239***	0.012

Variable	Female		Male	
	Coeff	se	coeff	se

Education

Elementary undergraduate (Ref. category)

Elementary graduate	0.002	0.012	0.025***	0.008
High school undergraduate	-0.040***	0.012	0.032***	0.009
High school graduate	0.014	0.011	0.023***	0.008
College undergraduate	0.036***	0.014	-0.028***	0.011
College graduate	0.078***	0.012	-0.032***	0.010

Whether currently attending school

No (Reference category)

Yes	-0.212***	0.017	-0.258***	0.018
-----	-----------	-------	-----------	-------

Marital status

Married (Reference category)

Never in union	0.107***	0.010	0.029***	0.007
Separated/annulled/widowed/others	0.056***	0.010	0.052***	0.012

Per capita HH income decile

First

Second	0.055***	0.014	0.057***	0.009
Third	0.032**	0.014	0.083***	0.010
Fourth	0.056***	0.014	0.074***	0.010
Fifth	0.052***	0.015	0.066***	0.011
Sixth	0.059***	0.015	0.057***	0.011
Seventh	0.061***	0.015	0.054***	0.012
Eighth	0.029*	0.016	-0.008	0.012
Ninth	-0.007	0.016	-0.051***	0.013
Tenth	-0.079***	0.015	-0.101***	0.014

Place of residence

Rural (Reference category)

Urban	0.079***	0.007	0.111***	0.006
-------	----------	-------	----------	-------

Continuous variables

HH members 3 years old and below	-0.005	0.005	0.015***	0.004
HH members 4 to 6 years old	-0.022***	0.006	0.002	0.005
HH members 7 to 12 years old	-0.010***	0.004	-0.004	0.003
HH members 13 years old and above	0.010**	0.002	-0.001	0.001
Regional unemployment rate, 2014	0.015***	0.003	0.008***	0.002
Female-male gap in unemployment rate, 2014	-0.039***	0.005	-0.022***	0.004
Industry –Agriculture output share gap, 2014	-8.9E-05	0.000	0.001***	0.000
Services-Agriculture output share gap, 2014	-0.001***	0.000	0.002***	0.000

*statistically significant at .10 level; **at .05 level; ***at .01 level

Table 3.4: Average marginal effects from the MNP model of male and female employment states (Paid employment in private households and family farm or business)

Variable	Female		Male	
	coeff	se	coeff	se

Age group

15-19 (Reference category)				
20-24	-0.038***	0.010	-0.005**	0.003
25-29	-0.060***	0.011	-0.005*	0.003
30-39	-0.025**	0.011	-0.001	0.003
40-49	-0.024**	0.011	-0.005*	0.003
50-65	-0.059***	0.011	-0.007**	0.003

Education

Elementary undergraduate (Ref. category)				
Elementary graduate	0.026***	0.010	0.007***	0.002
High school undergraduate	-0.001	0.011	0.004*	0.002
High school graduate	-0.041***	0.009	0.005**	0.002
College undergraduate	-0.131***	0.010	0.000	0.002
College graduate	-0.188***	0.008	-0.010***	0.002

Whether currently attending school

No (Reference category)				
Yes	-0.047***	0.009	0.000	0.004

Marital status

Married (Reference category)				
Never in union	0.069***	0.007	0.014***	0.002
Separated/annulled/widowed/others	0.037***	0.006	0.009***	0.003

Per capita HH income decile

First				
Second	0.023***	0.007	0.002	0.002
Third	0.024***	0.007	0.005***	0.002
Fourth	0.023***	0.008	0.004**	0.002
Fifth	0.011	0.008	0.005***	0.002
Sixth	3.4E-04	0.008	0.010***	0.002
Seventh	-0.010	0.008	0.007***	0.002
Eighth	-0.029***	0.007	0.016***	0.003
Ninth	0.008	0.009	0.022***	0.004
Tenth	0.156***	0.013	0.050***	0.006

Place of residence

Rural (Reference category)				
Urban	0.018***	0.004	0.005***	0.001

Variable	Female		Male	
	Coeff	se	coeff	se
Continuous variables				
HH members 3 years old and below	-0.003	0.003	0.001	0.001
HH members 4 to 6 years old	0.006*	0.003	-0.001	0.001
HH members 7 to 12 years old	-0.001	0.002	0.001*	0.001
HH members 13 years old and above	0.006**	0.001	0.002***	0.000
Regional unemployment rate, 2014	0.002	0.002	-3.3E-04	0.001
Female-male gap in unemployment rate, 2014	-0.005	0.003	-0.001	0.001

Industry –Agriculture output share gap, 2014	9.8E-05	0.000	-8.7E-06	0.000
Services-Agriculture output share gap, 2014	0.001***	0.000	0.000**	0.000

*statistically significant at .10 level; **at .05 level; ***at .01 level

Table 3.5: Average marginal effects from the MNP model of male and female employment states (Unemployed)

Variable	Female		Male	
	Coeff	se	coeff	se
Age group				
15-19 (Reference category)				
20-24	-0.011	0.009	-0.008*	0.004
25-29	-0.039***	0.009	-0.022***	0.005
30-39	-0.062***	0.009	-0.032***	0.005
40-49	-0.069***	0.009	-0.037***	0.005
50-65	-0.073***	0.009	-0.041***	0.005
Education				
Elementary undergraduate (Ref. category)				
Elementary graduate	3.3E-04	0.002	5.0E-05	0.001
High school undergraduate	0.008***	0.002	0.005***	0.001
High school graduate	0.007***	0.002	0.009***	0.001
College undergraduate	0.017***	0.003	0.023***	0.003
College graduate	0.016***	0.002	0.030***	0.003
Whether currently attending school				
No (Reference category)				
Yes	-0.013***	0.001	-0.009***	0.001
Marital status				
Married (Reference category)				
Never in union	0.011***	0.002	0.011***	0.002
Separated/annulled/widowed/others	0.006*	0.003	0.007**	0.004
Per capita HH income decile				
First				
Second	-0.008	0.006	0.001	0.003
Third	-0.009	0.006	0.005*	0.003
Fourth	-0.014**	0.006	-0.002	0.002
Fifth	-0.013**	0.006	0.001	0.003
Sixth	-0.019***	0.005	3.1E-04	0.003
Seventh	-0.022***	0.005	-0.002	0.003
Eighth	-0.023***	0.005	-0.005**	0.002
Ninth	-0.030***	0.005	-0.008***	0.002
Tenth	-0.032***	0.005	-0.011***	0.002
Place of residence				
Rural (Reference category)				

Urban	0.006***	0.002	0.011***	0.001
Continuous variables				
HH members 3 years old and below	-1.7E-04	0.001	0.001	0.001
HH members 4 to 6 years old	-0.003**	0.001	-0.002**	0.001
HH members 7 to 12 years old	-0.001	0.001	-0.001	0.001
HH members 13 years old and above	2.8E-04	0.000	0.001**	0.000
Regional unemployment rate, 2014	0.003***	0.001	0.002***	0.000
Female-male gap in unemployment rate, 2014	4.5E-04	0.001	-0.001	0.001
Industry –Agriculture output share gap, 2014	7.3E-05*	0.000	6.9E-05**	0.000
Services-Agriculture output share gap, 2014	-5.9E-05	0.000	-7.8E-05**	0.000

*statistically significant at .10 level; **at .05 level; ***at .01 level

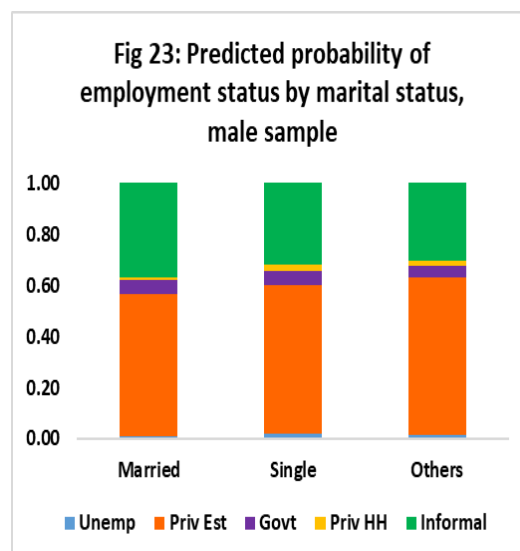
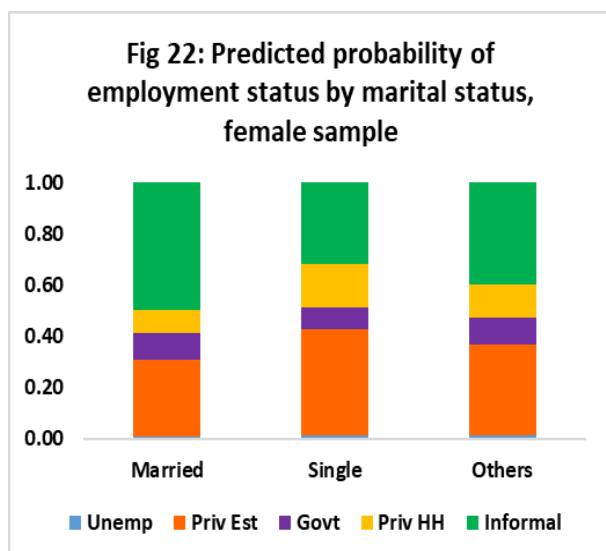
Paid employment in the private households and in private establishments are also important sources of employment for the lower educated women, accounting for about a fourth of the female labor force who have less than secondary education. Further education increases the likelihood of women to be working in private establishments and decreases the likelihood of working in private households. Relative to the least educated, having some college education increases the likelihood of working in private establishments by 4 percentage points and decreases the likelihood of working in private households by 13 percentage points, while a college diploma increases the probability of working in private establishments by 8 percentage points and decreases the probability of working in private households by 19 percentage points.

Private establishments are the largest provider of jobs while the private households are the least source of employment for the male labor force across all education levels. Males with either no education or who did not complete primary education are 54 percent more likely to work in private establishments, with the likelihood peaking at 59 percent for those with some high school education before declining to 52 percent for some college education and 50 percent for the college graduates.

Marital status

Marital status matters for employment states for the female labor force but does not figure prominently for the male labor force where the large majority are working in the private establishments and to a substantial extent in the informal sector regardless of their marital status (Figures 22 and 23). For the female labor force, currently married women are the most likely to take up employment in the informal sector and the least likely to take up paid work in the private establishment or private households. Compared with the currently married women, the likelihood of informal sector employment is significant lower by 9 percent points for those who are separated and divorced and by 17 percentage points for the never married female labor force. The greater flexibility of hours and location of work in informal sector employment makes it more compatible with childcare and housework which augurs well for currently married women.

By contrast, the likelihood of salaried employment in private establishments and in private households is highest for single women followed by those who are separated or widowed. Compared to currently married women, those who are never married are 11 percentage more likely to be in salaried employment in private establishments and 7 percentage more likely in private households. Those who are separated from their partners also have a higher likelihood of salaried employment compared to currently married women by 6 percentage points for employment in private establishments and 4 percentage points for employment in private households.



The likelihood of working in the government sector by women is not reduced by marriage. Currently married women are 11 percent more likely to take up work in the public sector compared with 10 percent for the separated and widowed and 8 percent for the never-married women. The government sector is an important source of employment for women, particularly for the currently married or ever-married women. The work environment policy in government sector seems to augur better for women workers who are provided with a more stable employment, better remuneration, maternity protection and greater availability of day care facilities.

5.2 Cultural determinants of female employment status

The use of the merged LFS and FIES survey datasets in the previous section suffers from an important data constraint in that neither survey collects information reflecting cultural factors such as religion and indicators of patriarchy. To examine the effect of cultural factors on the female labor force participation, the paper utilizes the National Demographic and Health Survey to supplement the empirical analysis provided by the merged LFS and FIES data.

This section focuses on the effects of culture as indicated by religion and a patriarchy index constructed by principal component analysis on a few questions on the dominance of men in decision making, on female labor force participation. The dependent variable is employment status and indicated by an affirmative answer to any of the following NDHS questions:

- (a) Aside from your own housework, have you done any work in the last seven days?
- (b) As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?
- (c) Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?

The 2017 NDHS included a sample of 25, 074 women aged 15 to 49 years old, of which 15,445 were currently married. The descriptive statistics of the dependent, main independent and control variables are shown in Table 4. About 62 percent of the sampled women in reproductive age were currently married or in consensual union, 34 percent were never married, and 4 percent were

separated/annulled/widowed. Employment rates were lower for the currently married women sample which was at 49 percent than the all women sample at 55 percent. As expected, currently married women were more likely to be pregnant, and to have very young children 3 years old and below and a larger family size. Compared to the all women sample, the currently married sample were older on average (35 years old vs. 30 years old) and had less education (e.g. the percent with less than secondary education was 18 percent for the all women sample and 22 percent for the currently married sample while the percent with at least some college education was 30 percent for the all women sample and 26 percent for the currently married sample).

Table 4: Descriptive Statistics

Variable	All women (N= 25,074)	Currently married women (N=15,445)
Employment status	<u>100%</u>	<u>100%</u>
Employed	54.63	49.33
Not employed	45.37	50.67
Education		
Elementary undergraduate	9.03	12.04
Elementary graduate	7.59	10.03
High school undergraduate	25.06	15.97
High school graduate	28.45	35.64
College undergraduate	13.27	10.55
College graduate	16.60	15.77
Marital status		
Married	61.60	
Never in union	34.50	
Separated/annulled/widowed	3.90	
Pregnancy status		
Pregnant	4.01	6.09
Not pregnant	95.99	93.91
Presence of Young Kids 3 years and below		
No	78.36	67.38
Yes	21.64	32.62
Religion		
Roman Catholic	72.35	72.29
Protestant and other Christian	12.35	12.55
Iglesia ni Cristo	2.9	2.87
Muslim	9.26	8.81
Others	3.15	3.47
Patriarchy Index		
Low		26.14
Moderate		36.31
High		37.55

Media exposure		
Lowest	20.28	24.35
Lower	19.9	21.23
Moderate	20.02	21.89
Higher	22.33	18.75
Highest	17.48	13.78
Place of residence		
Rural	64.04	67.03
Urban	35.96	32.97
Wealth index		
Poorest	23.65	27.61
Poorer	21.9	23.11
Middle	19.37	19.02
Richer	18.25	16.68
Richest	16.83	13.58
% own house and/or lot		
Do not own house or lot	63.05	45.28
Woman own house or lot jointly with others	20.36	31.54
Woman house or lot alone	16.58	23.18
Education of partner		
Less than elementary graduate		18.83
Elem graduate		11.32
Some high school		14.62
High school graduate		32.03
Some college		9.68
College graduate		13.53
Occupation of partner		
No work		3.14
Domestic work		24.71
Agriculture		7.28
Skilled worker		14.32
Clerk and services		31.16
Manager		11.96
Professional occupations		7.44
Continuous variables		
Age	30.13	34.52
Number of children still living	1.82	2.73
Regional unemployment rate	5.07	5.03
Female-male gap in unemployment rate	0.11	0.14
Industry-Agriculture output share gap	15.26	15.43
Services-Agriculture output share gap	31.74	30.93

Culture variables include religion for the all-women sample and both religion and patriarchy index for the currently married sample. Roman Catholics were the largest religious group comprising of

72 percent of the total sample, followed Protestant and other Christian groups at 12 percent, Islam which took 9 percent, and Iglesia ni Cristo at 3 percent. Another variable reflecting culture is patriarchy index which is a composite variable reflecting the dominance of men in household decision making and is applicable only for the currently married women sample. About 38 percent of the currently married women were in highly patriarchal family structures and another 37 percent had moderate levels of patriarchy index.

The level of exposure to media (e.g. newspaper, radio, TV, internet) is also a composite index constructed by principal component analysis and is lower for the currently married sample than for the all women sample (e.g. 33 percent of currently married women had high media exposure compared to about 40 percent for the all women sample). For control variables, the descriptive statistics indicate that two-thirds of the women were residing in rural areas, with a higher percentage of currently married women in poorer households (e.g. 28 percent of currently married women were in the poorest wealth quintile compared with 24 percent for the all women sample while 30 percent of currently married women were in the richest two quintiles compared with 35 percent of the all women sample), but a higher percentage of currently married women who owned a house or lot, either alone or jointly with others.

The estimates of average marginal effects of socioeconomic, demographic and cultural factors on employment rates are presented in Table 5.

Education

As in the previous section, education is a strong determinant of female employment, but with differing effects by educational level which vary for the all-women sample and the currently married sample. For the latter, a college degree is the only educational level that has a positive and statistically significant effect on employment. A married woman with a college diploma is 54 percentage points more likely to be employed than those with less than elementary education. For the all-women sample which includes never married women, the marginal effects demonstrate a positive diploma effect of both secondary and tertiary education, and the negative effects of being in school. Compared to the least educated with less than elementary education, the undergraduates are less likely to be employed by 7 percentage points for high school and 4 percentage points for college, while attainment of a diploma increases the probability of employment by 3 percentage points for completion of a secondary education and 21 percentage points for completion of a tertiary education.

The findings point to the importance of investing in the education of women towards the attainment of a diploma in secondary education and more so in tertiary education which generated the largest positive effects on female employment. This would require public programs that would increase geographic accessibility of higher level and quality education as well as the reshaping of mindsets particularly in the rural areas of the economic value in investing in the education of women.

“My mother was raised in a rural farm in Batangas, not far from the town. Her father did not send her to school even if she wanted to, because he said she is a woman and will eventually get married. But her brother was provided financially until he completed college. This is sad. My mother worked as a dressmaker and raised enough funds to send my father to college. He is now an accountant. Because of my mother’s passion for education, she invested in all of our education.”
[HR personnel ID04]

“Ang dami pang remote areas na dapat pang marating ng education. Ang mga indigenous peoples dito ay walang access sa quality education. Hindi sa ayaw nilang mag-aral, kaya lang walang teacher.”
[Entrepreneur, Community leader ID07]

“Dito sa amin, ang mga teachers ay galing pa ng City. Darating sila ng 9:00 am tapos uuwi

ng 3:00 pm kasi mahaba ang travel. Anong matutunan ng mga estudyante doon?

[Entrepreneur, Community leader ID07]

“Schools are located very far from IP communities. And the IP youth do not have the funds for transportation and food. They cannot sustain going to school in the cities. So, they just stay in the areas – to plant and the get contented because they can eat and survive. There are scholarships for IPs but this is largely limited to tuition. The funds do not include allowance for daily living expenses.”

[Entrepreneur ID47]

Table 5: Average marginal effects from the probit model of women employment status

Variable	Total women sample		Currently married sample	
	Coeff	se	coeff	se
Education				
Elementary undergraduate (Ref. category)				
Elementary graduate	-0.015	0.017	-0.048	0.048
High school undergraduate	-0.071***	0.015	0.029	0.044
High school graduate	0.028**	0.014	0.048	0.043
College undergraduate	-0.038**	0.016	0.061	0.053
College graduate	0.210***	0.016	0.542***	0.054
Marital status				
Married (Reference category)				
Never in union	0.090***	0.012		
Separated/annulled/widowed/others	0.190***	0.016		
Presence of kids 3 yrs. old and below				
No (Reference category)				
Yes	-0.155***	0.010	-0.444***	0.027
Pregnancy status				
Not pregnant (Reference category)				
Pregnant	-0.127***	0.018	-0.367***	0.048
Wealth index				
Poorest (Reference category)				
Poorer	0.016	0.011	0.116***	0.032
Middle	0.018	0.012	0.190***	0.037
Richer	0.020	0.013	0.218***	0.043
Richest	0.051***	0.014	0.225***	0.051
Ownership of house and/or lot				
Do not own house or lot (Ref category)				
Woman jointly own house and/or lot	0.083***	0.010	0.195***	0.027
Woman alone own house and/or lot	0.049***	0.010	0.089***	0.029
Media exposure				
Lowest (Reference category)				
Lower	-0.006	0.011	0.022	0.033
Moderate	0.004	0.011	0.050	0.033
Higher	0.039***	0.012	0.182***	0.037
Highest	0.044***	0.013	0.221***	0.041
Place of residence				
Rural (Reference category)				
Urban	0.025***	0.008	-0.007	0.027

Table 5: Average marginal effects from the probit model of women employment status

Variable	Total women sample		Currently married sample	
	Coeff	se	coeff	se
Religion				
Roman Catholic (Reference category)				
Protestant and other Christian	0.039***	0.011	0.138***	0.033
Iglesia ni Cristo	0.018	0.020	-0.015	0.064
Muslim	-0.128***	0.017	-0.328***	0.053
Others	0.046**	0.019	0.151**	0.059
Education of partner				
Elem undergrad (Reference category)				
Elem graduate			-0.020	0.042
Some high school			-0.025	0.040
High school graduate			-0.049	0.038
Some college			-0.054	0.050
College graduate			-0.115**	0.052
Occupation of partner				
No work (Reference category)				
Domestic work			-0.110	0.074
Agriculture			-0.028	0.081
Skilled worker			-0.096	0.077
Clerk and services			0.079	0.075
Manager			0.093	0.077
Professional occupations			0.054	0.081
Patriarchy Index				
Low (Reference category)				
Moderate			-0.077***	0.028
High			-0.129***	0.028
Continuous variables				
Number of children still living	0.003	0.003	0.007**	0.003
Regional unemployment rate	-0.059***	0.005	-0.069***	0.006
Female-male gap in unemployment rate	-0.020***	0.006	-0.014*	0.007
Industry-Agriculture output share gap	0.0008***	0.0002	0.001***	0.000
Services-Agriculture output share gap	0.0008***	0.0002	0.001*	0.000

*statistically significant at .10 level; **at .05 level; ***at .01 level

“Sa amin pong Teduray na IPs, ang schedule po ng mga teachers ay Tuesday or Wednesday at uuwi na ng Thursday. Hindi po sila araw araw pumupunta. Hanggang elementary education lang po ang tinuturo. Pero kulang ang quality. Katulad ng pamangkin ng asawa ko. Nag-graduate siya doon ng valedictorian pero pagdating dito sa City ay nahihirapan siya. Tinuturuan pa siya ng anak ko na grade 4 ng computer.”

[IP community leader ID09]

"We would like to work if given the opportunity. But we do not have the education or the skills."

[Housewife ID42]

"Ang dahilan po kasi kaya maraming uneducated ay hindi nila pinag-aaral ang kanilang mga anak at baka ma Christianized...baka gagawa ng bawal sa Islam kagaya ng pagkakain ng baboy."

[Housewife ID22]

"Mababa po talaga ang edukasyon sa karamihan. Iba ang mga mentalidad ng parents nila noon."

[Muslim Entrepreneur, Community leader ID26]

"Kadalasan po kasi hindi na pinapaaral ang mga anak kasi nahirapan din po sa pamasaha. Malalayo po ang mga schools."

[Housewife ID21]

Marital status and the presence of young children

As in labor force participation, married women are less likely to be employed by 9 percentage points compared with the never married women and by 19 percentage points compared with those who are separated/annulled or widowed. The presence of young children has a strong significant negative effect on employment with even larger effects for currently married women. Having a child 3 years and below reduces the probability of female employment by 16 percentage points for the all women sample and by 44 percentage points for the currently married sample. The larger negative effect of young children on currently married women may be attributed to additional pressure engendered by the conjugal partner to subscribe to traditional gender roles of women having the primary responsibility for childrearing and of men as the economic provider for the family.

"There is still a prevailing mindset that the head of the family should be the breadwinner. So if the man is not broad minded, then he demands that his wife stay at home to care for the children as he works to provide for the family. "

[Entrepreneur, mentor, ID10]

"My sister's husband demanded that she stopped from working to take care of children because he said he is earning enough to provide for the needs of the household. So she stopped working."

[Entrepreneur ID11]

"I used to earn a lot as a manager in a company. The nature of my work then was sales, so I traveled often. Eventually, I was offered a position that will double my salary. The higher we go up, the lesser time we have for our families. I felt guilty often. I choose my family over my work, when my husband told me that I need to give time for myself and my family. Women who works at the top in the corporate world are more likely to be in a broken family or single."

[Entrepreneur, mentor, ID10]

"I believe it is my role as a mother to care for my children. I also felt a sense of guilt because our eldest son preferred to sleep with the nanny because I needed to go to work early in the morning when he is still asleep and I go home so late at night when he is already asleep. And the guilt has become so strong that this also affected my concentration at work so eventually I resigned from my work."

[Entrepreneur, mentor, ID47]

"Women who are working are likely to take a leave from work to take care of the children. The husbands are not hands-on with childrearing. If our spouses or children are sick, we take a leave from work to care for them. If we are sick, nobody takes care of us and we sometimes still go to work. It is unfair. My women employees take a leave from work if there is a family-related problem".

[Entrepreneur ID11]

Traditional society expects married women to prioritize domestic care not only for their children but also their husbands over their economic work. The pressure for working mothers to spend more time for home and child care are coming not only from their spouses but also from their children, who perceive that the proper place of mothers is at the home.

"I am separated from my partner. My child says it could have been better if I and his father are together because then I do not have to work and could spend more time for them. His perception is influenced by the books he read in school."

[Officer, Online Freelancers ID12]

"Husbands really demand time for them and the children. Even my child has this perception that the mothers should stay at home and they learn this from school. From the beginning of early education, they were taught that mothers should stay at home."

[Entrepreneur ID11]

"Both my parents were working full time away from home when I was in high school and I was left with the nanny who took care of the housework. In school, I observed that those who performed academically well are always accompanied by their mothers and upon asking, I was informed that their mothers stay at home and tutor them. So at that young age, I thought that if my mother did not work and stayed at home, I would have done really well in school."

[Interviewer: Both your parents are working outside of the home. Why did you blame only your mother and not your father?]

"Because this is what I observed in school. I see mothers accompanying their children to school and I learned that for those who did well, that their mothers stay at home to take care of them."

[Young government official, ID92]

Patriarchal culture

Strong patriarchal values of the dominance of men over women appear to be a significant determining factor that explains the much lower likelihood of currently married women to participate in the labor force compared with either never married women or women who are widowed or separated from their partners or husbands. For the currently married sample, the regression model includes a patriarchy index variable which is constructed by principal component analysis from four decision making questions relating to husband's earnings, large household purchases, visits to family and relatives and the wife's health care. The highest score is attached to decisions made by the husband or partner, and the lowest score is attached to decisions made by the wife.

The regression results show that a strong patriarchal family culture has a statistically significant negative effect on the labor force participation of married women. Married women espousing the traditional values of the more authoritarian role of men in the family are less likely to work, with the larger effects for stronger patriarchal cultures. Compared with married women with low patriarchy index, those with moderate levels of patriarchy have lower labor force participation rates by 8 percentage points and by 13 percentage points for those with the highest patriarchy index.

Engagement in the labor force by women economically empowers them to actively participate in decision making with respect to every aspect of their individual and family life and to stand up against their subjugation. If a woman earns more than her husband, it contravenes the stereotyped gender role of men as the primary breadwinner and tended to breed insecurity among the husbands particularly those that espouse strong patriarchal values of the dominance of men over women. Some husbands felt emasculated or diminished by their lower earning capacities relative to their spouses, which engenders conjugal conflicts that may lead to married women giving up their work to preserve the family.

At the end of the day, my husband is still the boss. When it comes to decision making, I submit to my husband. We discuss things in regard to the house and in business. But he has the last say.... Although my husband tells me I always argue with him, at the end of the day he has the last say. I always defer to his opinion and decision. I submit to my husband as this will bring peace and happiness for the family. Sometimes this is unfair. But if this is the way to keep your family, then this has to be done."

[Entrepreneur, employer, ID45]

"I was promoted to a Sales Manager before. But my husband felt insecure about my higher job position. He said that he is often teased by his friends that he is just rank and file and married to a wife who is a manager. It is difficult. The society makes a husband feel that he is a failure and incapable just because his wife is earning more than he does. He keeps telling me I have no more time for the children. He made me feel guilty by telling me that I should have attended our child's graduation. So I looked for another job."

[Officer, Online Freelancers ID12]

"I am a businesswoman, and my husband is a government employee. There was a point in time when I was earning more than he does. I hired more workers and I managed them. Because I am their employer, the workers have a high regard for me and they follow me. Neighbors compare our earnings and they talk how little he earns as a government employee. This caused a strain in our relationship and we quarrel often. This was very stressful because you have to think not only about your business and your children but at

the same time struggle with your husband's insecurity. He tells me often that all my time is spent on business and that I no longer has time for him. So even if the business was doing very well at that time, the conjugal quarrels have become too burdensome that I decided to give up and turned over the business to my husband for him to decide what to do with it. Nowadays, I make and sell pineapple jams."

[Entrepreneur ID47]

"There was a time when I was working as a manager. I noticed that the nanny I hired does not have a good influence on my children in their behavior and speech. We have been very busy and could no longer supervise the children. My relationship with my husband was also strained because my higher job position and salary is causing some insecurity in him. He said I no longer listen to him and this resulted in extra marital relationship. So, I decided then to give up my job."

[Entrepreneur ID11]

"I know of many housewives who are struggling between the pressure of meeting the needs and expectations of the husband and the pressure of the demands for work. Most women just give up work to preserve the family. Before I got married, I worked for Mercury Drugstore and used to working overtime. After getting married, my long hours of work did not sit well with my husband who asked me to give up my work. My husband expected more time to be spent for him and the children. I loved my work but decided to give up my career to preserve my family."

[Entrepreneur ID47]

"I think it is normal for husbands to feel insecure when their wives are earning more than they do, because society dictates that it is the man who should provide for the family."

[Government official ID13]

The insecurities of husbands may be negatively manifested not only in mental abuse but also verbal and physical abuse of wives that adversely affect their work productivity and performance.

"Some working women are victims of domestic abuse, e.g., jealousy, physical and emotional battering, hence, they are forced to stop from working. Some husbands have vices/ on illegal drugs, becoming impediment to women's normal productive functioning."

[Respondent from Women's NGO]

When I was working in a company before, and there were emergency meetings, it is very difficult to make husbands understand why you cannot come home early. They become jealous and suspicious that we may be having some extra marital affairs, especially since we really look very pleasant when we go to the office, the insecurities builds up. It will come to the point where it becomes so demoralizing especially when the husbands resort to verbal abuse at home and sometimes in the workplace. I experienced it and I lost my dignity at work and was pressured to resign.

[Entrepreneur, ID41]

The penalty for pregnancy and motherhood

Pregnancy and motherhood appear to be penalized in the workplace. Pregnancy is associated with a reduction in the likelihood of employment by 13 percentage points for the all-women sample and by 37 percentage points for the currently married sample. The discrimination against hiring pregnant women was revealed in the narratives by the FGD Human Resource Personnel participants, as pregnancy is associated with lower productivity, the higher likelihood of taking sick

leaves, absences and tardiness, and of resigning after a childbirth:

“In my industry, we have a silent rule. If the applicant is pregnant you have to find a way to say “no” to the applicant. We do not ask a direct question ‘Are you pregnant?’, but we ask them a set of questions that would identify their pregnancy status. For example, we ask them if they are willing to undergo a complete physical and medical examination. Pregnant women will not undergo an X-ray examination. We cannot reject an applicant because she is pregnant. What we tell her is that an X-ray examination is part of the requirement for selection.”

[HR Personnel ID01]

“In the BPO industry, it is difficult to hire pregnant women especially for graveyard shifts.”

[HR Personnel ID02]

“A pregnant woman needs to have some regular or emergency medical check-up. This is a management cost and a risk, as clients would require a certain manpower headcount in each day. Pregnant women are considered a liability because they go on sick leave.”

[HR Personnel ID01]

“When a pregnant woman gives birth, she takes a maternity leave. And if this is her first childbirth, then she is expected to apply for an extended leave to take care of the baby. We waited for her to return to work after her maternity leave, and she comes back only to tender her resignation....to take care of the baby. So, this is back to square one for the recruitment process.”

[HR Personnel ID03]

“When a recruiter hires a pregnant woman who later goes on leave or resigns from work, the recruiter is penalized by a lower performance rating which is the basis for a future salary raise.”

[HR Personnel ID04]

“Mahirap makahanap ng trabaho ang babae kapag buntis. Kasi nga po kapag buntis ang isang babae, limited lang ang kanyang kayang gawin. Halimbawa sa isang factory, trimmer siya, hindi siya pwede magbuhat ng bundle-bundle na ititrim niya kundi, seserbisyuhan pa siya ng iba kasi kung anuman ang mangyayari sa kanya, pananagutan pa ng kumpanya. Puwedeng baligtarin ang kumpanya, idedemanda pa rin ng worker ang company dahil, pinagbubuhat siya. Kaya doble-doble ang trabaho. Kapag nasa group production chain siya, affected ang kabuuan ng finished product –dumaan sa trimmer, susunod diyan bubutonesan, pagka mabagal yung nagtitrim may problema na naman sa packaging at sa shipment. Malaking epekto po talaga”

[Community leader, entrepreneur and husband participant ID06]

Women who are pregnant are discouraged from applying for work because they anticipate discrimination or rejection from being selected into employment.

Pregnant women know that their chances of getting hired are slim. So, they no longer apply for work when they are pregnant. They just wait until they give birth.”

[HR personnel ID07]

Religion

Other than degree of a patriarchal family structure, culture is also reflected in religion. The empirical results show that Protestants and other religious affiliations (e.g. Aglipay) are the most likely to be employed and the Muslims are the least likely to be economically active. Compared to the Roman Catholic women who are 55 percent likely to be employed, the predicted employment rate for Protestant women are significantly higher by 4 percentage points while that for Muslims are 13 percentage points lower. The employment rates of *Iglesia ni Kristo* women were not significantly different from that of the Roman Catholics.

The magnitude of the effects is larger for the currently married sample. Roman Catholic married women are 54 percent likely to be employed. Relative to Roman Catholics, married Protestant women have higher likelihood of employment by 14 percentage points while married Muslim women have lower likelihood of employment by 33 percentage points.

Narratives from the key informant interviews and the FGDs provide some insights that explain the low economic activity of Muslim women. In Islam, women are subordinate to the men who make the decision on whether their wives can participate in the labor force. In Islam, men have the primary responsibility to provide for their family and women are expected to care for their husbands and children, as they rely on their spouses for financial needs.

“Sa batas ng Islam, sa mga mag-asawa, ang babae ay under sa lalaki. Kung ano ang gusto ng lalaki, yon ang masusunod. Kung gusto ng lalaki na magtrabaho ang babae, pwede siyang magtrabaho. Pero kung hindi gusto ng lalaki na siya ay magtrabaho, hindi siya pwedeng magtrabaho. Sa ngayon, marami na ring mga lalaki na pumapayag na ang kanilang asawa ay magtrabaho dahil sa hirap ng buhay. Sa Islam, obligation ng lalaki ang mag provide at magpakain sa kanyang pamilya, dapat na buhayin ng lalaki ang kaniyang pamilya.”
[Muslim Ustadz, Key Informant, ID91]

Muslim women are dissuaded from taking a job that does not allow them to wear a hijab (i.e. veil worn by Muslim women that covers their head, hair and chest when in the presence of unrelated males.)

“Ang pure na Muslim na babae ay di papasok bilang mga sales lady sa mga malls o grocery store kung merong dress code na nakapalda at bawal mag hijab kasi ang pure Muslim na babae ay nakabalot. Kaya pumipili sila ng trabaho. Kadalasan napupunta sila sa business – kung self-employed sila, pwede silang magdamit na ayon sa nakasaad sa batas Islam – nakabalot at nakahijab.”

[Interviewer: Is this also a constraint for single women?]

“Kung ang mga parents nila ay totoong Muslim, hindi sila papayagan na magtrabaho na ang pananamit nila ay hindi naayon sa batas Islam.”

[Muslim Ustadz, Key Informant, ID91]

Muslim women are discouraged from taking employment in the arts and entertainment industry as it is haram (i.e., prohibited) for women to sing, dance or do modelling that may lead to fitna (i.e., enticement and temptation of men). Islam forbids the display of a woman's voice in public such as singing which may be alluring to men. Dancing and modelling that is intended to entertain the public is likewise haram.

“Ang boses ng babae ay kanyang awra [i.e., part of a woman’s body that should be concealed from men]. Bawal gamitin ang boses sa pag-attract kagaya ng pag-aawit.”

[Muslim Ustadz, Key Informant, ID91]

There is discrimination against Muslims in employment by Christian employers, limiting the work opportunities for Muslim women especially in regions outside of Mindanao. In primarily Christian regions, there is Islamophobia or a fear and prejudice against Muslims as they are associated with militancy and terrorism. The large focus in media coverage of terroristic acts committed by Muslim extremists also contributed to sowing and perpetuating fear and prejudice against Muslims in general. There is also very little information about Islam and there is a lack of positive media coverage of the positive economic, social and development contributions done by Filipino Muslims, and especially Muslim women.

“We have experienced discrimination. Our ethnicity is revealed by our looks, the way we speak...our accent. We cannot compete against somebody with clothing that is considered as attractive, or who speak without an accent. In Manila, people associate a hijab with Abu Sayyaf. I myself experienced discrimination.”

[Muslim Entrepreneur, Community leader, ID34]

“I have heard a number of cases from fellow Muslim women who were rejected for employment as sales lady in department stores because they were wearing a hijab. They do not want their workers to be fully covered. There is this perception that you can steal goods easily if you are fully covered. Stealing is wrong in Islam as it is in Christianity. If a person is a thief, then he/she will find a way to steal no matter what he/she wears. It is not in the clothing.”

[Muslim Entrepreneur, ID23]

“Even in factories, there is also discrimination against women wearing hijabs because employers think that they could easily steal if they are fully covered.”

[Muslim Entrepreneur, ID25]

“Muslims are dreaded by the general population of non-Muslims. The media has transmitted biased negative coverage of Muslims as a source of conflict, war and terrorism. They associate ISIS with all Muslims. In Manila, the taxis refused to take us because we are wearing a hijab.”

[Muslim Entrepreneur, ID23]

“Nadiscriminate ang mga babaeng Muslim sa trabaho. At hindi lang ito sa mga babae kundi pati na rin sa mga lalaki. Lalong lalo na noong mga 1990s. Nakapunta na rin ako sa Maynila at may mga kasamahan kami na nag-apply din kami ng trabaho. Kaya lang kung Muslim ang pangalan mo, kagaya ng Muhammad, ay hindi ka na talaga matatanggap. Meron ding mga Moro na gumagawa ng masama pero iilan lang ito at hindi lahat ng Muslim, pero nadadamay ang mga totoong Muslim.”

[Muslim Ustadz, Key Informant, ID91]

Muslims are also largely equated with the Bangsamoro ethnic group comprising largely of the Maguindanaos, Maranaos, Tausug, Iranons, Yakans and Bajaus. The prevalence of local conflicts,

such as rido conflicts (i.e. clan feuds characterized by a continuing cycle of retaliatory violence) leads to perennial displacement of families and clans and adversely affecting both education, work and livelihoods of all the members of the involved clans and even among neighbors.

“Kapag may rido, hindi ka na basta basta makalabas ng bahay.”

[Founder, Women Entrepreneur Association ID23]

“Nakaranas na ako ng rido sa kapitbahay namin. Pati kaming mga kapitbahay takot at nag-iingat din.”

[Muslim Entrepreneur, Community leader ID26]

“Lalong-lalo na sa gabi, nakakatakot lumabas.”

[Housewife, ID21]

“Sa lugar naming may rido, mga 5:00 pm o 6:00 pm, wala nang mga dumadaan sa lugar kasi natatakot na ang mga tao dumaan. Wala ka na ring makitang mga sasakyan na dumadaan.”

[Muslim Entrepreneur, ID25]

“Ang buong clan ay napipilitang mag-evacuate kapag malala na ang conflict.”

[Muslim Ustadz, Key Informant, ID91]

The following could lead to an increase in the economic participation of Muslim women:

- (a) Increased levels of education of Muslim women which will strengthen their bargaining power regarding the use of their time.

“Marami sa kanila [those who completed a college education] ang nagtatrabaho. Sa ngayon, mas maraming mga babaeng nakatapos ng kolehiyo kaysa sa mga lalaki. Kasi konti lang kaming mga lalaki na nakatapos ng kolehiyo. Kadalasan ay pinapayagan [to work] – at marami sa kanila ang nagtatrabaho sa opisina – sa government offices ng ARMM. Maraming mga babaeng Muslim ang nagtatrabaho diyan. Kasi sa panahon ngayon, mas marami na ang mga babae kaysa lalaki ang may mataas na pinag-aralan. Pero ganoon pa rin na ay ang pananamit ay ayon sa batas Islam. Kaya pinipili lang din ang trabaho na kanilang papasukan.

[Muslim Ustadz, Key Informant, ID91]

- (b) Encourage employers to make accommodations for workers religious requirements in clothing unless this presents a public health and security hazard.

“Marami sa kanila ang papayagang magtrabaho [if employers allow the use of hijab in the workplace]. Kasi meron kami ditong mall – Alnor Mall – na ang may-ari ay Muslim kaya ang mga saleslady nila ay nakabalot ay naka-hijab. Pero meron din silang mga saleslady na Christian at di naman nila pinipilit sa pagsusuot ng hijab.”

[Muslim Ustadz, Key Informant, ID91]

- (c) Reduce prejudiced attitudes towards Muslims who are generally associated with violent extremism, through more social media coverage of the positive contributions to society of Muslim men and women and to promote more inclusiveness of diverse religious communities.

- (d) Strengthen the BARMM through its Regional Reconciliation and Unification Commission to solve peacefully rido conflicts.

“[With the BARMM], sa palagay ko mababawasan ang conflict. Kasi may ilalagay sila sa parliament na mga datu, na mag-aayos sa mga rido – Maguindanao o Maranao. Kasi karamihan sa cause ng rido ay land conflict. Ang mga datu kasi noon ay walang mga titulo. Kasi mataas ang level of trust noon. Pero ngayon ay napapalitan na ng mga politika at nag-aaway na ang mga datu sa mga boundary ng mga property nila. Kaya pwede itong mga property disputes ay maaayos.”

[Muslim Ustadz, Key Informant, ID91]

Exposure to media

A composite index is constructed by principal components analysis from the following four questions: (a) Do you read a newspaper or magazine at least once a week, less than once a week or not at all?; (b) Do you listen to the radio at least once a week, less than once a week or not at all?; (c) Do you watch television at least once a week, less than once a week or not at all?; (d) During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?

The findings show that a high exposure to media has a statistically significant positive association with labor force participation, and with larger effects for the currently married women. For the all-women sample, women with a high level of media exposure is 4 percentage more likely to be participating in the labor force than those with the least media exposure. For the currently married women sample, the associated increase in likelihood for labor force participation is 18 to 22 percentage points for those with high media exposure relative to those with the least media exposure.

Women ownership to assets

Women who have some ownership of assets (in terms of land and house) either alone or jointly with others are more likely to participate in the labor force, with larger effects for the currently married sample. Women who do not own a house or lot are less likely to participate in the labor force by 9 percentage points compared with those who independently own some assets and by 20 percentage points compared with those who own some assets jointly with their partners or with others. Ownership of assets may have conferred a stronger bargaining power among married women with respect to the use of their time.

5.3 The negative effect of the 4Ps cash transfers on labor force participation for some recipients

Cash transfers can produce a moral hazard effect with the recipients becoming dependent of the monthly grants and reduce their participation in economic activity. Receiving child allowances adds to the opportunity cost of being in paid employment and reduces the incentives for women recipients to enter the labor force especially if the incomes received from economic participation is

perceived to result in their disqualification from the program. A few FGD participants have cited the lower work effort by their workers after they become beneficiaries of the 4Ps. Some 4Ps beneficiaries also reported that they stopped their part-time engagement in economic activity after receiving monthly allowance from the 4Ps.

“One time I went to the market to buy rubber pots from my supplier who informed that nowadays they are always in shortage of supplies for rubber pots because those who used to make the rubber pots no longer do so because of the monthly allowance they get from the 4Ps. One of my workers also takes a leave for several days whenever it is time for her to collect her monthly allowance from the 4Ps and returns to work after she has used up her allowance.”

[Entrepreneur, Employer, ID45]

“In the past, it was easier to hire nannies but not anymore after many poor families became recipients of the 4Ps. Many stopped working and just relied on the 4Ps, particularly those in the remote areas.

[Entrepreneur, ID47]

“I have five children and my husband earns very little from working as a janitor. So, I do all sorts of work like direct selling of Tupperware products, cosmetics, soaps, laundry powder and other home products to have additional earnings to support the educational expenses of my children. Then I became a beneficiary of the 4Ps. I stopped working.”

[Housewife, ID21]

However, another plausible explanation for the reduction in labor force participation of some 4Ps recipients may be the need, particularly of mothers, to devote more time for domestic and social activities in compliance with a number of conditionalities in the child cash transfers. These conditionalities include: (a) bringing children to health centers regularly for a check-up to have children's growth monitored and to receive vaccines; (b) sending school-aged children to school and to have at least 85 percent school attendance; and (c) attending the monthly community-based Family Development Sessions conducted primarily by the Department of Health. The penalties for non-compliance include non-payment of cash benefits of PHP 300/child to PHP 500/child for education grants and PHP 500 for health grants.

There is need for a more rigorous investigation on the effect of conditional cash transfers on engagement in economic activities of mothers and time spent for housework, childcare and other types of work; as well as time spent for attending community seminars in health and education.

5.4 Opportunities of virtual jobs for mothers

Virtual jobs are jobs that can be done remotely, usually from home, because of technology. Remote and virtual jobs make work more compatible with childrearing and household responsibilities and can open work opportunities for mothers who need to be at home to take care of children and the family. Remote jobs will also augur well for Muslim women who face challenges in taking up employment in traditional office settings because of religious norms or discrimination.

“After I resigned from work as a manager, I took an online job where I worked from home but able to spend more time with my children. I am still earning more than my husband, but our relationship is much better because his friends no longer tease him about my higher status since I do my work at home.”

[Officer, Online Freelancers ID12]

“It is better to work online from home than to work in a call center. Because it is home based and I do not need to spend too much on clothing, make ups and other personal effects.”
[Entrepreneur, Employer ID45]

The government can facilitate access to virtual or remote jobs by providing reliable internet connectivity with high speed capability. Training for online workers by the Department of Information and Communications Technology (DICT) should not be limited primarily to young college graduates but also extend to mothers who wanted to engage in economic activity or earn incomes if they are given the opportunity to do work at home.

The DICT focuses on senior high school graduates and young college graduates who are unemployed. I am a member of a group in Manila and I am appointed as a city encourager. I help encourage newbies or aspiring online workers and help them in trainings that includes the introduction to freelancing.

There is a need for the DICT to include mothers and not just the youth in their trainings on virtual assistant – such as secretarial work or appointment setter. I know of mothers who have completed a college education but have difficulty finding work that is compatible with home and childcare responsibilities. Many of them are depressed by their lack of economic activity.”

“A high school graduate can do the work of an online virtual assistant, as long as she/he has the proper skills and training. A good command of the English language is important as clients are from other countries. If you have good communication and writing skills, then you can qualify for more online jobs such as a tutor or a writer.”

[Officer, Online Freelancers ID12]

5.5 Access to start-up capital for micro and small-scale business

Given a highly gender-segregated labor market, low educated women would have difficulty finding paid employment in male-dominated low-skilled occupations and are more likely to be accommodated in private households if they are in the young and single. However, for the many low-educated married women, starting a micro or small-scale business is the most viable way to earn an income. Apart from developing an entrepreneurial mindset, a start-up capital is a key component to starting a business. Under-capitalization and lack of access to credit are major obstacles to the development of micro and small-scale enterprises (Abraham and Schmukler, 2017).

The problem of under-capitalization among women who wants to start a business or livelihood was identified in the qualitative narratives:

“Mahirap kasi hinahanapan ka rin ng katibayan ng kapasidad sa pagbayad. Halimbawa sa microlending ay ano ba ang pagbabasehan para makabayad? Mangungutang ka nga pero saan ka kukuha ng ipapambayad, hindi ka pa nga nakakapagsimula ng business. Ang mga makapag-access dyan sa microlending ay yong may ongoing na na business. Pwede ring maka-avail ng loan kapag ikaw ang ay member ng isang organized group na nakarehistro sa DTI o isang government agency. Pero kung individual ka, magre-resort ka sa 5/6 Bumbay na naniningil araw- araw.”

[Community Leader, Key Informant, ID95]

The Sustainable Livelihood Program (SLP) of the government provides an outstanding opportunity for women in the poorest households to start a micro or small-scale business. However, the SLP does not seem to have been optimized to generate successful entrepreneurial undertaking that would provide sustainable livelihood and source of incomes for its recipients.

There is need to review the selection of SLP group beneficiaries to prioritize those who have the passion to start a micro business and the drive to exploit business opportunities and to make their livelihood sustainable. When the grouping of members for the SLP is driven primarily by the desire to qualify for a grant, then the livelihood project is likely to fail.

“Our group was given a grant of 100,000 for the duck raising proposal. Under SLP. The project failed. After the project proposal was approved and the grant was given, we were informed that we can avail of a training for duck raising with the training fees to be taken from the grant. Some of the members objected to continuing with the duck raising project and would like the money to be reallocated to putting up a mini grocery. They said that duck raising would not be viable because we are all residing in a squatter’s area. Many members also said that the grant is a dole out and that the money should be distributed to the members, 5000 pesos for each member.”

[IP community leader ID09]

“DSWD gave us 280,000 pesos to finance a project proposal for our group composing of 28 members. This means 10,000 pesos for each one of us. We are all 4Ps recipients. We asked within our area among 4Ps beneficiaries if they want to be part of a group for a livelihood program, because DSWD will give us money if we have a livelihood proposal. Those who wanted to join the group became part of the group, and we formed a cooperative. I am Vice President of the cooperative and was trained in financial management by the CDA. I took part in developing the proposal for rice business and I also help manage this project. The biggest problem of this rice project is that the members get the rice from the store on loan, but they do not pay back. We also have a treasurer who is also our bookkeeper. But he never presents a financial statement. Our presidents gets angry when we ask about the status of our finances.”

[Housewife, 4Ps recipient, ID14]

“Most group members that was provided with an SLP grant believe that since this is a grant from the government, that there is no need to pay back. They do not take the livelihood program seriously, and they do not ensure that it becomes sustainable.”

[Housewife, 4Ps recipient, ID17]

“I have heard from some of the 4Ps recipients that all they need to do is to group themselves to be eligible for a grant. It is easy to make a proposal of a sari-sari store or bigasan. They organized themselves just to get the grant, without concern on whether the members have the interest to ensure the sustainability of the livelihood program. This is different with the way we are trained at DTI which assists in assessing the viability and sustainability of the livelihood or business proposals, as well as in the production, the financial management up to marketing.”

[Entrepreneur ID45]

“The recipients do not seem have a sense of value for the grant because it is a grant and there is no responsibility from among the members of the group to ensure that the grant is invested wisely. It is so easy to make a proposal. But having an entrepreneurial mindset is important. There is also no penalty for failure of investment. So, recipients of the grant do not take seriously of their business.”

[Entrepreneur, Employer, ID45]

It takes more than just having a start-up capital to succeed in entrepreneurial undertakings. The Department of Trade and Industry is mandated under RA 10644 to provide entrepreneurs with links to markets and suppliers as well as business advisory services including training in entrepreneurial mind setting, development and assessment of viability of business proposal including the existence of a market for products, mentorship, financial management and access to trade fairs.

It is recommended that for the SLP to have a higher rate of success in achieving a sustainable livelihood for its beneficiaries, that priority is given to beneficiaries that have the entrepreneurial mindset and the passion to commit to sustaining the business. It is critical to involve other agencies particularly the Department of Trade and Industry in providing the necessary training, mentoring and links to markets that is critical to sustain a business undertaking.

“It can be recommended that the DWSD-SLP Component be made as a member of the Provincial Small and Medium Enterprise Development (SMED) Council. This is an inter-agency and multi-sectoral council, with representation from both the public and private sectors. In Misamis Oriental, it’s chaired by Oro Chamber with DTI as the co-chair, and with members from DOST, DOLE, DTI, TESDA, DICT and the LGU.”

[Government official, ID13]

The DTI has a series of trainings which starts with encouraging or forming an entrepreneurial mindset. The DTI is the lead agency mandated to implement to the MSME policies including the strengthening of domestic and foreign market access through trade fairs and export marketing events, improving productivity and efficiency through its shared services facility and the provision of entrepreneurial trainings and education that can develop an entrepreneurial mindset, strengthen entrepreneurial capabilities including the development of business development plans and proposals, access to soft technology in internet and phone.

There is need to optimize the use of social media marketing for those engaged in micro and small-scale businesses, majority of which are women-led. Micro and small-scale business enterprises comprise 99 percent of the total enterprises in the Philippines in 2016. Particularly in developing countries, they are considered as the engines of economic growth (Beck, Demirguc-Kunt and Levine, 2005). Filipino women engaged in micro enterprises are faced with constraints in accessing markets, and need to be capacitated to undertake on-line marketing, product promotion and business transactions that would reduce the costs of establishing sales channels that is key to sustaining a business.

“The DTI has Digital Marketing and Social Media Marketing in our business learning sessions. The mothers can avail of these trainings. It is best for them to be organized.”

[Government official, ID13]

5.6 Statistical underestimation of the employed female labor force

There were concerns raised in the focused group discussions on the degree by which the data on female labor force participation may have been underestimated. Housewives and mothers who

are not engaged in paid employment or who work irregularly for a few hours in a week or who does unpaid work from home or for an association or cooperative are likely to report themselves as full time housewives, leading to their being uncounted as part of the labor force.

If a woman takes the primary responsibility in the family for childcare and housework activities, she usually identifies herself as a housewife, regardless of her engagement in secondary economic activities. Unlike the men who are more likely to be in salaried employment or working in the farm or in the agricultural sector, a woman who does market work at home is less likely to be enumerated as having gainful employment. Some FGD participants introduced themselves as full time housewives, largely overlooking their home-based economic activities.

“I am a full-time housewife and have four children. I am a beneficiary and parent leader of the 4Ps. As a parent leader, I disseminate information from the DSWD to the 19 members of our group such as schedule of monthly meetings. This is volunteer work.”

[Question from FGD Moderator: Do you have any source of income; do you sell anything?]

“I sell peanut butter. But this is not regular. I do this once a month, depending on the demand.”

[Housewife participant ID16]

“I am a housewife and has one child with my live-in partner. I am a beneficiary of the 4Ps. I make home-cooked sardines and I was appointed by the barangay captain as a VAWC (Violence against Women and Children) Volunteer. I generate 2000 pesos in revenues for every 500 pesos of sardines. In the afternoon, I also cook and sell banana cue which gives me 500 pesos in revenues for every 180 pesos in investment. I receive a monthly honorarium of 500 pesos from the LGU for my volunteer work.”

[Housewife participant ID17]

“I am a plain housewife with five children.”

[Question from FGD Moderator: Do you have any source of income; do you have any work other than housework?]

“None. My husband does not like me to work. He wants me to stay at home. My husband is a farmer. We grow bananas. I only help look for workers to assist my husband in the farm. I take care of the workers... I do not have a monthly salary or honorarium. I am a volunteer in a Cooperative. I manage the store of the Cooperative and its livelihood program for the women where we sell groceries and rice. Last February, each member of our Cooperative received 4000 pesos as dividend.”

[Housewife participant ID18]

“The women themselves do not seem put a high economic value on their economic activity, especially if this is done on a part time basis. They are likely to report themselves as full time housewives.”

[Developer, IP weavers, ID44]

“If the economic activity generates only a small additional income or not done on a regular basis, it is usually disregarded and not reported as an economic activity. And many women are also engaged in direct selling of personal care products, homecare

products which they do also on a part time basis. And these are usually not counted as an economic activity.”
[Employer ID45]

“If a woman is at home taking care of the children and the housework, she considers herself as a full-time housewife, regardless of other economic activities.”

[Founder, Women Entrepreneur Association ID23]

The concept of “work” seems to be commonly associated with economic activity that earns a wage or on a full time and regular basis. This differentiates from the official definition of “work” as including several forms apart from salaried work such as self-employment and unpaid family labor. More specifically, the Philippine Statistics Authority defines work as any economic activity a person does for pay during the past week, in cash or in kind, in any establishment, office, farm, private home, or for profit; or without pay on a family farm or family enterprise. Hence, if a person has done any of such activities for at least an hour in the past 7 days from the date of the interview, then he/she is considered employed, regardless of whether the person’s time is devoted primarily to non-market work such as household chores and childcare. In addition to persons who were at work for at least an hour in the previous week, the following are also considered as employed: (a) those who have a job or business but not at work in the previous week because of temporary illness/injury; vacation; or other reasons; and (b) persons who expect to report for work or to start operation of a farm or business enterprise within two weeks from the date of the enumerator’s visit (Philippine Statistics Authority, 2018).

“There is a strong association of work with being regularly employed. In this region, there are not many firms or companies. Many incomes are not from payrolls. But many of the housewife recipients of the 4Ps that I know of, maybe about 90 percent of them, have economic activity – they have contacts with several households and do laundry for them.”
[Entrepreneur ID47]

“Work is usually understood to mean an 8 to 5 work outside of the home, like office work or work as teacher. But many housewives here do part-time work as direct selling personal effects or home products, and cooking and selling food like chicken pastil. If you count them, then there is about 70 percent of women who are engaged in some economic activity, instead of the 30 percent that statistics show.”

[Entrepreneur, ID41]

“Kapag wala kang ID, hindi na itinuturing na trabaho.”

[Community leader, ID51]

“Minsan hindi naiintidihan kung ano ang ibig sabihin ng trabaho. Hindi well-defined. Merong mga pasideline-sideline, pero di na binibilang kung magkano ang kita.”

[Community leader, ID52]

Field enumerators are given a quota of interviews to be completed in a given period of time and may neglect asking additional probing questions to women who reported themselves as “full time housewives”, hence failing to capture the full range of women’s engagement in economic activities.

“The enumerators are usually in a hurry to complete the interviews. If they ask what the occupation or economic activity or work of the household member is, and the response is housewife, they do not probe further.”
[Employer ID45]

“The enumerators asked me several questions about my husband’s work. But they do not ask me any more questions when I tell them I am a housewife.”

[Housewife ID21]

“I used to work as an enumerator before. While we undergo training on the survey instruments and probing skills for more accurate data collection, we are bound by a quota of interviews that have to be completed. So, if there are many members of a household, then sometimes there is no more probing.”

[Community leader, ID19]

Women recipients of the Pantawid Pamilyang Pilipino (PPP) Program also has a disincentive to reveal their engagement in productive activities that would increase their reported household income beyond the threshold level and may result in their disqualification from eligibility for PPP program benefits and cash transfers.

“If the woman’s economic activity generates substantial additional income, then it is not likely to be overlooked, but women may choose not to report this because it might disqualify them as a beneficiary of the 4Ps program.”
[Entrepreneur ID41]

The FGD participants also suggested including questions on sources of income to capture more fully the participation of women, particularly the full-time housewives, in economic activity.

“Perhaps another way of probing is to ask those who reported that they are full time housewives, what their sources of income are other than her husband’s income.”

[Entrepreneur, Employer ID45]

“Instead of asking whether the woman has work, they can ask question women who reported themselves as housewife if she has additional sources of income. Work is commonly associated with salaries and women have a low value of their economic contribution if this is not done regularly or full time.”

[Entrepreneur, Employer ID11]

“Kailangan kasi sa survey ay hukayin para makuha ang sagot. Kung ang sagot ay “Wala po akong trabaho”, dapat tanungin: “Ano ang pinagkukunan ninyo ng kabuhayan?”
[Community Leader, Key Informant, ID94]

Some full-time housewives are also engaged in volunteer work such as parent leaders in the 4Ps program or as barangay health worker or as sweepers for the barangay or municipal local government for which they received some minimal allowance.

“Most of the women in our municipality receives a monthly allowance as sweepers where they are assigned by batch –IPs, Moro and Christians. Almost everybody is given some work the whole year round by the local government.”

[Municipality Gender Focal Person, ID38]

6. Measuring unpaid domestic work and volunteer community work

Accuracy of statistics on labor force and employment is critical to the calculation of a country's GDP which is based on the value of activities within the production boundary prescribed in the System of National Accounts (SNA). The SNA is the internationally agreed standard set of recommendations for measuring national economic activity and income according to established accounting conventions based on economic principles (United Nations, 2008).

Data that fail to capture all productive activities in the labor market (including temporary, part-time, sporadic and unpaid economic work in the informal sector) carried out by Filipino mothers and housewives who take primary responsibility for housework and childcare undervalues their contribution in the economy. This, however, is not the only source of the undervaluation of the work that women do, with work being defined in the 19th International Conference of Labour Statisticians (ICLS) as encompassing all activities that produce goods and services for use by others or for own final use (ILO, 2013). Apart from employment in the labor market, work also includes unremunerated housework and childcare work, volunteer community service, apprenticeship or trainee work, and own-use production work. While paid productive activities are regularly measured and monitored through the conduct of the national labor force surveys, there is not much that is known about unpaid domestic and care services and voluntary community services where Filipino women are overrepresented.

In the Philippines, a study by Domingo, Raymundo and Cabegin (1994) on conjugal division of work using time-use diary-method survey² showed a highly unequal conjugal sharing of domestic work where wives spent about three times more for child care and four times more for housework compared to husbands. The disproportionate share taken on by wives for domestic work is more pronounced in rural than in urban areas. If work constitutes productive activities for both market and home production, then the study indicated that wives worked longer by two hours on an average day than their husbands (daily average of 11 hours for wives vs. 9 hours for husbands). There was also a high degree of specialization in the specific childcare tasks between spouses. Wives took the greater burden of for the more laborious child care tasks such as feeding, bathing and dressing up children or putting them to sleep while husbands had more time spent than wives in playing with the children in urban households and in telling them stories in rural households. The specialization in domestic work by women was also corroborated by Virola and Encarnacion (2007) who cited a number of time-use studies in selected areas that reveal that the time spent in housework is two to three times more for women than men.

Based on the 19th ICLS, the ILO (2013) identified various forms of work³ which can be classified

² The time use survey was carried out in June 1993 and covers three municipalities from three provinces in Oriental Mindoro, La Union and Metro Manila. The sample comprised of 400 currently married couples (or a total of 800 individuals) from the following types of geographic area: (a) one rural fishing area; (b) one rural farming area; and (c) two urban municipalities.

³ Work excludes self-care (e.g. personal grooming and hygiene), activities that cannot be performed by another person

into activities within or outside the SNA production boundary:

Productive activities within the SNA production boundary:

- (a) Employment work (activities to produce goods or provide services for pay or for profit, performed for others). This includes employment in private establishments, government and non-profit institutions; employment in household enterprises to produce goods such as raising animals, forestry and logging, fishing and aquaculture, mining and quarrying, making and processing goods for the market, construction services and others; employment in households and household enterprises to provide services; setting up a business, training and studies in relation to employment; ancillary activities and breaks related to employment and travelling and commuting for employment.
- (b) Production of goods for own final use or mainly for the final consumption of household members or of related family members living in other households. Production of goods includes producing and or processing for storage agricultural, fishing, hunting and gathering products; collecting and or processing for storage mining and forestry products, including firewood and other fuels; fetching water from natural and other resources; manufacturing household goods such as furniture, textiles, clothing, footwear, pottery or other durables; building or effecting major repairs to one's own dwelling, farm buildings, etc.
- (c) Unpaid trainee work – unpaid activity to produce goods or provide services performed in market and non-market units that are owned by non-household or non-family members, in order to acquire workplace experience or skills in a trade or profession and where unpaid means the “absence of remuneration in cash or in kind for the work done or hours worked; nevertheless, these workers may receive some sort of support, such as transfers of education stipends, or grants, or occasional in cash or in-kind support (e.g., meals or drinks);
- (d) Unpaid community-based and organization-based volunteering– unpaid, non-compulsory activity to produce goods and services that are performed through, or for organizations comprising market and non-market units (i.e. organization-based volunteering) including through or for self-help, mutual aid or community-based groups of which the volunteer is a member; and where “unpaid” is interpreted as the absence of remuneration in cash or in kind for worked done or hours worked or who may receive some small form of support or stipend in cash, when below one third of local market wages (e.g. for out-of-pocket expenses or to cover living expenses incurred for the activity), or in kind (e.g., meals, transportation, symbolic gifts). Unpaid community-based and organization-based volunteering includes unpaid volunteer work on road/building repair, clearing and preparing land, cleaning (streets, markets, etc.), preparing/serving meals; unpaid volunteer cultural activities, recreation and sports activities; unpaid volunteer office/administrative work.
- (e) Unpaid compulsory work – community service and work by prisoners ordered by a court or similar authority, compulsory military or alternative civilian service;

Productive activities outside of the SNA production boundary:

in one's own behalf (e.g. sleeping, watching TV), and activities that do not involve any production such as begging and stealing (ILO, 2013).

- (f) Production of services for own final use or mainly for final consumption of household members or of related family members living in other households. These includes food and meals management and preparation; cleaning and maintaining of own dwelling and surroundings; do-it-yourself decoration, maintenance and repair; care and maintenance of textiles and footwear; household management for own final use; pet care; shopping for own household and family members; childcare and instruction; care for dependent adults who are suffering from physical or mental illness or any disability or impairment; help to non-dependent adult and household and family members; travelling, moving, transporting or accompanying goods or persons related to the provision of services for own final use.
- (g) Unpaid direct volunteering for other households includes unpaid non-compulsory activities to provide services as help to other households, not arranged by an organization and includes unpaid volunteer housekeeping, shopping/purchasing goods and services; childcare and instruction and care for adults.

In line with international standards, the labor force in the Philippines comprises of the employed and the unemployed. Employment work remains largely the reference concept for labor force statistics and where the employed population, as earlier mentioned, includes those who are at work for pay or profit or as unpaid workers in a family farm or business in the past week. Hence, the labor force does not encompass the supply of labor in all types of productive activities contributing to the SNA production. The labor force includes those employed to generate income and persons seeking and available for such type of work. It excludes own-use production work and unpaid volunteer work and trainee work which are in the SNA production boundary, and for which data is not collected in the regular rounds of the Philippine Labor Force Survey, as do data on productive activities outside of the SNA production boundary such as housework and care work for children and dependent adults.

Time use surveys is the only source of data on work that is outside the production boundary of the SNA. In cognizance of the importance of measuring non-market work such as unpaid work in home production and volunteer work, a number of national statistical offices in Asia and the Pacific have conducted national time use surveys on a regular basis (usually on a quinquennial or decennial basis), including the developed countries of Australia, Japan, New Zealand and the Republic of Korea (ILO and UNDP, 2018). Modular time-use national surveys have also been conducted in Bhutan, Cambodia, Cook Islands, Kyrgyzstan, Lao PDR, Malaysia, Nepal, Timor-Leste, Vietnam and national time use surveys using time diary method have been carried out in Bangladesh, China, India, Mongolia, Pakistan and Thailand (ILO and UNDP, 2018).

In the Philippines, the National Statistics Office (renamed in 2013 as the Philippine Statistics Authority) conducted in 2000 a Pilot Time Use Survey in two highly urbanized barangays of Quezon City and six barangays in Batangas to gather data on how Filipinos 10 years old and over spend time. These eight enumeration areas were selected purposively to represent the following four geographic strata: highly urban, urban, rural-agriculture, and rural-non-agriculture. The 2000 Pilot Survey has an allocated budget of PHP 700 thousand (NSCB, 2000), and was undertaken with funding support from the Canadian International Development Agency.

The 2000 Pilot Time Use Survey (TUS) has a sample comprised of 30 households per barangay or a total of 240 households. All household members 10 years and older in the sampled households were asked to participate in the time diary survey. The 240 sample households generated a total of 855 eligible population 10 years old and over of which 78 percent or 663 persons participated in the survey.

The 2000 TUS aimed primarily to collect data on time spent in paid work, unremunerated housework and leisure activities of Filipino men and women, devise an efficient and viable mode of data collection for time diaries and determine the appropriateness of the United Nations classification of time use activities for a prospective National Time Use Survey. The survey administered two data collection instruments: (a) a Household Questionnaire which is interviewer-administered and collects data on the demographic characteristics (relationship to household head, sex, age, highest grade completed, marital status and an indicator for overseas contract worker); employment characteristics for household members 10 years and over (occupation, kind of industry, class of worker and nature of employment), and the household usage of time saving devices and equipment such as refrigerator, telephone, washing machine, oven and other cooking device, electric iron, vacuum cleaner and others; and (b) a 3-day time diary that asked respondents to recount sequentially the activities that they engaged for one weekday and the two weekend days (Saturday and Sunday). The specific questions asked are as follows: "Upon waking up, what were the different activities or housework that you did? What did you do next? What were the other activities that you did at the same time?" Hence, the time-diary approach captures simultaneous activities carried out by the eligible household member participating in the survey and the time these activities began and ended. For each activity carried out by the respondent, he/she also identifies: (a) whether he/she received a corresponding remuneration for doing the activity; (b) the place where the activity was carried out (i.e., home; employer's home; workplace other than employer's place; other place); and (c) with whom the activity was done (i.e., alone; with spouse; other household members; others).

The 2000 Pilot survey used two alternative modes of collecting time use: (a) interviewer-administered or retrospective diary mode; and (b) self-administered or leave-behind diary mode. In the interviewer-administered mode, the respondent is asked by an interviewer to recall the activities that he/she did from the time he/she woke up to the time he/she slept in a previous day. For the 3-day time diary, the enumerator visits the respondents three times on the day after a designated diary day (e.g. a Sunday interview day for a Saturday diary day and a Monday interview day for a Sunday diary day). In the self-administered or leave-behind diary mode, the respondents are provided with a copy of the diary forms which they are to fill up during the designated diary days.

In April 2019, the Philippine Statistics Authority carried out a national time use survey using stylized questions for a predetermined list of activities in own-use production work and unpaid housework which are added to the regular Labor Force Survey. These rider time-use questions collected information from all household members aged 5 years old and over on their engagement in own-use production work and unpaid housework in the last 7 days from the date of the interview, and the time spent in minutes doing such activities. Own-use production work included activities engaged in by the household member for producing and/or processing goods that is mainly for household's consumption. The following specific questions were asked for own-production activities: (a) farm work or work in a kitchen or backyard garden such as preparing the land, planting or harvesting; (b) tending work animals such as carabao, or raising animals such as pigs, chickens or cattle; (c) fishing or collecting shellfish; (d) hunting; (e) gathering foodstuff such as wild berries or nuts; (f) collect firewood or other natural products for use as fuel by the household; and (g) fetch water from natural or public sources for use of the household?

Time spent on the following specific unpaid housework tasks were also collected: (a) planning the household finances or paying bills; (b) cooking, serving meals, washing dishes or arranging food supplies; (c) making other food and drinks to be preserved such as cheese, butter, flour, dried fish/meat, marmalade, alcoholic beverages; (d) washing, ironing, mending clothing or household linen; (e) doing other housework or yard work, such as cleaning, weeding, cutting grass; (f) shopping for the household; (g) making any products for use by the household, such as furniture, pottery, clothing mats, etc.; (h) doing household maintenance or repairs in your dwelling such as

painting, decorating, installing fixtures or fittings; (i) doing construction work to renovate, extend or build the household's dwelling; (j) looking after children 17 years or younger who live in the household; (k) providing care, help or assistance to adult persons who live in this household because of an illness, disability or old age.

Comparison between 2000 diary TUS and the 2019 stylized TUS

There are advantages of the time diary approach used in the 2000 Pilot Time Use Survey over the stylized approach for collecting time use data used in the 2019 Labor Force Survey (LFS):

- (a) the diary approach used in the 2000 Pilot TUS captured simultaneous activities so that the total time spent in a day for primary activities would add up to 24 hours and the same would be true for secondary activities. This is important since many of the unpaid housework carried out by women are often done simultaneously with other activities (e.g. supervising the children while cooking or doing laundry). In the stylized time-use approach adopted in the 2019 LFS, respondents are asked to estimate how much time they spent on a list of specific activities without identifying simultaneous activities or distinguishing primary activities from secondary or tertiary activities.
- (b) the 2000 TUS diary approach covers the full range of productive activities including paid work, unpaid housework, childcare and volunteer work, as well as non-productive activities such as personal care and maintenance, learning and socializing and recreation. The 2019 stylized time use approach has a narrower coverage of activities relating to producing goods and providing services primarily for personal and household consumption.
- (c) The time reference period for obtaining information on time spent in the various activities is the current or previous day for the 2000 TUS diary approach and the previous week (i.e. last 7 days prior to interview date) for the 2019 stylized time-use survey, which subjects the latter to a larger recall bias.

Although the diary approach is considered as the most accurate method to collect time use data (United Nations Economic Commission for Europe, 2017), it also has some disadvantages including high operations costs, and lack of comprehension on use of time by lower educated respondents resulting in missing information, and high technical expertise for coding activities (ILO, 2018). In the Philippines, the cost for conducting the 2000 Time Use Survey was PHP 700,000 for 240 households. Adjusting for inflation, this translates to an estimated PHP 281 million if expanded to a national survey sample of 45,000 households every quarter or to PHP 1.1 billion for the four rounds of Labor Force Survey in a year.

The ILO (2018) also enumerated the advantages of stylized questions as follows: (a) it is the least expensive type of method for collecting time-use data; and (b) it can measure the time spent of specific activities that occur less frequently.

7. Conclusions

This paper employs a multivariate analysis of national survey datasets (i.e., merged 2015 Labor Force Survey and Family Income and Expenditure Survey and the 2017 National Demographic and Health Survey) and undertakes qualitative focused group discussions and key informant

interviews to examine the socioeconomic and cultural determinants of labor force participation and employment states. The study findings are divided into three parts: (a) supply-side determinants of low female labor force participation; demand-side dimensions of low female labor force participation and (c) statistical issues relating to undercounting of women's economic activities and the use of time-use survey to capture other types of work.

7.1 Supply-side determinants of low labor force participation

- The relationship between age and the labor force participation differs between men and women: it is concave for men and more M-shaped for women. There is a sharp uptake in labor force participation as young people aged 20 to 24 years old completes school and transitions to employment. While this high level of participation is largely maintained for the men until it declines in the age period towards compulsory retirement, the pattern for the women exhibits a decline in labor force participation rate in the peak childbearing period of 25 to 29 years old. This may indicate the higher likelihood of women to withdraw from the labor force for marriage, childbirth and childrearing.
- Increasing education from elementary to secondary education or some college education does not guarantee more employment. The relationship between female labor force participation and education has been revealed to follow a U-shaped pattern with the least educated and the most educated women having the higher rates of labor force participation. The transition from primary to secondary education and some tertiary education is associated with a decline in labor force participation as young women attend school. Attainment of a college degree is associated with a significant uptake in labor force participation by 7 percentage points higher than the least educated and 14 percentage points higher compared to those with the college undergraduates.
- Marriage and childbearing are associated with a significant decline in the female labor force participation. Controlling for education and other factors, women who are currently married or in consensual union with someone are 40 percent less likely to participate in the labor market than do the never married and the widowed or separated. Having a child 3 years and below is also associated with a reduction in the probability of female employment by 16 percentage points for the all women sample and by 44 percentage points for the currently married sample. Qualitative results indicate that stereotyped gender roles and patriarchal mindsets that assigns women to domestic and reproductive roles and men to economic and productive roles appeared to have weakened the participation in economic activities and market work for women. A person's reservation wage (i.e., the minimum wage rate at which a worker would be willing to accept a particular job type) also increases with the presence of young children and a spouse or partner which is exacerbated by the increasing cost of alternative domestic work and child care services. In highly urbanized areas such as Metro Manila where traffic is heavy, the larger time and monetary costs of commuting also forms part of the workers reservation wage and increases the opportunity cost for women who undertakes unpaid housework and childcare at home.
- Currently married women are more likely to work in the government units than in private establishments compared to single women, which may be attributed partly to the greater entitlement of female public sector workers to such benefits as paid and extended maternity leave. Public sector workers also enjoy greater security of tenure which allows women workers to continue working after a childbirth. There are less benefits provided in private households and smaller private establishments which are legally exempted from providing such benefits for workers. The provision of adequate maternity benefits makes childbirth

more compatible with economic activity and can strengthen the integration into the labor market of women experiencing a childbirth or those taking care of very young children.

- The paper also examines the effect on female employment of cultural variables which are traditionally omitted in standard labor regressions. Culture is indicated by religion and a patriarchy index denoting the extent of male dominance in decision making. The findings reveal that the more patriarchal familial structures reduce a woman's employment rate by 8 to 13 percentage points. Another indicator of culture is religion. The Muslim religion which upholds female subordination and dependence on men is associated with the lowest female employment rate. Religious beliefs and practices such as the wearing of a hijab or religious prohibitions in terms of attire and against certain occupations (e.g. arts and entertainment) also constrains Muslim women to a largely informal sector employment and to a limited extent to public sector employment for those who have completed tertiary education.
- Qualitative results also indicate a reduced labor market effort for some of the 4Ps recipients. Conditional cash transfers can be a disincentive for women to participate in the labor force especially if incomes received from economic participation is perceived to result in their disqualification from the program or prevent them from undertaking the activities in compliance with the conditionalities of the cash transfer such as bringing children for medical and health care visits, sending school-aged children to school and attending monthly seminars.
- The narratives also indicate the desire of mothers with young children to engage in telecommuting work and virtual jobs which are more compatible with domestic care but that they are constrained in terms of access to technology and skills training in core competencies such as the ability to communicate well electronically and functions appropriate for virtual jobs (e.g. data processing and programming, research and development; transcription, customer service, etc.).

7.2 Demand-side determinants of low labor force participation

- Controlling for other factors, the likelihood of participating in the labor force is higher for males than females across all educational levels by 11-20 percentage points with the gender gap observed to be widest for the less educated and narrowest for those with a college degree. Low educated women suffer a double handicap; they are the least likely to be employed, and for those who do find employment, they are more likely to be working in paid employment in private households and in the informal sector which are characterized by low remuneration, lack of social protection and poor working conditions. This may have weakened incentives of women to participate in the labor force. Less educated women are also less likely than similarly categorized men to be in paid employment in private establishment which may indicate that jobs available for lower educated women are much limited compared to lower skilled men who can take up elementary occupations in the construction, transport and agriculture sectors.
- Regional unemployment rates have a larger negative effect on women than men's labor force participation rate decreasing the rate by 4 percentage points for women and 1 percentage point for men. Higher non-agriculture sector output share also increases labor force participation of women, with larger positive effects for the services sector than for the industry sector. The macro data reveals the higher absorptive capacity of women workers by the services sector and the manufacturing sector, and the disproportionate representation of women in industries that require more cognitive skills than physical strength. There is a need to spur growth and investments in both the manufacturing and

services sectors and to eliminate the barriers against women's participation in their preferred sectors and occupations.

- Employer discriminatory practices also undermines female labor force participation. Qualitative narratives from heads of human resource department in private companies reveal the presence of discriminatory practices against pregnant women who are perceived to have lower productivity and higher medical care costs. The multivariate analysis shows that pregnancy reduces the likelihood of employment by 13 percentage points for the all women sample and by 37 percentage points for the currently married sample. Pregnant women also decide against applying for paid work in anticipation of discrimination in the job hiring and selection. The narratives also indicate the presence of Islamophobia where employers discriminate against Muslims whom they associate with militancy and terrorism. This needs to be addressed at the individual level as well as the regional and national levels through more a more equal spatial allocation and access to better employment or more decent work opportunities, and policy reforms to eliminate discrimination in all its forms in employment.

7.3 Statistical issues on the underestimation of women's work

- Some women, particularly the full-time housewives, were excluded from the count of the labor force for a number of reasons including: (a) women's misconception of "work" or "job" as a formal sector or regular 8-to-5 workday job, leading them to report themselves as full time homemakers regardless of economic activities undertaken which may be part-time and intermittent, and irregular; and (b) time constraint by field enumerators who are given a quota of interviews to be completed in a day. This may result in a lack of attention given to asking probing questions to women who reported themselves as full time homemakers in order to capture fully women's engagement in economic activities.
- There is a tradeoff between accuracy and cost in the choice of time use survey method between the diary approach and the stylized modular approach in collecting data for other types of work of women including own-use production activities, unpaid trainee work and volunteer community work as well as unpaid housework and childcare activities. The diary approach which was used in the 2000 Time Use Survey has several advantages over the stylized modular approach adopted in the April round of the 2019 Labor Force Survey including capturing simultaneous activities, full coverage of different types of work and recreation activities and minimized recall bias. The stylized modular method is much less accurate but is also the least expensive method for collecting data on the various types of work other than employment work.

7. Recommendations

7.1 Greater sensitivity of women's work in data collection methods

Changes can be made in the method of data collection that capture more fully women's economic contribution.

- 7.1.1 There is need to conduct gender orientation trainings for survey enumerators and supervisors to improve the collection of employment and unemployment data on women and minimize their exclusion from the labor force.

- 7.1.2 Enumerators should be given a more reasonable quota of interviews to be completed in a day that would allow them enough time to ask probing questions for household members who are reported to be housewives. An enumerator has a daily quota of 6 households to be interviewed in a regular Labor Force Survey. There is need for a time and motion study to determine what would be a more reasonable daily quota of interviews that have to be completed to ensure the completeness and high quality of data collected particularly on the employment and unemployment status of women.
- 7.1.3 There is need to include recovery questions or to paraphrase questions that would capture economic activities of women, particularly of those who reported themselves as housewives.

Recovery questions to capture employment work

Rephrasing of questions to capture the official definition of work that includes part-time economic activities engaged in by women who takes primary responsibility of childcare and housework, as well as women in agricultural areas. The use of the key word questions such as “work” or “job” may not be suited to fully capture economic activities of women that are home-based or undertaken to supplement work in family farm or business (Anker, 1983). Questions to capture women’s work can be rephrased to include a list of activities of specific tasks (Anker and Anker, 1989; Dixon, 1982; Langsten and Salem, 2008) – supplementary work done in the family farm or business, selling foods and products that are produced at home, engagement in direct selling, etc.

There is need to ask recovery questions to improve the reporting of women’s engagement in economic activities. This would be important for respondents who report themselves as full-time homemakers. Recovery questions can improve enumeration including a question on whether they are engaged in activities that provide additional sources of family income whether on a regular or temporary or part-time basis such as: (a) making and selling foods, drinks and other products; (b) assisting in the family farm or family business; (c) rendering a service such as laundry or housekeeping for other households for pay or benefit in kind; (d) engaging in direct selling of personal care, health and household products from companies such as Avon Cosmetics, Herbalife, Natasha, and others.

Recovery questions to capture unemployment

For a woman who is not at work to be counted as part of the labor force, she has to fulfill the requirements for inclusion into the unemployed population, namely: seeking for work and available for work.

In the current labor force survey, a question is asked to those who were not at work in the reference period to identify their seeking work status as follows: “Did (NAME) look for work or try to establish a business during the past week?”.

The criterion of seeking for work may not be appropriate for women who are overrepresented in the informal sector employment, with majority of them doing some intermittent or irregular jobs. Women who are actually looking for engagement in some productive activities may be missed out in the count of the unemployed, as the term “seeking work” may be interpreted as searching jobs through the more formal labor recruitment or hiring channels and the reference period of the past 7 days may be too short to capture adequately activities for employment search.

In line with international standards, the reference period relating to search for work can be extended from the past 7 days (past week) to the past four weeks (past month). The following recovery question can be adopted to improve the reporting of unemployment status (Benes and Walsh, 2018): “Did (NAME) do anything in the past four weeks to find any kind of work to generate income where such work may be casual or irregular, part-time or sporadic?”.

7.1.4 Data on other types of work than employment work

The April round of the 2019 Labor Force Survey included stylized questions that would capture data on own-use production activities and unpaid housework and childcare activities. For similar undertakings in the future, data on other types of work within the SNA boundary can be included as follows:

- (a) Data on unpaid volunteer work. Additional probing questions to capture organization-based volunteer work defined as unpaid voluntary activity including sweeping the streets, community administrative support services, preparing and serving meals for the community feeding program, undertaking community sports activities, etc.
- (b) Data on unpaid trainee work. Additional probing questions for those who report themselves as full time students to capture paid and unpaid trainee work. In the study findings, labor force participation is lowest for the college undergraduates, of which some may be undergoing unpaid on-the-job-training and which should be counted as part of productive activity. The underestimation of the economic contribution made by those who are attending school on a full-time basis can be minimized with direct questions on whether they are engaged trainee work (whether paid or unpaid) or in activities to produce goods or provide services for others in order to acquire workplace experience or skills in a trade or profession.

7.2 Policy Recommendations

The study recommends the following policy reforms that may increase female labor force participation.

7.2.1 Countering the stereotyped gender norms and a patriarchal mindset that undermines labor force participation of women.

The findings of the study show that stereotyped gender roles of ascribing to women the primary responsibility of taking care of homes and to men as the provider of the family, undermines the labor force participation of women with larger negative effects on those who are currently married or currently living with a partner and those with very young children. The following program interventions can be undertaken to address gender stereotypes that constrains women from participating in the labor force:

- (a) Given the positive effect of exposure to media on female labor force participation, a possible program intervention is to increase public information and media coverage on the important role of the women workforce in both rank and file and leadership positions in the public and private sectors, and the important role in home and child care of not just mothers but of fathers as well.

- (b) Review educational learning materials and storybooks in early childhood to promote gender equality and dispel stereotyped gender roles. There is need to address the gender bias in textbooks that portray the primarily role of women in reproductive functions and of men in productive roles as indicated by Java and Parcon (2016) for Philippine first grade textbooks and by Quezada and Reyes (2000) for Philippine secondary education history books.

7.2.2 More equal conjugal sharing of home production and childcare through an extended paternity leave and additional parental leave.

- (a) An extended paternity leave and parental leave encourages increased men's involvement in prenatal visits, childcare and housework and ensures a more equal conjugal sharing of domestic care that would free up some time for women to participate in the labor force. In the Philippines, paid non-transferable parental leave around childbirth comprises of only 7 days of paternity leave and 100 days maternity leave with another 5 days which can be shared between the two parents of the child as they prefer.

The length of paternity leave in the Philippines pales in comparison to the practice in some OECD countries which can take as long as 12 months and can be availed for taking of young children in the infancy ages of below 2 years old. In Norway, the parental leave is 15 weeks each for mother and father. Iceland passed a law reserving 5 months of non-transferable parental leave for the mother and 5 months for the father, and another 2 months of parental leave that parents can divide as they choose. Finland allows a paternity leave of up to 54 weekdays which can be used to take care of a child below 2 years old. In Belgium, each parent can avail of up to 4 months of non-transferable paid parental leave. In Japan and Korea, each parent is entitled to one year of paid parental leave. In Germany, a couple can avail of 2 months of additional parental leave payments if both parents utilize a sharable parental leave allowance for at least two months, making the duration of parental leave effectively two months for each parent (OECD, 2016).

A few legislative bills such as Senate Bill 1209, House Bill 5995 and House Bill 5353 seek to extend paternity leave to 15 days of paid leave with an additional 15 days of unpaid leave while Senate Bill 1063 seeks to extend paid paternity leave to 30 days.

- (b) An extended paternity leave will also lessen the discrimination of employers against hiring women over equally capable men as women are associated with higher labor costs especially after the passing of the Expanded Maternity Leave Law that more than doubled the maternity leave benefits to working mothers from 60 to 105 days. A study by ECOP (2019) reveals that only 50 percent of the 118 respondent firms in a survey supported the expansion of the maternity leave law before it was enacted, 32 percent did not support the law and 18 percent were indifferent. In addition, one third of firms reported that the law will negatively affect hiring of women.

7.2.3 Improving the workplace environment for working parents with young children.

Facilitate the back-to-work transition of workers taking a maternity or paternity leave, by providing them access to childcare services for very young children. This would be very helpful for parents encountering difficulty in finding alternative childcare arrangements at the end of a parental leave after childbirth for babies in their early infancy (2-month old or 3-month old babies) and reduce the likelihood of mothers to withdraw from the labor force after a childbirth.

- (a) For the public sector, strengthen the implementation of Executive Order No. 340 directing the National Government Agencies and Government-Owned and Controlled Corporations to provide day care services to children of their employees under five years of age.
- (b) Support Bills that require employers in private and public sectors to provide day care facilities for their employees with children aged 5 years and below, and which shall be handled by qualified competent personnel with proven experience in child care (e.g. House Bill 8563; House Bill 6205; House Bill 3306; House Bill 2181; House Bill 739; and Senate Bill 401).
- (c) Strengthen the enforcement of Republic Act 10028 or the Expanded Breastfeeding Promotion Act which requires employers to establish lactation stations in the workplace and to grant nursing mothers with a reasonable break time to express breast milk for her nursing child.

7.2.4 Strengthen skill capacities and increase paid employment opportunities for less educated women

Compared to men, there are not enough paid jobs in elementary or lower-skilled occupations created for women who are overrepresented in the informal sector. There is need to strengthen the manufacturing sector where most women workers in the industrial sector congregate. The concentration of women in the services and manufacturing sectors that require more cognitive rather than physical abilities, also underlines a strengthened and more directed vocational and technical education by TESDA for mothers and young women to provide them with the necessary qualifications and skills that meet labor market demand and facilitate their transition to productive employment.

7.2.5 Strengthen sustainable livelihood programs for the poor

Less educated women are more likely to engage in self-employment. The lack of start-up physical and financial capital is an important constraint faced by women in micro enterprises, which makes the government's livelihood programs a very critical point of intervention. Increased involvement of the DTI and the DOST in all public livelihood programs can serve as an important catalyst for entrepreneurial activity among underprivileged women by providing them increased access to technological support and entrepreneurial capacity building that enhances productivity and increase the likelihood of a sustainable and successful entrepreneurial activity.

7.2.6 Strengthen the enforcement of the Telecommuting Act

RA 11165 or the Telecommuting Act allows employers to offer employees to voluntarily work from an alternative workplace (e.g. home) with the use of telecommunication and/or computer technologies. Strengthen programs that addresses the challenges of telecommuting work, through the: (a) development of telecommunications infrastructure particularly in regions outside of Metro Manila that will facilitate access of households to high-speed and quality internet connection; and (b) increasing capacity building for telecommuting work by DICT with increased focus not just on the youth but also on mothers with young children.

7.2.7 Countering discrimination in the workplace.

In 2015, RA 10911 or the Anti-Age Discrimination in Employment Act which prohibits discrimination of any individual by employers in terms of hiring, compensation, terms and conditions or privileges of employment based on age. Anti-discrimination in employment laws can be extended to other categories of individuals including religion and religious beliefs, ethnicity, sexual orientation and gender identity, civil status, and pregnancy status, and to cover all aspects of employment including hiring, firing, pay, job assignments, promotions, layoff, training, fringe benefits, and any other term or condition of employment.

The anti-discrimination policy can require employers to provide reasonable accommodation for an employee's religious beliefs and practices. In the US, Title VII of Civil Rights Act of 1964 requires employers to make reasonable adjustments to the work environment that would allow employees to practice his or her religious beliefs unless doing so would cause "undue hardship" or "more than a minimal burden on the operation of the employer's business". Religious accommodation includes flexible scheduling and granting of leaves for religious observances (e.g. Sundays for Christians, Saturdays for Seventh-Day Adventists, Fridays for Muslims) and dress practices for religious reasons such as wearing a head covering or a hijab or the observance of religious prohibition against wearing certain attire (e.g. sleeveless dresses or mini-skirts).

The US also passed a Pregnancy Discrimination Act which requires employers to treat pregnancy as a temporary disability and to provide reasonable accommodation for pregnant women to perform modified tasks that ensures the safety of the mother and child and do not involve exposure to dangerous chemicals and to physically demanding work such as heavy lifting, excessive repetition, prolonged period of sitting and standing, etc., unless doing so would cause "undue hardship" to the employer.

Similar laws can be passed in the Philippines requiring employers to reasonably accommodate an employee's religious beliefs and practices, and pregnancy status, unless doing so would cause more than a minimal burden to the operation of the employer's business.

7.3 Recommendations for future research

A few research gaps have emerged from the discussion and analysis of the study findings and which can be addressed in future research, such as the following:

- (a) Critical review of the presence of gender bias in main Philippine textbooks in early childhood, primary and secondary education and how this can be addressed.
- (b) Research of the positive effects on productivity of greater gender and ethnic diversity and inclusiveness in the workplace.
- (c) Cost-effectiveness analysis of maternity leave including effect on worker productivity and labor turnover.
- (d) Cost-effectiveness analysis of workplace day care centers and breastfeeding stations on productivity and work-life balance of working mothers.
- (e) Effect of paternity leave on conjugal sharing of housework and childcare and on spouse's labor force participation.
- (f) Identify the determinants of firms to support telecommuting work and the determinants of workers to engage in telecommuting work; and how to address the challenges faced by employers and workers in fully enforcing the Telecommuting Act.
- (g) The effect of the telecommuting work on the labor force behavior, the amount of time in the employment work as well as time spent for housework and childcare, and on worker productivity.
- (h) The effect of conditional cash transfer on women's engagement in the labor market and time spent for housework, childcare activities, attendance in community seminars and trainings and other types of work including volunteer community work in administrative support services such as information dissemination to other 4Ps recipients.
- (i) Identify the determinants for successful and sustainable livelihood projects under the government's livelihood program for the poor.
- (j) Time and motion study to determine the reasonable of questionnaires to be completed in a day for a regular Labor Force Survey with the inclusion of recovery questions for employment and unemployment activities with emphasis on women who reported themselves as full-time homemakers for regular rounds of the Labor Force Survey; and a cost analysis to determine the concomitant increase in budget (for additional field enumerators and supervisors and data encoders to be hired, and other operational costs).

REFERENCES

- Anker, R. (1983). Female labour force participation in developing countries: A critique of current definitions and data collection methods. *International Labour Review* 122 (6):709-23.
- Anker, R. and Anker, M. (1989). Measuring the female labour force in Egypt. *International Labour Review* 128(4):511–520.
- Abraham, F. and Schmukler, S. (2017). Addressing the SME finance problem. Research & Policy Briefs; no. 9. Washington, D.C. World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/809191507620842321/Addressing-the-SME-finance-problem>.
- Albert, J.R. and Vizmanos, J. F. (2017). Do men and women in the Philippines have equal economic opportunities? PIDS Policy Notes No. 2017-09. Quezon City: Philippine Institute for Development Studies. Retrieved from <https://pidswebs.pids.gov.ph/CDN/NEWS/pidspn1709.pdf>
- Asian Development Bank. (2013). *Gender Equality in the Labor Market in the Philippines*. Manila: Asian Development Bank. Retrieved from <https://www.adb.org/sites/default/files/publication/31194/gender-equality-labor-market-philippines.pdf>.
- Beck, T., Demirguc-Kunt, A. and Levine, R. (2005). SMEs, growth and poverty: Cross-country evidence. *Journal of Economic Growth* 10(3): 199-299.
- Benes, E. and Walsh, K. 2018. Measuring unemployment and the potential labour force in labour force surveys: Main findings from the ILO LFS pilot studies. Geneva: ILO
- Dixon, R. (1982). Women in agriculture: Counting the labor force in developing countries. *Population and Development Review* 8(3):539–566.
- Domingo, L, Raymundo, C. and Cabegin, E. (1994). “Conjugal Division of Labor in Employment, Housework and Child Care in the Philippines.” Manuscript. University of the Philippines Population Institute.
- International Labour Organization. (2013). 19th International Conference of Labour Statisticians. Resolution I concerning statistics of work, employment and labour underutilization. Geneva: ILO. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---dgreports/--stat/documents/normativeinstrument/wcms_230304.pdf.
- International Labour Organization. (2018). Survey methods to improve measurement of paid and unpaid work: Country practices in time-use measurement. Geneva: ILO.
- International Labour Organization and United Nations Development Programme. (2018). Time-use surveys and statistics in Asia and the Pacific. New York and Geneva: ILO and UNDP. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---asia/---robangkok/documents/publication/wcms_630892.pdf.
- Java, J.R. and Parcon, C. R. 2016. Gendered Illustrations in Philippine Textbooks. *Asia-Pacific Higher Education Research Journal* 3(1): 34-51.

- Kalton G & Schuman H (1982). The effect of the question on survey responses: A review. *Journal of the Royal Statistical Society*, 145 (1), 42-57.
- Langsten, R. and Salem, R. (2008). Two approaches to measuring women's work in developing countries: A comparison of survey data from Egypt. *Population and Development Review*, 34(2):283–305.
- Philippine Statistics Authority. (2018). 2018 Gender Statistics on Labor and Employment. Manila: PSA. Retrieved from <https://psa.gov.ph/sites/default/files/2018%20Gender%20Statistics%20on%20Labor%20and%20Employment.pdf>
- National Statistics Coordination Board. (2000). NSCB clears seven statistical surveys since January 2000. March 6, 2000. Press Release. Retrieved from: <http://nap.psa.gov.ph/headlines/2000/06mar.asp>
- National Statistical Coordination Board. (2002). Resolution No. 15 Series of 2002: Adoption of an official definition on the informal sector. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-manila/documents/publication/wcms_125116.pdf
- OECD. (2016). Background brief on fathers' leave and its use. Retrieved from: <https://www.oecd.org/els/family/Backgrounder-fathers-use-of-leave.pdf>
- United Nations. (2008). System of National Accounts. Washington, D.C. inter-Secretariat Working Group on National Accounts.
- United Nations Economic Commission for Europe. (2017). Guide on valuing unpaid household service work. New York and Geneva: United Nations.
- Virola, R. and Encaranacion, J. (2007). Are Pinoy machos getting more domesticated? Statistically Speaking. National Statistical Coordination Board. November 2007. Retrieved from http://nap.psa.gov.ph/headlines/StatsSpeak/2007/111207_rav_domesticated.asp
- World Economic Forum. (2018). The gender gap report. Switzerland: WEF. Retrieved from http://www3.weforum.org/docs/WEF_GGGR_2018.pdf