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Poverty, the Middle Class, and Income Distribution amid COVID-19

Jose Ramon G. Albert, Michael Ralph M. Abrigo, Francis Mark A. Quimba, and Jana Flor V. Vizmanos



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Jose Ramon G. Albert Michael Ralph M. Abrigo, Francis Mark A. Quimba Jana Flor V. Vizmanos

PHILIPPINE INSTITUTE FOR DEVELOPMENT STUDIES

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Abstract

Often development focus has been on measuring and analyzing poverty in order to reduce poverty. While the poor face future prospects of being perpetually trapped in poverty, the nonpoor also are vulnerable to poverty. Vulnerability has been particularly recognized in the wake of the impact of the novel coronavirus (COVID-19) that is likely to yield declines in incomes because of reduced economic activities. In this study, we provide an updated profile of the poor in the Philippines, as well as various segments of the income distribution, based on the 2018 Family Income and Expenditure Survey. We follow the typology of the low, middle, and high income classes proposed in previous research reports, and simulate the likely effects of contractions in per capita income on poverty and the entire income distribution amid the coronavirus pandemic. In estimating the impact of COVID-19 on poverty, and the income distribution, data are not available at this time. The study makes use of simulation scenarios and assumptions. We find that in a (medium case) scenario of declines of incomes by 10 percent across the entire income distribution, the number of poor Filipinos can increase by 5.5 million, but with the emergency financial subsidies (i.e., the social amelioration program and the small business wage subsidy in. place) that targeted 90 percent of households, the worsening of poverty conditions has been managed so that only 1.5 million would fall into poverty, i.e., 4 million less than expected number of Filipinos falling into poverty. These simulation results are consistent with nowcasting exercises of IFPRI and the World Bank on poverty amid COVID-19 that assume a global GDP contraction of 3 percent. Further, low-income classes would, on average, transition only a quarter year more than the baseline of 21.25 years for this (medium-case) scenario if after the pandemic (and an assumed V-shaped economic recovery), their incomes would have a constant annual growth of 2.5 percent. However, under tougher conditions of income contractions of 20 percent with social protection cash assistance, we simulate that the average time for low income Filipinos to move up into middle income class would increase by three years from baseline figures. Under a protracted recovery, we would thus expect a longer period to transition. These results, though relying on simulation scenarios and simplistic assumptions, are helpful in illustrating the importance of government efforts to provide social protection not only for the poor but also for segments of the income distribution that could likely to fall into poverty given income contractions from reduced economic activities during this COVID-19 pandemic. The study also discusses various policy and data issues, recommending that the Philippine Statistics Authority start reviewing its official poverty measurement system, including the current use of income over expenditure as the poverty metric, as well as the poverty line setting methodology given the changes in income and expenditure patterns in the past decade (prior to the onset of COVID-19) that improved living conditions.

Keywords: poor, middle class, inequality, income distribution, novel corona virus, simulation

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Poverty, the middle class, and income distribution amid COVID-19

Jose Ramon G. Albert, Michael Ralph M. Abrigo, Francis Mark A. Quimba and Jana Flor V. Vizmanos *

1. Introduction

Last December 2019. the Philippine Statistics Authority (PSA) released official estimates of poverty based on the results of the 2018 Family Income and Expenditure Survey (FIES). According to the PSA (2019a), the poverty incidence, i.e., the proportion of people in poverty, across the country stands at 16.6 percent as of 2018. This estimate is much lower than the corresponding (revised) estimate of 23.3 percent poor Filipinos in 2015. Furthermore, the subsistence poverty rate, representing the proportion of Filipinos in extreme poverty who belong to households with (per capita) incomes lower than food needs, is estimated at 5.2 percent in 2018, nearly half of the 9.1 percent extremely poor Filipinos in 2015.

Improved welfare conditions have led to an expanding middle class, although a larger share of the middle class still belongs to the lower part of the middle-income bracket (see Albert *et al.* 2018a for typology on the income distribution, including a definition of the middle class). The carbon consumption patterns of Filipinos, especially those in the middle class, are more driven by increasing wealth than by environmental concern and knowledge or any other factors (Never and Albert 2020). Behavioral insights are vastly needed to identify particular entry points for changing current or avoiding future carbon-intensive consumption patterns.

There are concerns that the country's gains in improving welfare conditions during the period 2015 to 2018 can get easily wiped out in the wake of the novel coronavirus (COVID-19) pandemic. In an attempt to manage the spread of COVID-19, the government has adopted several measures, including an enhanced Luzon-wide enhanced community quarantine (ECQ) from March 17 to April 30. The ECQ is to be extended in Metro Manila, CALABARZON, Central Luzon except Aurora, which is under a general community quarantine (GCQ), and other select provinces and cities. The ECQ and GCQ, particularly travel restrictions, closures of schools and other gathering places have resulted in a drastic slowdown in economic activities. As a result of coronavirus-related morbidity and mortality, the inability of COVID-19 patients with jobs to work fully effectively for at least several weeks as well as drastic slowdown of economic activities, labor supply has been reduced. Economic losses between 276.3 billion and PHP 2.5 trillion representing about 1.5% to 13.3% of the 2019 Gross Domestic Product (GDP), are expected largely as a result of drops in labor supply between 7.4 percent to 19.7 percent (Abrigo *et al.* 2020).

Regardless of when the ECQ is eventually lifted throughout the country, there is recognition that the concerted actions meant to contain the virus have rapidly changed how we live, work and learn, and that a new normal is emerging. This study aims to examine the limited publicly

^{*} The first three authors are senior research fellows at the Philippine Institute for Development Studies (PIDS), while the last author is a research specialist at PIDS. Views expressed are those of the authors and do not necessarily reflect the position of the PIDS.

available microdata from the 2018 FIES to look into possible scenarios on poverty and the entire income distribution accounting for some scenarios on reduction of incomes. In the next section, we review some literature on outlooks regarding the macro-economy and poverty. The third section firstly describes the official poverty methodology, as well as the methods used to profile various segments of the income distribution, especially the poor and middle-class. In this section, we also provide empirical findings based on the 2018 FIES. The fourth section shows simulation scenarios on income contractions as well as the effects of social protection programs during the COVID-19. We then close this report with a summary of the findings, policy issues and some recommendations.

2. The Economic Impact of COVID-19

Outlooks on the Philippine and world economies have been released by various international organizations reflecting dampened prospects from prior to the onset of the virus (ADB 2020, IMF 2020, WB 2020). For instance, the Asian Development Bank expects the Philippine economy to grow at 2.0% in 2020 (ADB 2020), while the International Monetary Fund forecast for GDP growth forecast is 0.6% for 2020 (IMF 2020). The World Bank, on the other hand, projects growth in the Philippines to decline to 3.0 percent in the baseline and further expects a negative 0.5 percent in the lower-case scenario in 2020, from 5.9 percent in 2019 (WB 2020), given the prospects of shrinking external demand, decline in tourism revenues, and reductions in remittances (Table 1). All these reflect much reduced expectations of the economic performance of the Philippines, a big difference from its growth trajectory prior to the pandemic. Even local researchers have pointed out huge losses in the economy (Abrigo et al. 2020; Habito 2020). The National Economic and Development Authority (NEDA) has thus slashed its GDP growth projections, and is now expecting growth to fall between -0.6% and 4.3% for 2020. The NEDA has also estimated economic losses from the six-week Luzon ECQ at 767.19 Billion PhP (equivalent to 3.85% of GDP), with CALABARZON (314.6 Billion PhP) taking the biggest hit across regions, followed by NCR (269.2 Billion PhP) and Central Luzon (103.8 Billion PhP). Across economic sectors, losses from retail are estimated at 97.9 Billion PhP; Industry at 583 Billion PhP; while Agriculture at 73 million PhP. Schools are also estimating losses ranging from a low of 55 Billion PhP to a high of 142 Billion PhP. Banks also expect 368 Billion loan defaults.

Table 1. GDP Growth Outlook in 2020 for ASEAN member economies

	2019	Baseline 2020	Lower case 2020
Indonesia	5.0	2.1	-3.5
Malaysia	4.3	-0.1	-4.6
Philippines	5.9	3.0	-0.6
Thailand	2.4	-3.0	-5
Viet Nam	7.0	4.9	1.5
Cambodia	7.1	2.5	1
Lao PDR	4.8	3.6	2.2
Myanmar	6.3	3.0	2

Source: World Bank (2020)

The PSA (2020) has also released information on the first quarter 2020 economic performance which suggests that GDP for 2020 has contracted by 0.2 percent. Given the likely drop in incomes and expenditures of households as well as businesses, we would expect a worsening of poverty conditions. Several estimates have been made on the impact of Covid-19 on poverty incidence (using international poverty lines1), either using (i) computable general equilibrium (CGE) model (ILO 2020; Vos *et al.* 2020a; Vos *et al.* 2020b) or assumptions regarding the contraction of per capita household income or consumption (Sumner *et al.* 2020). The CGE models estimate how supply and demand shocks, output contractions or changes in trade or production factors feed into monetary poverty.

- The ILO (2020), which regularly estimates the working poor (i.e. the proportion of the working population earning less than the international poverty lines), estimates that for 2020, there will be between 9 and 35 million new working poor at a poverty line of US\$3.20 per day in 2011 purchasing power parity (PPP) prices for lower middle-income countries across the developing world.
- Simulations made by IFPRI (Vos *et al.* 2020a; 2020b) suggest that a global GDP (GDP) slowdown of 1 percent would increase the proportion in the population below US\$1.90 per day in 2011 PPP prices between 1.63 percent and 3.02 percent (corresponding to 12–22 million more people in extreme poverty) depending on the transmission channel. For the Philippines, the increase in extreme poverty rates are expected to be between 3.0% and 6.0% from the baseline (correspondingly to an increase in the number of extremely poor Filipinos between 270 to 600 thousand). (**Table 2**). Across the whole of South East Asia, the proportion below \$1.90 can rise between 2.2% to 5.1%.

Table 2. Poverty Impact of 1% Global Economic Slowdown for ASEAN member economies: Percentage Increase from Baseline Values

ASEAN member	Scenarios							
economies	Labor Productivity Shock	Total Factor Productivity Shock	Trade Shock					
Indonesia	4.14	4.86	7.46					
Philippines	2.97	2.52	6.64					
Thailand	2.36	2.22	2.89					
Viet Nam	1.92	9.42	19.32					
Cambodia	3.48	5.3	19.82					
Lao PDR	2.97	2.52	6.64					
Myanmar	2.97	2.52	6.64					
ASEAN-wide	2.24	2.62	5.09					

¹ To monitor extreme monetary poverty across the world, World Bank makes use of an international poverty line of \$1.90 in purchasing power parity (PPP) 2011 prices. The World Bank also makes use of other international poverty lines, such as poverty lines for lower-middle-, upper-middle- and high-income countries respectively at \$3.20 PPP, \$5.50 PPP, and \$21.70 PPP a day. For the Philippines, the World Bank estimates of the proportion in poverty for 2015 are 6.15 percent and 26.04 percent, respectively using \$1.90 PPP and \$3.20 PPP, respectively. Official estimates of poverty are at 23.3 percent for 2015, suggesting that the national poverty lines are between the two international poverty lines of \$1.90 PPP and \$3.20 PPP. (See World Bank Povcalnet http://iresearch.worldbank.org/PovcalNet/povOnDemand.aspx)

ASEAN member	Scenarios						
economies	Labor Productivity	Total Factor	Trade Shock				
	Shock	Productivity Shock					
Worldwide	1.63	1.88	3.02				

Source: Vos et al. (2020a, 2020b)

- In its World Economic Situation and Prospects report, the United Nations (2020) forecasts a 3.2% reduction in global GDP this year, and using its World Economic Forecasting Model (WEFM) expects an estimated 34.3 million people to fall into extreme poverty (with incomes below \$1.9 USD per person per day in 2011 PPP prices).
- Sumner *et al.* (2020) made use of three simulation scenarios: low, medium, and high contractions of (a) 5, (b) 10, and (c) 20 per cent, to estimate the impact on the poverty headcount using the international poverty lines of US\$1.90, US\$3.20 and US\$5.50 per day in 2011 PPP prices). Extreme poverty, estimated at 10.1% for a poverty line of \$1.90, is shown to rise to 11.2% or even 15.7% at a reduction of in incomes of 5 percent and 20 percent, respectively. Using a higher poverty line of \$3.20, the proportion in poverty, estimated at 25.2%, would rise to by at least 1.8 percentage points to 27.0% with a reduction of 5 percent in incomes (or as much as 4.8 percentage points at 33.0%).

Mahler *et al.* (2020) make use of the most recent data from PovcalNet and extrapolate forward using the growth projections from the recently launched World Economic Outlook of IMF (2020), in which global output is projected to contract by 3% in 2020, and suggest that global poverty could increase from 8.2% in 2019 to 8.6% in 2020, or equivalent increase the counts from 632 million people to 665 million people in poverty. Breakdown of simulations on the impact of COVID-19 on poverty for ASEAN member economies are given below, as per e-mail communication with these authors (**Table 3**).

Table 3. Increase in Number of People in Poverty in ASEAN member economies Using IMF Growth Projections Resulting from COVID-19

ASEAN	Increase in millions of people living								
member	below								
state	\$1.90 per	\$3.20 per	\$5.50 per						
	day	day	day						
Cambodia	0.04	0.11	0.27						
Lao PDR	0.1	0.25	0.2						
Indonesia	1.91	5.47	6.29						
Malaysia	0	0	0.06						
Myanmar	0.05	0.82	1.85						
Philippines	0.77	2.63	2.74						
Singapore	0	0.01	0.01						
Thailand	0	0.14	1.88						
Vietnam	0.19	0.58	0.97						

Source: Email communication with dmahler@worldbank.org

Mahler *et al.* (2020) also look into the robustness of their forecasts by examining what will happen to poverty under slightly more optimistic or pessimistic scenarios (either with 1 percentage point lower or higher values than the World Economic Outlook projections (IMF 2020), or increased or decreased Gini inequality by 1% in all countries in 2020). Their simulation shows that global poverty could range between 8.4% and 8.8%, or in other words, the number of people pushed into extreme poverty will be roughly between 40 and 60 million. Since estimates of IFPRI (Vos *et al.* 2020a; 2020b) on poverty assumed a global GDP (GDP) slowdown of 1 percent, if we were to assume instead a GDP slowdown of 3 percent consistent with IMF and new UN projections), we would expect an increase in the number of extremely poor Filipinos between 810 thousand to 1.8 million, which are roughly consistent with the results of Mahler *et al.* (2020).

Throughout all these estimates of poverty, we have yet to determine the impact of the pandemic to specific groups of people, e.g., women and men. Many studies have suggested that the novel coronavirus affects especially the elderly. Moreover, across the world, it appears that men are hit harder by the virus than women. This is particularly true in the Philippines: as of April 7, men outnumber women 58 to 42 among people who tested positive (Abrigo *et al.* 2020). Further, men appear twice more likely to die than women from COVID-19, as among deaths, 70% are among men vs 30% for women. These empirical results appear to be on account of traits of men that might make them more vulnerable to the pandemic — for example, having certain medical conditions like asthma, diabetes, hypertension, chronic respiratory diseases, because of their lifestyles, compared to women.

Further, what we do know is that prior to the onset of the virus, women and men have been situated differently across occupations. **Figure 1** illustrates that as of 2015, 72.6 % of health professionals (73.3% if we add also other human resources) are women (Abrigo and Ortiz 2019). These figures were much higher two and a half decades prior to 2015, suggesting that these occupations are moving more toward gender parity though the gap continues to be rather wide. On the other hand, among workers in Science and Technology (S&T), only a quarter (25.3%) of workers are women and often working women in the S&T sector drop out of working in the sector much faster than women (Albert *et al.* 2020 TBR). In the entire agriculture and industry sectors, men tend to dominate while in services, women do (David *et al.* 2018).

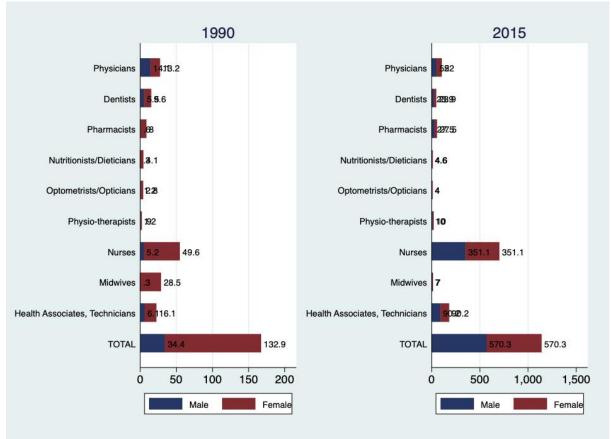


Figure 1. Health Human Resources in the Philippines, by Sex: 1990, 2015

Source: Abrigo & Ortiz (2019)

Further, as regards leadership, the country's leaders are still dominated by men in both the public and private sectors (David *et al.* 2018). As of 2016, the proportion of women in senior and middle management positions is only about a third (32.7%). Even if more women are getting to be visible in certain occupations, even in board rooms of the private sector, and even become chief executives or the president of the country, the number and proportion of women who have broken such glass ceilings is still far beyond gender parity. Cabinet secretaries have remained largely male-dominated from 1986 to the present, even during years when we had female presidents. The downgrade in the performance of the Philippines in the 2020 Gender Global Gap Report is almost entirely due to the lower female representation in the cabinet, which declined from 25% in 2017 to 10% in 2019 (WEF 2019).

The starting issue in the workplace is the barrier to even participate in the labor force. According to data from the January 2018 Labor Force Survey (PSA 2018), the principal reason given by about three out of five women of working age for being economically inactive is unpaid care work, whereas for more than half of their men counterparts, "schooling" is the primary reason for being outside the labor force (**Figure 2**). Thus, opportunities for women and men to participate in the economy remain unequal, largely because the disproportionate share of unpaid care and domestic work they undertake. Further, even when women join the work force, a much larger share are in vulnerable jobs.

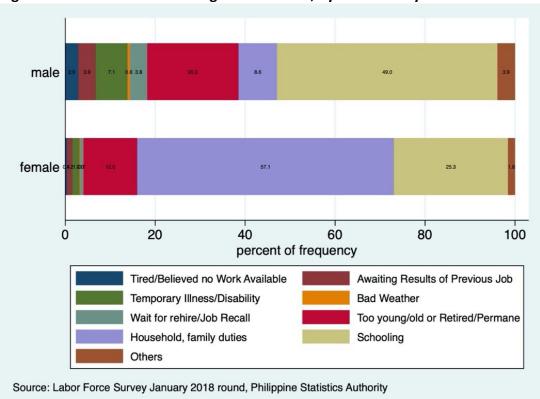


Figure 2. Reasons for Not Joining Labor Market, by Sex: January 2018.

Note: Authors' calculations.

In response to the pandemic and the vulnerabilities we face, government has adopted a three-pronged macro policy strategy involving (i) containing the spread of the virus, (ii) providing social protection to the poor and vulnerable; and (iii) increasing demand to boost economic activity. Current policies are meant to mitigate demand externalities and financing constraints, utilizing monetary and fiscal instruments, and social protection to dampen the impact of adverse shocks to livelihood and the economy (**Box 1**).

Box 1. Macro-Policy Respor	ses to COVID-19
Policy	Strategies and Programs
1. Contain Spread of Virus	Detect, isolate-treat-reintegrate (DITR) strategy to fight catastrophic impact of COVID-19; P35.7 billion in expanded medical resources
2. Provide Social Protection	Government largely providing people relief from sudden shock. Local government units (LGUs) providing food packs; National government (NG), in cooperation with LGUs, implementing a P583.8 B for Social Amelioration Program (SAP) and Small Business Wage Subsidy (SBWS) program
3. Re-booting and boosting Demand	Monetary policies (reduced key policy rates and reserve requirements) and fiscal policies to soften decline in consumer and business spending (including P220.5 B in monetary and fiscal incentives)

Note: Authors' summary

All these macro policies are supported by a COVID-19 war chest amounting to P1.7 trillion—P58.6 billion in expanded medical resources to fight the disease and ensure frontliners' safety; P595.6 billion in emergency support for the poor, low-wage workers, the informal sector, and other vulnerable groups; P1.1 trillion for monetary and fiscal initiatives, including an economic stimulus. Theoretically, shocks would yield a v-shaped trajectory on growth, but in the real world, the coronavirus could produce a prolonged and deep recession and sharp economic volatility either in a L, U, or W shape.

In the next section, we describe the income distribution in the Philippines, as reflected in the 2018 FIES results, and pay special attention to looking into the gaps across various income segments in the country. This reflects essentially an update of work by Albert *et al.* (2018a) on the middle-class, based on the currently available microdata pertaining to the 2018 FIES.

3. Profile of Poverty and the Middle Class

In this study, the underlying framework for describing poverty (and inequality) is a monetary approach of the identification and measurement of poverty (and income inequality), that is the most commonly used approach. This involves essentially views persons in poverty in monetary terms, as those that belong to families with per capita incomes less than some poverty threshold. The latter represents the minimum level of income per person deemed adequate for meeting food and non-food needs. Data on total household income can be gathered by identifying all possible income sources, e.g., incomes from salaries and wages, interests, dividends and self-employment. Income inequality, which describes asymmetry in the distribution of income within society is to be viewed in the context of the gaps in various statistics across various income groups (as defined by Albert *et al.* 2018).

Countries have put poverty at the heart of the development agenda. In 2015, 193 member countries of the United Nations, including the Philippines, committed to achieving the Sustainable Development Goals (SDGs) by 2030. The agenda on the SDGs is a continuation and expansion of the Millennium Development Goals framework to put poverty reduction and related goals at the center of development priorities. The first goal of the SDGs, SDG1: "end poverty in all its forms everywhere" is essentially about eradicating extreme poverty; it involves targeting the most vulnerable to poverty, increasing basic economic resources and social protection services, formulating pro-poor and inclusive policy frameworks, as well as supporting communities affected by conflict and climate-related disasters. In the Philippines, medium term national development plans have mainstreamed poverty reduction, and even incorporated the country's aspiration to be a predominantly middle class society by 2040, where no one is poor (NEDA 2015; NEDA 2016). Amid the pandemic, countries have started to reset their development priorities, and reallocate resources to deal with the pandemic, and there are dangers that such response to the pandemic could be de-linked from the SDGs. As earlier pointed out, this study makes use of a largely descriptive examination of available income data from the 2018 FIES to describe poverty, the middle class and the entire income distribution. The study also recognizes the likely reduction in incomes brought about by COVID-19 and the attempt to reduce the contagion. We firstly, however, review some concepts in the official poverty measurement methodology.

3.1. Official Poverty Measurement System

To develop the proper policy framework and instruments for reducing poverty, countries need a credible poverty measurement system. Essentially, official poverty measurement systems involve three steps (UNSD 2005; Albert 2008; Haughton and Khandker 2009):

- Defining a welfare indicator. Most countries make use of a money-metric based on income or consumption. In the Philippines, the PSA uses income per capita. China and Malaysia, aside from the Philippines, also use welfare indicators based on income. Most developing countries make use of consumption expenditure-based measures rather than income-based owing to difficulties in obtaining accurate income data, as reported income tends to be biased downward, especially among households relying on farming income and self-employment, and on income from housing services or capital gains.
- Setting a poverty line. The typical scheme in developing countries, including the Philippines, for setting poverty lines involves the basic needs approach, which attempts to identify the cost of absolute minimum food and non-food requirements for long-term well-being. The details for implementing this approach, however, vary a bit across countries.
- Summarizing the poverty data. All NSOs that measure poverty release poverty incidence estimates i.e., the proportion of people (or households) with income per capita below the poverty threshold. The PSA also releases the subsistence incidence i.e., the proportion of people (or households) whose incomes per capita do not even reach the food component of the poverty line (also known as subsistence threshold)

For its poverty measurement system, the PSA makes use of data on per capita income, i.e., the total household income divided by the family size, sourced from the triennial FIES. In the FIES, total household income is the aggregate of incomes from all sources, including employment, social transfers, home production, informal support, income from rent, and the like. In other countries, data on aggregate consumption/expenditure consist of adding up expenditures of all items purchased from market sources and items obtained from other sources (such as gifts and home-produced items that are consumed by the household) using imputed values at local market prices.

The FIES has been traditionally designed to yield reliable information at the regional level, though the design of the 2018 FIES (and subsequent rounds of the FIES) has been changed to adopt self-weighting schemes, as well as to make use of four times than the previous sample sizes in order to obtain more precise survey-based statistics at the provincial level. For several years, the PSA has also released first semester poverty data based on the FIES. Further, the PSA experimented with a release of poverty statistics sourced from another survey, the Annual Poverty Indicator Survey (APIS), with the use of many income questions from the FIES module. But owing to criticisms that income data from APIS and FIES are fundamentally different (Albert et al. 2015), this practice, including comparing APIS-sourced poverty data with first semester FIES-sourced poverty, appears to have been discontinued.

Is income or expenditure a better welfare indicator? As pointed out in Albert (2008), poverty analysts generally view consumption-based measures of poverty as providing a more adequate picture of wellbeing than those based on income, especially in low- or middle-income countries. Income typically fluctuates from year to year and changes across one's lifetime whereas consumption remains relatively unchanging. Further, consumption/expenditure is viewed to be more accurately measured than income: survey respondents may be more able as well as willing to remember what they spent rather than what they earned, especially when their memories are jogged with more detailed questions. In addition, reported income is likely to be underreported due to biases from memory recall, the reluctance to reveal accurate income data for tax purposes or because some of the actual income may be from illegal sources. In addition, the accuracy of some components of income, especially agricultural income, may be difficult to defend. On the other hand, the extent of bias in income data is likely to be higher on the upper part of the income distribution, which is not of particular concern in poverty analysis. Salaried and fixed income earners can also accurately account for their incomes (perhaps even better than their expenditures). The direction and extent of bias on expenditure data, however, is unclear: the poor can have prestige biases, when being asked their expenditures. Even jogging the memory of respondents with detailed questionnaires has its limitation: respondents may suffer from information fatigue after long hours of being interviewed. Reportedly, respondents for the FIES take an average of four to five hours of interview, with the household visited twice—in July and in January of the following year. This can seriously erode the quality of survey data (for both expenditure and income). The PSA should be looking into its entire poverty measurement methodology soonest, given the likely changes in income and consumption patterns, especially in the wake of COVID-19 and a post-COVID-19 world.

Some NSOs, including the PSA, are experimenting with the use of a multidimensional poverty index that puts together various poverty indicators into a composite measure. While there may be some attraction to the idea, this is not without its complications as one has to develop a framework for identifying what indicators to consider, what weights to give to the indicators, and what thresholds to use for each indicator (Albert and Vizmanos 2018c).

When NSOs such as the PSA generate poverty statistics, they also determine national poverty lines, i.e., the value of the chosen indicator of welfare (i.e, per capita income for the Philippines) deemed necessary to maintain a minimal standard of well-being. For monetary welfare indicators that use income or expenditure, the poverty line is the amount needed to purchase a basket of basic food and non-food goods and services. For non-monetary indicators of welfare, such as the years of schooling of an adult aged 15 and over, 4 years has been suggested as a poverty line, and two years for an "extreme" poverty line (UNESCO 2010). The justification for such thresholds to identify the education poor is that the workforce need basic literacy and numerical skills for stable occupations, and having less than four years of schooling puts these people at a severe disadvantage in career mobility (and moreso if they have less than 2 years of schooling).

When official statistics make use of income or consumption-expenditure indicators in poverty measurement, monitoring and analysis, the official poverty lines are referred to as "absolute" poverty lines. That is these poverty lines are essential comparable yardsticks across time whose changes in nominal values merely reflect price changes, and whose differences in subnational areas indicate the differences in cost of living across these areas. Most developing countries, the Philippines included, sets their poverty lines with the cost-of-basic needs (CBN) approach, a methodology that (a) firstly obtains the food component of the poverty line by a food bundle, anchored on minimum calorie requirements (typically 2100 Calories per person per day), and (b) adjusting these food poverty line upward to incorporate non-food needs. In the Philippines, 2,000 calories per person per day is used as the nutrition benchmark. This benchmark is already quite generous as results of the Food Consumption Survey of the Food and Nutrition Research Institute (FNRI), suggest that more than 90 percent of Filipinos do not consume as much as this benchmark in a day. The Philippines also vastly differs in its implementation of the CBN approach by use of "low-cost" menus for rural and urban areas in each province as an artifice for estimating the food poverty line, whereas most countries make use of a food basket with prices based on the costs incurred by a reference population (typically between the second and fifth deciles of the food consumption distribution). Thus, the reported PhP 7,528 monthly for a family of 5 for 2018 is actually representing the an average food poverty lines in the entire country.

Furthermore, the food menus in the Philippines are one-day menus valued with "low cost" provincial prices at the urban/rural areas in each province. These menus also are meant to meet the 100% Recommended Dietary Allowance (RDA) adequacies for energy and for protein, as well as 80% RDA adequacies for other nutrients and vitamins. The FNRI prepared these one day menus, reportedly validated through extensive consultations with stakeholders. The menus are also adjusted to account for the availability of food commodities that FNRI deemed cheap and nutritious. Food items that can be costly are also included in the food menu but only in as far as these items are the only sources of the nutrient requirements, say, for iron adequacy.

The food menus could be attractive as far as its ability to incorporate other nutrient requirements besides calories. In addition, since a decade ago, the food menus have been started off with a national menu (unlike previously where regional menus could vary considerably), to ensure that relatively comparable food items priced for the food poverty lines across the country. An alternative approach of using a food bundle has been advocated for use (Albert and Molano 2009) in estimating the food threshold, and could be worth exploring.

In a few developing countries, a non-food basket is used to value the non-food requirements. On the other hand, most countries estimate non-food needs indirectly using Engel's coefficient - i.e., the food share of those near the food poverty line. In the Philippines, Filipinos at the bottom of the income distribution spend around 70% for food, thus, the inverse of this food share - i.e., 1/0.7=1.43- is used to adjust the food poverty line upward for non-food needs. Thus the monthly poverty threshold of PhP 10,727, on average, for a family of five per month in 2018, is an adjustment upward of the food threshold.

For several decades, developing countries have adopted a view of poverty as monetary deprivation, but ultimately poverty has to resonate with what society's views. Failrly recently, a number of netizens expressed surprise about the official poverty line, and mentioned that they could not survive with the official poverty lines of PhP 10,727-a-month for a family of 5 in 2018². A few netizens have even asked PSA officials and staff to try surviving with such amounts. This strong reaction in social media may have likely been partly a result of a P10,000-a month figure that an official of the NEDA reportedly mentioned about a "decent" quality of life, although this amount was actually meant to explain inflation³. What should be pointed out to most people is that "survival" means different things to different people: an extremely wealthy Filipino will not "survive" with P100,000 a month, even if for more than half the population, this would be a huge amount of money. Al NSOs across the world, attempt to measure poverty to help describe the extent to which poverty changes, so that decision makers can appropriately carry out interventions meant to improve the plight of the needy.

Although NSOs such as the PSA have not yet come up with an international standard on poverty measurement, similar to the national accounting practices, the approaches for counting the poor across countries are actually quite similar, as per several literature developed by the World Bank and by the United Nations Statistics Division (Haughton and Khandker 2009; UNSD 2005). These approaches are based on on estimating the cost of "basic needs," (and not how much one needs to survive). However, this idea still causes confusion, as the term "basic" needs may not be commonly defined. For instance, would we consider internet use as a basic need? And how exactly should we be costing these "basic needs"?

Those familiar with the food menus of the PSA have also been puzzled why are least-cost prices used in the menus? Adding to the confusion is that the daily costs incurred by those in the "middle class", who tend to be most outspoken in social media, (and even more so those in the upper income class) do not match the official poverty thresholds on a per person per day basis. What PSA should be explaining is that the expenditures (and consumption baskets) of the average Filipinos are very different from those in the low income class. The PSA needs to develop better communication messages so that people will not equate their spending (and the prices they pay) with the condition of the poor.

The World Bank has been monitoring poverty globally making use of another set of "absolute" poverty line. In the Millennium Development Goals period, the World Bank initially used and international poverty line \$1 per person per day in 1991 PPP indices, and subsequently (with the availability of more recent price data from the International Comparison Program) updated this poverty threshold to US\$1.25 per day in 2005 PPP prices, and recently into \$1.9 per day in 2011 PPP prices. The latter is now meant for monitoring the Sustainable Development Goals. While the PSA's official poverty lines are not tied to the \$1.9 per day poverty line, if we were to compare them, the national poverty line would actually be higher. Thus, official income

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 $^{^2\ \}underline{\text{https://businessmirror.com.ph/}2019/04/18/\text{beyond-the-data-what-does-being-poor-in-the-phl-mean/}}$

³ https://www.rappler.com/thought-leaders/204385-real-score-about-neda-budget-challenge

poverty headcounts are higher than the World Bank estimates of people in poverty for the Philippines using the \$1.9 a day poverty lines (**Table 4**), though the trends in the two sets of poverty incidence figures tend to be the same. Note, however, that the \$3.2 poverty lines suggested by the World Bank for use in tracking poverty across lower middle income countries yields estimates of poverty rates that are higher than the official poverty headcount figures, thus suggesting the need for PSA to re-examine its poverty line methodology, in the wake of improved living conditions across time (before the onset of COVID-19), that should lead to much higher poverty thresholds (and poverty counts) today.

Table 4. Poverty Headcount Rates (in %) in the Philippines using International and National Poverty Lines: 2010-2015

Year	Internationa	National	
	\$1.90 a day	\$3.20 a day	Poverty Lines
2015	6.15	26.04	21.6*
2012	10.51	33.55	25.2
2009	10.87	34.24	26.3
2006	14.54	38.42	26.6
2003	13.16	36.29	
2000	13.89	38.15	

Sources: World Bank Povcalnet; PSA

Note: According to PSA (2019c), the official poverty incidence estimate of 21.6 percent in 2015 has been revised to 23.3 percent to reflect rebased prices from a base year of 2006 to 2012, and to incorporate counts from the 2015 Census of Population (PopCen).

Whether or not we think that the official poverty lines are unrealistic, what we should ultimately get bothered with is that around 3 out of every 20 Filipinos (16.6%) are from families with incomes below PhP 10,727 a month (if the family is a family of 5), and that one in 20 (5.2%) even are part of families with incomes 30% less than this threshold (around PhP 7,528 a month). The threshold should thus be viewed as a mere artifice. Nonetheless, it is important for the PSA to start reviewing its poverty line methodology⁴ as ultimately poverty metrics, just like any set of statistics, have to be "credible" to society and ultimately reflect norms.

Finally, as regards summaries on poverty data, the PSA regularly releases the poverty (and subsistence) thresholds, and the poverty incidence. The latter statistics are the simplest way of summarizing poverty data. Data users, however, have to realize that it is not enough to compare poverty rates across areas because the total population also varies across areas. Some areas that have high poverty incidence actually do not have as much share of total poverty on account of population size. Similarly, some areas with low poverty incidence may actually have a high share of total poverty because of population size. More discussions on this issue in the next sub-section.

It should also be noted that while poverty incidence rates provide a readily understandable summary of poverty conditions, they also are unable to show the intensity of poverty and

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⁴ The PSA is planning to review its official poverty methodology, as pointed out in this article. https://businessmirror.com.ph/2020/02/07/psa-eyes-changes-in-computing-poverty-level/

describe the severity of poverty. Other poverty measures such as the poverty gap and poverty squared gap are being monitored, respectively, for such purposes. The PSA regularly generates the poverty gap index, but the extent of explanation of these figures are not adequate to help data users. The poverty squared gap is even more difficult to interpret; hence, these figures are used mostly only in academic research reports, and hardly used for practical field work.

3.2. Poverty Profile

As indicated in the previous subsection, various poverty measures can be calculated to aggregate and summarize poverty data from a household survey on living standards. The most common descriptive measure of poverty is poverty incidence, also called the poverty rate, or headcount poverty index, which gives the proportion of the population in poverty.

As of 2018, the estimated poverty rate in the Philippines, based on the 2018 FIES, is 16.8 percent (equivalent to an estimated 17.7 million Filipinos in poverty out of a total of 105.8 million Filipinos in 2018). This is slightly different from these PSA-released figures on account of the incorporation of a revised urban/rural definition in the 2018 FIES microdata reflecting information gathered from the 2015 Census of Population (PopCen). In terms of families/households⁵, the household poverty incidence is 12.4 percent (corresponding to 2.9 million households in poverty out of a total 23.7 million households). Among the 17.7 million poor Filipinos, 5.6 million are estimated to be in subsistence or extreme poverty. Furthermore, around 830 thousand Filipino households are extremely poor in that they have per capita incomes less than the subsistence threshold.

The distribution of Filipinos and households in the country by poverty status in 2018 is shown in **Table 5**. Here, we notice that the Bangsamoro Autonomous Region of Muslim Mindanao (BARMM) has the highest poverty incidence and share of total poverty in the country, whether in terms of population or households. Further, the National Capital Region (NCR) or Metro Manila has the least poverty. Such a portrait of disparities across regions has been unchanged, although many regions appear to have reduced poverty, though at rather different rates (Albert *et al.* 2015).

Table 5. Distribution of Population and Households (in thousands) by Poverty Status and by Regions in 2018

Region	Population				Households					
	Poor			Total Total			Poor	Total	Total	
	Food- Poor T		Total	Non-		Food-	Poor	Total	Non-	
	poor	but	Poor	poor		poor	but	Poor	poor	
		not					not			
		Food-					Food-			
		Poor					Poor			
Ilocos	93	421	514	4,665	5,178	13	74	86	1,142	1,228
Cagayan Valley	154	432	586	2,994	3,580	26	82	108	750	858

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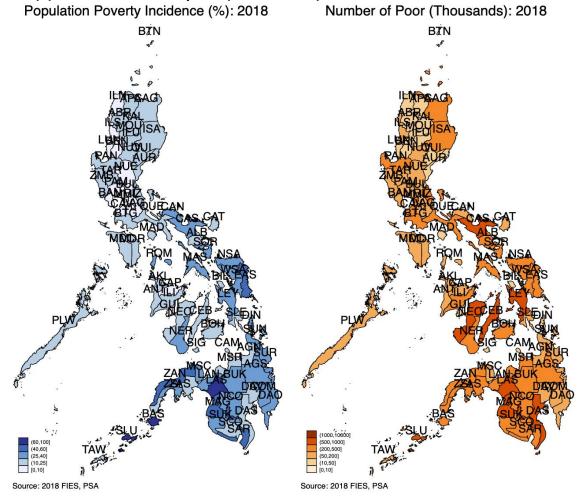
⁵ A household is a set of people who reside together, using the same kitchen and cooking utensils. In this report, we do not differentiate a household from a family.

Region			Population	on		Households				
		Poor		Total	Total	Poor			Total	Total
	Food-	Poor	Total	Non-		Food-	Poor	Total	Non-	
	poor	but	Poor	poor		poor	but	Poor	poor	
		not					not			
		Food-					Food-			
		Poor					Poor			
Central Luzon	180	663	842	11,048	11,890	26	112	138	2,532	2,670
CALABARZON	232	873	1,105	14,314	15,419	36	148	185	3,353	3,537
MIMAROPA	136	334	470	2,624	3,094	20	55	76	641	717
Bicol	424	1,195	1,619	4,387	6,006	59	197	256	1,027	1,282
Western Visayas	331	944	1,275	6,489	7,764	48	162	210	1,555	1,765
Central Visayas	372	991	1,363	6,382	7,745	59	172	232	1,487	1,718
Eastern Visayas	463	962	1,425	3,195	4,619	71	174	246	788	1,034
Zamboanga	465	756	1,222	2,503	3,725	72	135	207	587	793
Peninsula										
Northern	295	838	1,133	3,759	4,893	43	147	190	887	1,077
Mindanao										
Davao Region	291	691	982	4,147	5,129	45	125	171	1,041	1,211
SOCCSKSARGEN	544	806	1,350	3,428	4,777	90	151	241	831	1,071
National Capital	55	254	309	13,145	13,454	8	37	45	3,014	3,059
Region (NCR) or										
Metro Manila	64	455	247	4 550	4 775	10	26	26	267	402
Cordillera Administrative	61	155	217	1,559	1,775	10	26	36	367	403
Region (CAR)										
Bangsamoro	1,207	1,276	2,483	1,531	4,015	164	220	384	330	714
Autonomous	1,207	1,2,0	2,403	1,551	7,013	104	220	307	330	, , , ,
Region of										
Muslim										
Mindanao										
(BARMM)										
CARAGA	271	553	824	1,868	2,692	42	98	140	439	578
Philippines	5,574	12,145	17,719	88,036	105,755	830	2,117	2,947	20,770	23,717

Note: Authors' calculation from 2018 FIES, PSA and Official Poverty Lines, PSA

As mentioned in the previous subsection, the 2018 FIES has four times the sample size of previous waves of the FIES, which allows the survey to be used for generating more reliable estimates of poverty at the provincial level. The poverty maps on poverty incidence and the magnitude of poor Filipinos show disparities across the country (**Figure 3**).

Figure 3. Poverty Across Provinces in 2018 in terms of (a) Poverty Incidence (in percent) and (b) Number of Poor Filipinos (in thousands).



Further, the maps are a bit different in showing where poverty is least and worst since some provinces having a bigger share of total poverty in the country on account of population sizes. In consequence, policy makers and poverty data users should take caution in merely deciding to focus poverty interventions in areas with a high poverty incidence.

Box 2 provides a summary of the best and worst cases of provinces in the country in terms of poverty incidence and share to total poverty (or equivalently the number of poor Filipinos). Full data on the distribution of the population and across families are found in the annex tables. All the provinces identified that have poverty rates of 50 percent or above (including Isabela City) only account for 10.4 percent of the total poverty in the country. These areas, together, with those with poverty rates between 30 to 50 percent, can account for about a third (31.6) of all the poor in the country. In contrast, provinces with more than half a million poor Filipinos contribute a combined share of nearly a fifth (17.9%) of all poor Filipinos. More than half (55.3%) of all poor Filipinos reside in these provinces, together with those with between 250 to 500 thousand poor Filipinos. Thus, once again, we point out that poverty data users should be cautious in focusing solely at poverty incidence, as we may be missing out on populated areas that have a small poverty incidence, but actually a lot of poor people.

Box 2. Sum	mary of Poverty Conditions across Provinces :
Poverty Incidence	High poverty: with incidence of 50% or more in (Isabela City*,) Lanao del Sur, Basilan, and Sulu
	Moderately high poverty: with rates between 30% to 50% in Camarines Norte, Sultan Kudarat, Dinagat Island, Masbate, Northern Samar, Surigao del Norte, Zamboanga Sibugay, Davao Oriental, Agusan del Sur, Davao Occidental, Sarangani, (Cotabato City*,) Zamboanga del Norte, Maguindanao, Eastern Samar
	Least poverty: with rates of 5% or below in (NCR*,) Pampanga, Laguna, Rizal, La Union, Ilocos Norte
Number of Poor	High poverty: with more than half a million poor people in Camarines Sur, Leyte, Negros Occidental, Maguindanao, Sulu, Cebu, Lanao del Sur
People	Moderately high poverty: with between 250 to 500 thousand poor in Misamis Oriental, Sultan Kudarat, Basilan, Agusan del Sur, Lanao del Norte, Bohol, Isabela, Davao de Sur, Albay, South Cotabato, Quezon, Masbate, Batangas, Negros Oriental, Pangasinan, Bukidnon, Iloilo, Cotabato, Zamboanga del Sur, Zamboanga del Norte
	Least poverty: with 50 thousand poor or less in Batanes, Siquijor, Guimaras, Camiguin, Apayao, Quirino, Kalinga, Ilocos Norte, Ifugao, Biliran, Marinduque, Aurora, La Union, Mountain Province, (NCR-4th Dist.*), Dinagat Island, Abra, Benguet

Note: Authors' summary

The head-count index, however, does not indicate how poor the poor are. The Poverty Gap Index, which is the average over all people, of the gaps between poor people's income and the poverty line, expressed as a ratio to the poverty line, shows the average depth of poverty. However this is not sensitive to the distribution of living standards among the poor. To make the poverty gap index more sensitive to the distribution of income among the poor, the poverty gaps of the poorest people can be given a bigger weight when calculating the index. One such weighted average (that uses the relative gaps as the weights) is the Poverty Severity Index; the higher the value of this index, the more unequal is the distribution of income among the poor.

Table 6 show that the poverty comparisons across regions, in relation to the poverty incidence, gap, and squared gap measures, are generally consistent, although not fully. BARMM is, for instance, consistently the poorest across regions. Zamboanga Peninsula is the second poorest by poverty incidence and poverty gap in terms of the actual estimates of the indices, but only seventh and fifth, by share to total poverty incidence and total poverty gap, respectively. Thus, as was pointed out in the earlier sub-section, policies and practices to reduce poverty should not focus solely on poverty incidence.

Table 6. Poverty Incidence, Poverty Gap, Poverty Squared Gap (in %) among Filipinos, by Region: 2018

Region	Index Estimates				Share to Total (in %)		
	Poverty Incidence	Poverty Gap	Poverty Squared Gap		Poverty Incidence	Poverty Gap	Poverty Squared Gap
Ilocos	9.92	1.76	0.49		2.90	2.22	1.78
Cagayan Valley	16.37	3.28	0.98		3.31	2.87	2.47
Central Luzon	7.08	1.33	0.41		4.75	3.86	3.46

Region	Ind	ex Estima	ites	Share	to Total (i	in %)
	Poverty Incidence	Poverty Gap	Poverty Squared Gap	Poverty Incidence	Poverty Gap	Poverty Squared Gap
CALABARZON	7.17	1.38	0.42	6.24	5.17	4.52
MIMAROPA	15.19	3.43	1.17	2.65	2.59	2.56
Bicol Region	26.96	5.65	1.77	9.14	8.27	7.52
Western Visayas	16.42	3.40	1.09	7.19	6.44	5.96
Central Visayas	17.60	3.79	1.27	7.69	7.17	6.92
Eastern Visayas	30.84	7.32	2.53	8.04	8.25	8.25
Zamboanga Peninsula	32.81	8.41	3.07	6.90	7.64	8.09
Northern Mindanao	23.16	4.80	1.49	6.40	5.72	5.14
Davao Region	19.14	4.32	1.46	5.54	5.40	5.29
SOCCSKSARGEN	28.25	7.79	3.10	7.62	9.08	10.45
National Capital Region (NCR) or Metro Manila	2.29	0.36	0.10	1.74	1.19	0.92
Cordillera Administrative Region (CAR)	12.20	2.71	0.89	1.22	1.17	1.12
Bangsamoro Autonomous Region of Muslim Mindanao (BARMM)	61.86	18.59	7.33	14.02	18.20	20.79
CARAGA	30.62	7.26	2.51	4.65	4.77	4.77
Philippines	16.76	3.88	1.34	100.00	100.00	100.00

Note: Authors' calculation from 2018 FIES, PSA and Official Poverty Lines, PSA

3.3. The Middle Class

As pointed out in Albert *et al.* (2018b), the scope of poverty assessments and social protection interventions must go beyond profiling poverty, and look into various segments of the income distribution given the vulnerabilities to future poverty that people face. This is particularly relevant in the wake of the impact of COVID-19 on incomes of households. The non-poor is a very big portion of society with a lot of inherent heterogeneity.

For this purpose of examining inequality among the non-poor and in relation to the poor, it can be helpful to consider the income group typology espoused by Albert *et al.* (2018a) that identifies the low-, middle- and high- income classes in the country, especially since the middle class plays a crucial role in in society (Murphy *et al.* 1989; Chun *et al.* 2017; Banerjee & Duflo 2008; Huntington 1991; Kharas 2017). Further, this provides a good way to have a metric to determine whether the long term aspiration for the country to become a largely middle class society is being met. (NEDA 2015). **Table 7** provides the updated thresholds for the seven income groups (and three income classes) proposed by Albert *et al.* (2018a) using the poverty data available from the PSA for 2018.

Table 7. Income Groups in the (Per Capita) Income Distribution, Income Thresholds and

Sizes of Income Groups in 2018

Income	Definition	Range of	Size of Income G	
group		Monthly Family Incomes (for a Family Size of 5 members) in 2018 prices	Number of Hous Number of Households	Number of Persons
Poor	Per capita income less than official poverty threshold	Less than PhP 10,957 per month	2.9 million	17.7 million
Low income (but not poor)	Per capita incomes between the poverty line and twice the poverty line	Between PhP 10,957 to PhP 21,914 per month	8.4 million	40.7 million
Lower middle income	Per capita incomes between twice the poverty line and four times the poverty line	Between PhP 21,914 to PhP 43,828 per month	7.6 million	31.0 million
Middle middle class	Per capita incomes between four times the poverty line and seven times the poverty line	Between PhP 43,828 to PhP 76,699 per month	3.1 million	11.2 million
Upper middle income	Per capita incomes between seven times the poverty line and twelve times the poverty line	Between PhP 76,699 to PhP 131,484 per month	1.2 million	3.8 million
Upper income (but not rich)	Per capita incomes between twelve times the poverty line and twenty times the poverty line	Between PhP 131,483 to PhP 219,140	358 thousand	1.0 million
Rich	Per capita incomes at least equal to twenty times the poverty line	At least PhP 219,140	143 thousand	360 thousand

Notes: (i) Authors' computations from microdata of the 2018 Family Income and Expenditure Survey (FIES), PSA (2019a), making use of income group typology of Albert et al. (2018a). (ii) There are slight differences in representation of the poverty line from a family of five with those given by the PSA in their December 2019 release of poverty thresholds for 2018 (PSA 2019b), as the average here makes use of the released FIES microdata that redefines the urban-rural thresholds with data from the 2015 PopCen.

Thus, Filipinos in a family of five would be in the middle class if their monthly family income falls between PHP 23 thousand and PHP 140 thousand in 2018 (or around PHP 25 thousand and PHP 150 thousand, respectively in 2020 prices). Table 7 also provides estimates of the sizes of the income classes, both in terms of population and households, sourced from the 2018 Family and Income Expenditure Survey (FIES), conducted by the Philippine Statistics Authority (PSA). In particular, 47.7% of households are low-income, while about half (50.1%) are middle-income, and 2.1% are high-income. Of the middle-class households, less than two thirds (63.6%)) are in the lower middle group (comprising about 7.6 million households), about a quarter (26.2%) are middle middle group (consisting of 3.1 million households), and a tenth (10.1%) are in the upper middle group (made up of 1.2 million households). Thus, if the Social Amelioration Program (SAP) for 18 million households (out of 24.4 million estimated households in 2020) has been targeted well, it provides benefits for all of the low-income class, and a sizeable portion of the lower middle-income group.

As of 2018, urban households are predominantly middle-class: three in five (61.3%) urban households are middle-class, while only 3.0 percent is high-income. Among rural households, only 38.5% are middle-class, while more than 60.2% are low-income (**Figure 4**). Further, in urban areas, the proportion of households belonging to low-, middles and high-income classes are 35.8%, 61.3%, and 3.0%, respectively.

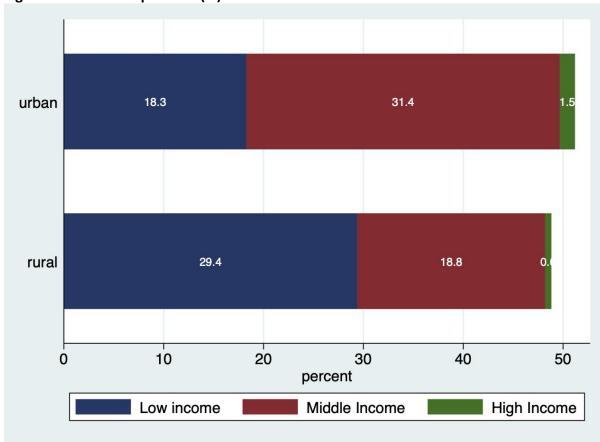


Figure 4. Share of Population (%) in Urban and Rural Areas across Income Classes

Note: Authors' computations from microdata of the 2018 Family Income and Expenditure Survey (FIES), PSA (2019b), making use of income group typology of Albert *et al.* (2018a).

Figure 5 shows that the bulk of the income groups in urban areas are in the lower middle class (36.0%), followed closely by the low income but not poor (33.8%). Nearly seven in ten (69.8%) persons in urban areas are in these two income groups. On the other hand, in rural areas, the

low-income but not poor (43.3%) and the poor (24.6%) are the dominant income groups, which in combination make up two-thirds (67.9%) of the rural population.

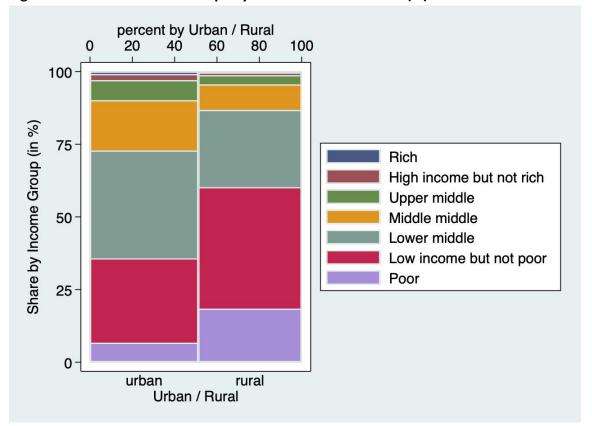


Figure 5. Share of Income Groups by Urban and Rural Areas (%): 2018.

Note: Authors' computations from microdata of the 2018 Family Income and Expenditure Survey (FIES), PSA (2019b), making use of income group typology of Albert *et al.* (2018a).

Among the regions, Metro Manila, CALABARZON, and Central Luzon, are where the middle-class dominantly reside (**Table 8**). Slightly more than half (51.3%) of all the middle-class households reside in these three regions. These three regions also have around three-fifth of their households being with middle-class, with NCR having the biggest proportion (74.1%), while in CALABARZON and Central Luzon, the respective shares of middle class households among the household distribution are 63.7% and 59.5%.

Table 8. Percentage Distribution of Households Among Income Classes by Region in 2018

Region	Low	Middle	High	Total
Ilocos	5.05	5.3	5.22	5.18
Cagayan Valley	3.83	3.45	2.73	3.62
Central Luzon	9.21	13.35	7.64	11.26
CALABARZON	10.59	18.94	16.97	14.92
Bicol	7.32	3.66	3.73	5.41
Western Visayas	8.33	6.61	7.05	7.44
Central Visayas	7.78	6.72	7.62	7.25

Region	Low	Middle	High	Total
Eastern Visayas	6	2.83	3.72	4.36
Zamboanga	4.84	1.99	1.72	3.35
Northern Mindanao	5.74	3.44	3.65	4.54
Davao Region	5.72	4.58	3.76	5.11
SOCCSKSARGEN	5.86	3.3	2.93	4.52
NCR	5.91	19.04	24.87	12.9
CAR	1.42	1.91	2.88	1.7
BARMM	5.65	0.63	0.07	3.01
CARAGA	3.41	1.54	1.92	2.44
MIMAROPA	3.34	2.7	3.52	3.02
Philippines	100	100	100	100

Note: Authors' computations from microdata of the 2018 Family Income and Expenditure Survey (FIES), PSA (2019b), making use of income group typology of Albert *et al.* (2018a).

While family sizes tend to vary across the income distribution, the low-income class not only tends to have a larger-sized family (with more children) than those from the middle and high-income classes, but also it has much more variability in family sizes, as well (**Figure 6**). Thus, decisions on fertility and reproductive health tend to be associated with income levels.

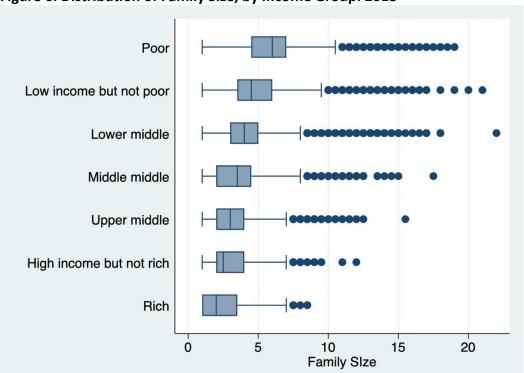


Figure 6. Distribution of Family Size, by Income Group: 2018

Note: Authors' computations from microdata of the 2018 Family Income and Expenditure Survey (FIES), PSA (2019b), making use of income group typology of Albert *et al.* (2018a).

Further, fertility decisions and time poverty may explain why women from low-income families, especially the poor, tend not to join the labor force given the expectation that they

should be spending more time taking care of younger children. This is confirmed by results of the PSA's labor force surveys which show that unpaid care work is the main bottleneck to women's labor participation. For instance, according to the January 2018 round of the LFS, the principal reason given by (about three fifths of) women of working age for being economically inactive, i.e., being outside the labor force is unpaid care work, whereas for (more than half) their men counterparts, "schooling" is the primary reason for being outside the labor force (**Figure 7**).

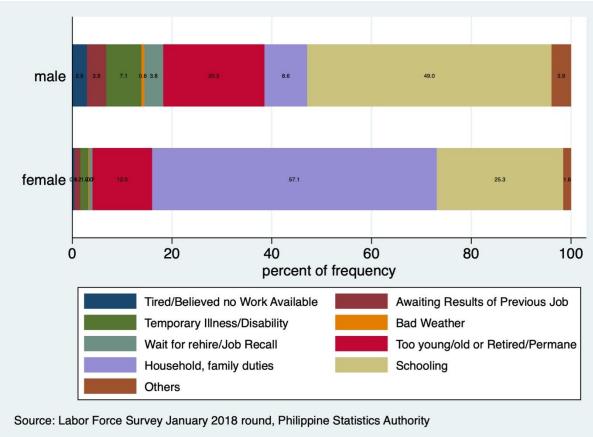


Figure 7. Reasons for Not Joining Labor Market, by Sex: January 2018

Among the estimated 23.7 million households in 2018, three-tenths (29.7%) had overseas remittances. Their remittances averaged P100 thousand, slightly more than a quarter of total household income. **Figure 8** shows that more than half of these households with remittances were either from lower middle-income (37.2%) or low income but not poor (27.0%). In contrast, only one in twenty households with remittances were from the poor (5.7%). Lower

contrast, only one in twenty households with remittances were from the poor (5.7%). Lower middle-income families received an average of P80 thousand, double the levels of the low income but not poor, and four times the average remittance levels received by poor households. In the wake of COVID-19 effects on remittances, these households that benefit from overseas remittances would get affected from reduced remittances that likely result from reduced

economic activities in the countries of origin of the remittances.

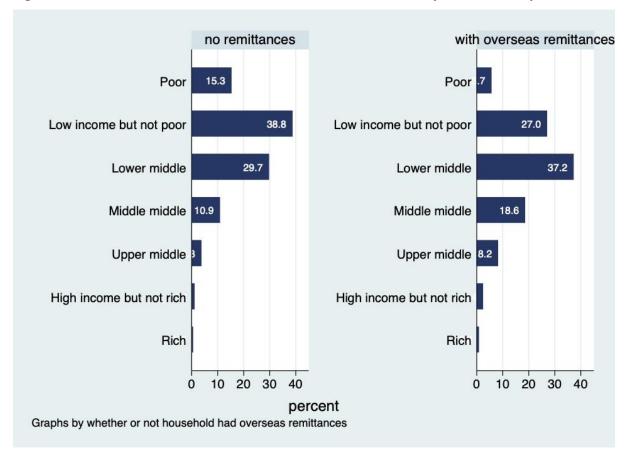


Figure 8. Households without and with overseas remittances, by Income Group: 2018.

Note: Authors' computations from microdata of the 2018 Family Income and Expenditure Survey (FIES), PSA (2019b), making use of income group typology of Albert *et al.* (2018a).

Figure 9 shows that the middle-class spends nearly double (2.8%) on health compared to the low-income class (1.5%), and this is more than a third less than the high-income class (4.5%). Expenditures on education, on transportation and on communication also rises with income. The low-income and middle class spend about 2 percent of total expenditures on alcohol and tobacco, while the high-income class spends less than 1 percent. The results of the 2018 FIES also confirm Engel's law, which states that the share of food expenditures decreases with increasing income levels: the low-income class spends about three-fifths (56.9%) of its total expenditures on food, while total food spending for the middle- and high-income classes are about two-fifths (42.8%) and a-fifth (22.9%) of total expenditures, respectively.

Expenditure Shares (in %) by Income Group 0 20 40 60 80 100 Share of Expenditure (in %) Alcohol Tobacco Food exc. Tob&Alc. Health Transportation Education Communication Non-Food exc. HET&C Source: 2018 FIES, PSA

Figure 9. Share (in %) of Food, Alcohol, Tobacco, Education, Health, Transportation Expenditures to Total Household Expenditure, by Income Classes: 2018

Note: Authors' computations from microdata of the 2018 Family Income and Expenditure Survey (FIES), PSA (2019b), making use of income group typology of Albert *et al.* (2018a).

Compared to previous profiles of the middle class in the Philippines (Albert *et al.* 2018a), the profile of the middle-class for 2018 suggests that the middle class continues to be dominantly residing in urban areas, and has grown slightly in size. Also, a larger proportion of the middle class still belongs to the lower parts of the distribution. Never and Albert (2020) make use of a simple protocol for identifying the middle class, and based on survey data collected on middle-class households, suggest also that the middle-class is dominantly less wealthy. Further, they point out that many middle-class households own their houses, a fan, a smartphone, a TV and a refrigerator, consistent with profiles from the FIES (Albert *et al.* 2018a). Further, they report that middle class households score high on environmental knowledge, and that carbon consumption patterns of the Filipino middle class are more driven by wealth than by any other factor. They suggest that environmental concern and knowledge lead to easy-entry sustainable behaviors, which may provide entry points for changing current or avoiding future carbon-intensive consumption patterns as wealth increases. (Never and Albert 2020).

4. Poverty and the Middle Class in the Wake of Covid-19

In this report, we follow the approach of Sumner *et al.* (2020) by simulating low, medium, and high contractions of 5, 10, and 20 per cent respectively of the entire income distribution to estimate the impact of COVID-19 on overall income poverty in the Philippines. This may be

simplistic given the varying income reductions among Filipinos in the wake of the crisis, depending on the nature of work of household members, and the risk factors associated of household members and its consequent effects on labor supply. There are also important nonmonetary poverty impacts of COVID-19, e.g., on health (such as immunization coverage, breastfeeding, malnutrition), education (both school participation and quality of learning), and other dimensions of poverty not captured in assumed income losses. Further, the government has introduced several social protection programs in response to the pandemic, most notably cash transfers and food aid. Through a SAP, the national government, thru the Department of Social Welfare and Development (DSWD) has initiated a cash transfer for two months of 5 to 8 thousand pesos per month for a targeted 18 million households (75 percent of around 24.4 million estimated households in the country). Further, through a Small Business Wage Support (SBWS) program, support similar to the levels given to the SAP beneficiaries is to be provided to around 3.4 million workers among micro-, small- and medium- enterprises (MSMEs) in the formal economy. Local government units (LGUs), with the support of the DSWD, have also been providing food aid, either universally or to selected households, but the monetary value and distribution schemes (including frequency) of such food assistance has varied considerably.

4.1. What to Expect from Various Income Contraction Scenarios?

Table 9 summarizes estimates of poverty (rates and magnitude) under various scenarios on income contractions from COVID-19, incorporating the effects of income support from the SAP and the SBWS (but not the food aid of LGUs), by assuming that government targets effectively the cash support for SAP, based on the SAP guidelines of DSWD (2020) that differentiate support across regions based on the regional minimum wages, and similarly for the SBWS, assuming that these go to the 75th to the 90th percentiles of households across the per capita income distribution (with the same SAP parameters).

Table 9. Poverty Scenarios Assuming Income Contractions and Effective Social Protection Targeting

Scenario	•	Incidence ercent)		Number of s (in millions)	
	Using Food Poverty Line as Threshold SThreshold With Total Poverty Line as Threshold		Belonging to Families with Income below	Belonging to Families with Income below	
(Status quo: Baseline 2018 data)	5.3	16.8	Food Poverty Line 5.6	Total Poverty Line 17.7	
A0: income contraction of 5%	6.4	19.2	6.7	20.3	
A1: income contraction of 5% with SAP and SBWS	4.4	15.5	4.7	16.4	
B0: income contraction of 10%	7.7	21.9	8.2	23.2	
B1: income contraction of 10% with SAP and SBWS	5.6	18.2	5.9	19.2	

Scenario	•	Incidence	Estimated Number of			
	(in pe	ercent)	Poor Persons (in millions)			
	Using Food With Total Poverty Line as Threshold as Threshold		Belonging to Families with Income below	Belonging to Families with Income below		
			Food Poverty Line	Total Poverty Line		
C0: income contraction of 20%	11.4	28.0	12.0	29.7		
C1: income contraction of 20% with SAP and SBWS	8.6	24.2	9.1	25.6		

Notes: (i) Computations from income data sourced from 2018 Family Income and Expenditure Survey (FIES), PSA (2016a), national poverty lines; (ii) Slight differences in baseline data figures as the microdata released by the PSA incorporates revised urban-rural definitions from the 2015 population census.

Thus, we observe that the proportion of extremely poor Filipinos can increase by 1.1 percentage point from 5.3 %, with an income contraction of 5 percent across the income distribution, or it can even double to 11.4 % if incomes decrease by 20 percent. The social protection programs, if well-targeted to the bottom 90 percent of households, can also further reduce extreme poverty, i.e. subsistence poverty, but only if income contractions are 5 percent. The middle scenario of a contraction of 10 percent in incomes, coupled with counter-effects of the SAP and SBWS, can manage the change in poverty incidence rates to an increase of 1.4 percentage points from the baseline figure of 16.8% (thus increasing the number of poor Filipinos by 1.5 million rather than 5.1 million more poor without the government financial assistance), but the worst of the three scenarios can put poverty to roughly the poverty incidence in the 2006-2012 period when poverty stood at around a quarter of the population. The middle case scenario of increased poverty by 1.5 million Filipinos appears consistent with projections by Mahler *et al.* (2020) that poverty could increase by about 770 thousand using a poverty line of \$1.9 per person per day, or 2.63 million using a higher poverty line of \$3.20 per person per day (see Table 3).

Disaggregated data by regions on 2018 poverty rates (status quo) and on poverty simulations based on assumed income contractions and effective social protection assistance are shown in **Table 10.** Results suggests that for the medium case (B1) scenario of incomes dropping by 10 percent, but with effective social protection programs in place, all regions would have increased poverty incidence, with as much 3.1 percentage point increases in Bicol. For the worst (C1) scenario of income contractions of 20 percent in the entire distribution, but with the SAP and SBWS distributed to everyone other than the upper ten percent households, poverty incidence could increase by over 10 percentage points in six regions, viz., Bicol (11.5), Eastern Visayas Zamboanga (11.2), CARAGA (10.7), BARMM (10.6), and Northern Mindanao (11.3),(10.0). This is on account of a considerable share of the regional distribution among those in low income but not poor group in 2018 (i.e. those from households with per capita income between the poverty line and twice the poverty line). Note that while only Luzon is on ECQ, we would also expect some reduced economic activity in regions outside of Luzon, thus reduced incomes, though perhaps not exactly at the same strength as in Luzon. The microsimulation scenarios in this essay have been developed only in as far as they would reflect overall income contractions in the country.

Table 10. Poverty Incidence Estimates by Region Assuming Various Scenarios

Region				Scenarios			
	Status	A0	A1	В0	B1	C0	C1
	quo						
Ilocos	9.9	13.1	9.4	15.5	12.2	22.1	18.3
Cagayan Valley	16.4	18.6	14.8	22.0	17.5	29.0	24.5
Central Luzon	7.1	8.5	6.1	10.4	7.7	15.2	12.1
CALABARZON	7.2	8.7	6.3	11.1	8.0	14.9	12.4
MIMAROPA	15.2	31.0	25.4	21.7	17.5	28.8	24.2
Bicol	27.0	19.5	14.7	34.7	30.1	43.4	38.4
Western Visayas	16.4	20.2	15.7	22.1	17.8	30.5	24.9
Central Visayas	17.6	34.6	29.2	23.0	19.0	30.0	25.7
Eastern Visayas	30.8	36.4	31.2	38.6	33.1	46.8	42.2
Zamboanga	32.8	26.6	20.7	40.5	35.1	48.6	44.0
Northern Mindanao	23.2	21.8	17.3	30.9	24.7	38.7	33.2
Davao Region	19.1	31.7	27.3	24.9	20.3	32.3	27.7
SOCCSKSARGEN	28.3	3.1	1.9	35.2	30.6	42.7	38.1
NCR	2.3	14.4	11.5	4.0	2.6	6.8	4.8
CAR	12.2	65.4	60.5	16.9	13.4	22.5	19.2
BARMM	61.9	34.1	29.0	69.1	64.5	76.2	72.4
CARAGA	30.6	18.1	14.5	38.1	33.0	46.4	41.3
Philippines	16.8	19.2	15.5	21.9	18.2	28.0	24.2

Note: Calculations made with microdata from the 2018 FIES, PSA.

Examining instead the distribution of poor persons under the different scenarios (**Table 11**), we find that under the medium case (B1) scenario of incomes contractions of 10 percent with effective social protection programs in place, Bicol would have the largest increase in the number of poor at close to two hundred thousand people. For the worst (C1) scenario of income reductions by 20 percent, but with the SAP and SBWS distributed to first nine deciles of households, the number of poor would increase by over half a million in the following regions: CALABARZON (800 thousand), Bicol (690 thousand), Western Visayas (660 thousand), Central Visayas (630 thousand), Central Luzon (590 thousand), and Eastern Visayas (520 thousand). These six regions combined would contribute to nearly half of the 7.9 million more poorer Filipinos.

Table 11. Estimates of Number of Poor Filipinos (in Millions) by Region Assuming Various Scenarios

Region				Scenarios			
	Status	A0	A1	В0	B1	C0	C1
	quo						
Ilocos	0.51	0.68	0.49	0.80	0.63	1.14	0.95
Cagayan Valley	0.59	0.67	0.53	0.79	0.63	1.04	0.88
Central Luzon	0.84	1.01	0.73	1.23	0.91	1.81	1.44
CALABARZON	1.10	1.34	0.97	1.71	1.24	2.30	1.90
MIMAROPA	0.47	0.56	0.45	0.67	0.54	0.89	0.75
Bicol	1.62	1.86	1.53	2.09	1.80	2.61	2.31
Western Visayas	1.27	1.51	1.14	1.72	1.38	2.37	1.93
Central Visayas	1.36	1.57	1.22	1.78	1.47	2.33	1.99
Eastern Visayas	1.42	1.60	1.35	1.78	1.53	2.16	1.95
Zamboanga	1.22	1.36	1.16	1.51	1.31	1.81	1.64
Northern Mindanao	1.13	1.30	1.01	1.51	1.21	1.90	1.62
Davao Region	0.98	1.12	0.89	1.27	1.04	1.66	1.42
SOCCSKSARGEN	1.35	1.52	1.30	1.68	1.46	2.04	1.82
NCR	0.31	0.41	0.26	0.53	0.36	0.91	0.64
CAR	0.22	0.26	0.20	0.30	0.24	0.40	0.34
BARMM	2.48	2.63	2.43	2.77	2.59	3.06	2.91
CARAGA	0.82	0.92	0.78	1.03	0.89	1.25	1.11
Philippines	17.72	20.30	16.43	23.18	19.22	29.66	25.60

Note: Authors' calculations made with microdata from the 2018 FIES, FSA

The expected effect of the SAP and the SBWS is to help provide nearly all households some assistance for recovering income losses. **Table 12** provides estimates of the average household monthly incomes of various income groups under the different simulation scenarios examined. The income groups are based on the typology of Albert *et al.* (2018a). For the worst case scenarios, while the SAP and SPWS help, they are clearly not enough to bring average incomes to baseline levels.

Table 12. Estimates of Average Monthly Income (in thousand pesos) for a Family of Five by Income Groups Assuming Various Scenarios

Income Group	Scenarios						
	Status quo	A0	A1	В0	B1	C0	C1
Poor	9.9	9.7	10.5	9.5	10.3	8.9	9.6
Low Income but not Poor	15.4	15.1	15.6	14.9	15.3	14.4	14.7
Lower Middle	25.2	24.9	24.9	24.6	24.5	23.8	23.7
Middle Middle	41.1	40.5	39.4	39.8	38.7	39.1	38.0
Upper Middle	62.1	60.9	60.9	60.1	60.1	58.7	58.7
High Income but not Rich	95.3	94.9	94.9	92.8	92.8	88.8	88.8
Rich	195.0	193.7	193.7	195.7	195.7	199.4	199.4

Philippines	25.9	24.6	25.4	23.3	24.1	20.7	21.4
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Note: Authors' calculations made with microdata from the 2018 FIES, FSA

More scenarios could be examined by other researchers under assumptions of differentiated income shocks to households, for instance, knowing that agricultural households may have had less income contractions especially as those in the agriculture sector were allowed to sell their products, and thus reported losses in agriculture were far less than those in other sectors and sub-sectors in the macro-economy. However, we suggest this as a future research exercise when more data may be available, including information on the impact of COVID-19 on the labor market as may be suggested from the Labor Force Survey.

4.2. Is a Middle Class Society Still Attainable by 2040?

Finally, we explore the likely effects of COVID-19 on attaining the 2040 Ambisyon goal of a middle-class society (NEDA 2015). Albert *et al.* (2018a) made use of an approach to simulate how long the "low income and not poor", and the poor will transition into middle-income class, assuming a constant growth rate per year. If z is the lower threshold for the middle-income class and if the per capita income of a low-income person, y_i , grows at a constant positive rate g (in percent) per year, then the number of years it will take him or her to reach the middle class threshold z is:

$$t_i^g = \frac{\ln(\frac{z}{y_i})}{g}$$

The average transition time of a low-income person is simply t_i^g averaged over all low-income persons. Here, we replicate the methodology but on the 2018 FIES data, and with the simulation scenarios in the previous subsection. These results essentially assume that conditions will be ripe for a V-shaped recovery that will allow us to get back into the economic trajectory that country had prior to COVID-19 (which may be a very optimistic assumption given the many uncertainties in the business climate). **Table 13** shows the average transition time (in years) for low-income persons to reach the middle class income threshold. For instance, a growth rate of real income per capita of 2.5% per year (given a V-shaped recovery), would, on average, result in a low-income person transitioning into middle class in approximately 21.2 years if this growth rate in incomes were continuous and uniform across the population. It should be noted that annualized growth rates of household income per capita in the Philippines among the bottom 40 per cent of the population was 1.8 percent between 2012 and 2015, and 3.5 percent between 2015 and 2018.

Table 13. Number of Years for a Typical Low- Income Person to Transition into Middle Class Given Constant Annual Growth in (Real) Income and Under Different Scenarios.

Growth in	Growth			l	Scenarios	}		
Household Per Capita Income (in %)	Rate of GDP Per Capita (in %)	Status quo	A0	A1	ВО	B1	C0	C1
0.5	1.0	106.28	111.25	102.34	116.51	107.49	128.76	119.40
1.0	2.0	53.14	55.62	51.17	58.26	53.74	64.38	59.70
1.5	3.0	35.43	37.08	34.11	38.84	35.83	42.92	39.80
2.0	4.0	26.57	27.81	25.58	29.13	26.87	32.19	29.85
2.5	5.0	21.26	22.25	20.47	23.30	21.50	25.75	23.88
3.0	6.0	17.71	18.54	17.06	19.42	17.91	21.46	19.90
3.5	7.0	15.18	15.89	14.62	16.64	15.36	18.39	17.06
4.0	8.0	13.29	13.91	12.79	14.56	13.44	16.10	14.92
4.5	9.0	11.81	12.36	11.37	12.95	11.94	14.31	13.27
5.0	10.0	10.63	11.12	10.23	11.65	10.75	12.88	11.94
5.5	11.0	9.66	10.11	9.30	10.59	9.77	11.71	10.85
6.0	12.0	8.86	9.27	8.53	9.71	8.96	10.73	9.95
6.5	13.0	8.18	8.56	7.87	8.96	8.27	9.90	9.18
7.0	14.0	7.59	7.95	7.31	8.32	7.68	9.20	8.53
7.5	15.0	7.09	7.42	6.82	7.77	7.17	8.58	7.96
8.0	16.0	6.64	6.95	6.40	7.28	6.72	8.05	7.46
8.5	17.0	6.25	6.54	6.02	6.85	6.32	7.57	7.02
9.0	18.0	5.90	6.18	5.69	6.47	5.97	7.15	6.63
9.5	19.0	5.59	5.86	5.39	6.13	5.66	6.78	6.28
10.0	20.0	5.31	5.56	5.12	5.83	5.37	6.44	5.97

Note: Authors' calculations made with microdata from the 2018 FIES, PSA (2019b)

Under the medium case scenario (of 10 percent income reduction in the wake of COVID-19, but supported by effective social protection) made in the previous subsection of this report, the average transition time increases, but only by a quarter of a year from the baseline scenario if income growth is at 2.5 percent annually. This suggests why the financial assistance of government beyond the poor is important. However, under the worst-case scenario (with a 20 percent income contraction but given financial assistance to the bottom 90 percent of households), if incomes rise by 2.5 percent annually, the average transition time increases to nearly 24 years, i.e. about three years more than the baseline scenario. For lower growth rates that could happen under a prolonged stress, i.e. if a W-, U- or L shaped recovery results, then the transition of the low income to middle class will even take much longer, even with the current cash assistance by the national government to most households.

The growth in incomes of the bottom 40 percent (or the entire lower middle class) depends on both the average GDP per capita growth and on the pattern of its distribution. But the distributional consequences of growth in income also matter. From 2012 to 2015, the GDP per capita grew at an annualized rate of 4.8 percent, while income per capita among the bottom 40 percent grew by 1.8 percent per year in the same period. On the other hand, GDP per capita grew annually by 5.1 percent in the period 2015 to 2018, with income per capita among the bottom 40 percent increased by 2.2% per year.

According to Dollar et al. (2013), the variation in growth in incomes of the poorest quintiles is accounted for by 78 percent of the growth in average incomes, while the remainder is explained by changes in the distribution, and the differences in the growth elasticity of poverty (GEP)⁶. Using national accounts data and official poverty incidence, Albert and Vizmanos (2018) estimate the GEP at 0.15 between 2006 and 2009, at 0.32% in the period from 2009 to 2012, and at 0.99% from 2012 to 2015. Recent national accounts and official poverty data put GEP at much higher figures between 2015 and 2018 (**Table 14**). For the entire period 2006 to 2015, GEP can be estimated at 0.5%. If, we were to consider relating income growth of the bottom 40 percent with GDP per growth, in the period from 2003 to 2015, when the bottom 40 percent had incomes that grew by 2.1 percent per year, GDP per capita had an annualized growth of 4.2 percent, and thus GEP is 0.5. This is why the implied overall GDP per capita growth rates in Table 13 are twice the household per capita income growth rates.

Table 14. Poverty Elasticity Estimates for 2003-2018

	2003	2006	2009	2012	2015	2018
Official poverty		26.56	26.27	25.23	21.6	16.6*
headcount					(23.3*)	
Per capita GDP (constant PHP)	48954.05	54225.58	58198.60	65266.08	74832.64	86369.7
Total percent change		2003-2006	2006-2009	2009-2012	2012-2015	2015-2018
in official poverty hea	adcount		-1.1%	-4.0%	-14.3%	-28.8%
in per capita GDP		11.2%	6.8%	13.2%	14.5%	15.4%
Growth elasticity of poverty			-0.16	-0.30	-0.98	-1.87

Note: (i) Authors' calculations based on National Accounts and Official Poverty Estimates; (ii) Differences with Albert and Vizmanos 2019 on account of revisions in national accounts from rebasing. Legend: *= makes use of rebased Consumer Price Index (CPI) market basket prices from 2006 to 2012; and adopts the 2015 PopCen results for the weights in the FIES (PSA 2019a)

This simulation exercise in this section provides a concrete indication on the effects of COVID-19 to the AMBISYON 2040 aspiration for a middle-class society (where no one is poor is within reach), and how critical the social protection programs have been not only for the poor, but more so for the non-poor who have also been likely affected by income contractions amid the pandemic. The SBWS, as well as the SAP and other forms of social protection assistance, are meant to be short-term in nature, sending a message to the bulk of Filipinos that have been vulnerable to income shocks from the reduced economic activities that government acknowledges their difficulties and that it cares and supports their resilience.

5. Summary of Results, Policy Implications and Ways Forward

Since March 17, 2020, the Philippine government has adopted ECQ and/or GCQ measures to manage the spread of the COVID-19. The ECQ and GCQ have resulted in a drastic slowdown of economic activities. Huge economic losses are expected (Abrigo *et al.* 2020), and the first quarter GDP figures have already shown a contraction of the economy. The second quarter figures are also likely to show a contraction relative to the second quarter performance last

⁶ The GEP refers to the percentage reduction in poverty rates associated with a percentage change in mean (household per capita) income.

year. Given the likely drop in incomes and expenditures of households as well as businesses, we would expect a worsening of poverty conditions. Various international organizations and local researchers have projected the Philippine economy to grow at a slower pace or even contract in 2020. While economic estimates on the impact of COVID-19 on poverty incidence have been made using sophisticated economic modeling (see ILO 2020; Vos *et al.* 2020a; Vos *et al.* 2020b, UN 2020), the impact to specific groups of people (e.g. women and men, elderly, etc.) is yet to be determined. Using the 2018 FIES, this study looks into the possible scenarios on poverty and the entire income distribution based on various assumption of fixed declines of incomes.

A descriptive examination of available income data from the 2018 FIES to describe poverty, the middle class and the entire income distribution would require a description of some concepts in the official poverty measurement methodology. In the country's official poverty measurement system, the PSA makes use of data on per capita income, i.e., the total household income divided by the family size, sourced from the triennial FIES. Per capita income is then compared to the poverty line, i.e., the value of the per capita income deemed necessary to maintain a minimal standard of well-being.

The Philippines, just like many other developing countries, uses the CBN approach for setting its national poverty lines. This involves the use of a food menu, anchored on calorie requirements, as an artifice to determining the cost of the minimum food nutritional (calorie) requirements: the reported PhP 7,528 monthly for a family of 5 for 2018 is really an average of the food poverty lines in the entire country. Further, since the average percentage of food expenditures to total basic food expenditures of families spending the food threshold is around 70 percent, by considering the inverse of this food share—i.e., 1/0.7=1.43—, the food poverty line is adjusted upward by 43 percent to indirectly estimate non-food needs. Thus the monthly poverty threshold of PhP 10,727, on average, for a family of five per month in 2018, is an adjustment upward of the food threshold.

As of 2018, the estimated poverty rate in the Philippines, based on the 2018 FIES, is 16.8 percent (equivalent to an estimated 17.7 million Filipinos in poverty out of a total of 105.8 million Filipinos in 2018). This is slightly different from these PSA-released poverty headcount figures on account of the incorporation of a revised urban/rural definition in the 2018 FIES microdata reflecting information gathered from the 2015 PopCen. In terms of families/households, the household poverty incidence is 12.4 percent (corresponding to 2.9 million households in poverty out of a total 23.7 million households). Among the 17.7 million poor Filipinos, 5.6 million are estimated to be in subsistence or extreme poverty. Furthermore, around 830 thousand Filipino households are extremely poor in that they have per capita incomes less than the subsistence threshold, poverty data users should be cautious in focusing solely at poverty incidence, as we may be missing out on populated areas that have a small poverty incidence, but actually a lot of poor people.

The 2018 FIES has four times the sample size of previous waves of the FIES, which allows the survey to be used for generating more reliable estimates of poverty at the provincial level. poverty data users should be cautious in focusing solely at poverty incidence, as we may be

missing out on populated areas that have a small poverty incidence, but actually a lot of poor people. Provinces identified that have poverty rates of 50 percent or above (including Isabela City) only account for 10.4 percent of the total poverty in the country. These areas, together, with those with poverty rates between 30 to 50 percent, can account for about a third (31.6) of all the poor in the country. In contrast, provinces with more than half a million poor Filipinos contribute a combined share of nearly a fifth (17.9%) of all poor Filipinos. More than half (55.3%) of all poor Filipinos reside in these provinces, together with those with between 250 to 500 thousand poor Filipinos.

The poverty incidence, the poverty gap index, and the poverty severity index are all useful for summarizing facts on poverty. While the poverty incidence reports the share of the population in poverty, the Poverty Gap Index and the Poverty Squared Gap Index show, respectively the average depth and average severity of poverty. Across the indices, poverty comparisons across regions show that BARMM is consistently the poorest across regions, as of 2018. Zamboanga Peninsula is the second poorest by poverty incidence and poverty gap in terms of the actual estimate of the indices, but only seventh and fifth, by share to total poverty incidence and total poverty gap, respectively.

As regards the framework in poverty measurement in the Philippines, it is important to reexamine the use of income data (over expenditure), the current approach for poverty line setting (particularly whether a food bundle can be used instead of a menu), as well as the set of poverty statistics released by government. We suggest that the PSA make haste in studying the entire official poverty measurement methodology, with guidance of experts on poverty diagnostics to ensure that poverty statistics remain credible. While the PSA has been following good global practices in statistical measurements, the PSA needs to have concrete communication strategies for ensuring trust in data since credibility is the foundation of official statistics. With the advent of technology, especially increased use of social media platforms, the data landscape is changing rapidly. Data and statistics, especially on poverty, need to be communicated more effectively with infographics, videos, and various visualizations, especially as people, particularly netizens, are giving negative feedback on official poverty lines, which reflect a misunderstanding of the underlying estimation methods that are actually sound, but just just not effectively esplained. It will be crucial for the PSA to also start working on reviewing its current poverty line methodology, in the wake of criticisms that they do not reflect actual poverty conditions in the country. The average of the current poverty lines, while much higher than the international poverty line of \$1.9 in 2011 PPP used to measure extreme poverty, is lower than the World Bank's suggested international poverty line for lower middle income countries. However, the use of the higher international poverty line of \$3.2 per person per day yields a much higher estimate of poverty than the official poverty rates. It may be helpful for the Philippines to shift to use of consumption over income data for tracking poverty, especially as many households, particularly those engaged in agriculture sector and the informal sector, do not have regular wages, and thus income data may be unreliable for these households.

The PSA is reportedly intending to remove the collection of income data from the APIS so that APIS focuses more on non-monetary poverty correlates. Further, it can be noted that the release

of the first semester FIES-based poverty data comes too close to the elections. Thus, the PSA may need to re-examine release dates on poverty statistics as well as review the consumption patterns in the country, especially those of the poor (and thus look into current approaches to poverty line estimation). While the PSA currently has an Interagency I Committee on Poverty Statistics, the PSA should reconstitute this committee as a Technical Committee comprising experts, to help guide the PSA, given the many technical issues in poverty diagnostics.

Using the income typology espoused by Albert *et al.* (2018a) that identifies the low-, middle-and high- income classes in the country, this study provides the updated thresholds for the seven income groups (and three income classes) (Table 7). Thus, Filipinos in a family of five would be in the middle class if their monthly family income falls between PHP 23 thousand and PHP 140 thousand in 2018 (or around PHP 25 thousand and PHP 150 thousand, respectively in 2020 prices). Table 6 also provides estimates of the sizes of the income classes, both in terms of population and households, sourced from the 2018 FIES, conducted by the PSA. In particular, 47.7% of households are low-income, while about half (50.1%) are middle-income, and 2.1% are high-income. Of the middle-class households, less than two thirds (63.6%)) are in the lower middle group (comprising about 7.6 million households), about a quarter (26.2%) are middle middle group (consisting of 3.1 million households), and a tenth (10.1%) are in the upper middle group (made up of 1.2 million households). Thus, if the SAP for 18 million households (out of 24.4 million estimated households in 2020) has been targeted well, it provides benefits for all of the low-income class, and a sizeable portion of the lower middle-income group.

The country faces huge challenges amid COVID-19 and the emerging new normal. In the short term, the economic performance of the country will get dampened, but with challenges come opportunities to reboot the economy and improve the economic performance in a post-COVID-19 world.

While poverty reduction has been lackluster in the period 2006 to 2012, the reduction of poverty took more steam from 2012 to 2015, and moreso between 2015 and 2018. No actual official poverty figures are available until after the conduct and analysis of results of the 2021 FIES. This study provided a nowcasting simulation exercise based on scenarios about income contractions on the entire distribution. The simulation results suggest that poverty conditions can revert to those more than a decade ago, and that targets for the country to attain its aspirations to become a largely middle class society can be pushed back. The number of poor Filipinos could rise by about 1.5 million from the baseline figures, if everyone's incomes contract by 10 percent, even with the SAP and SBMS in place. Without SAP and SBMS, the number of poor would rise even by 5.5 million.

Assuming that the country gets a V-shaped recovery, and manages to provide a growth rate of real income per capita of 2.5% per year (or an effective 5% growth in GDP per capita per year), the average transition time for the low income (in 2018) to become middle class would be approximately 21.25 years if this growth rate were continuous and uniform across the population. Under the medium case (simulation) scenario (of 10 percent income reduction, but supported by effective social protection), the average transition time increases, but only by a

quarter of a year. However, under the worst-case scenario (of 20 percent income contractions with the social protection cash transfers),, the average transition time increases to nearly 24 years. For lower growth rates that could arise from a prolonged recovery, we would further expect the transition to take even much longer. The simulation results in this study provides concrete indication on how the country's aspiration for a middle-class society (where no one is poor is within reach) articulated in AMBISYON 2040 can get affected. The simulations here assumed effective targeting schemes for the SAP and SBMS programs (to all families except the upper 10 percent of per capita income distribution), and that the cash support was given for two months.

The government and all Filipinos should ultimately ensure that the poor are at the center of policy attention, especially given all the reduced economic activities from COVID-19 and the likely undercounts of COVID-19 infection among the poor, who do not have the luxury to seek health care, and for whom "washing hands" is also a luxury (as they have no access to safe water and safe sanitation services). The poor as well as certain other non-poor groups (viz., the low income but not poor, and the lower middle income group) are vulnerable from both the public-health challenges of the COVID-19 and the economic consequences of efforts to contain the virus. These vulnerable groups often have meager savings to cushion them against sustained economic disruptions, and may have even little protection against other related shocks, such as job losses, and food insecurity. Their recovery may be challenging compared to those in higher income groups.

There is imminent risk that whatever inequalities we currently have across income classes that have been heightened during the COVID-19 pandemic may further widen given the glaring digital and the other divides we currently have in the country. Social protection should be at the core of government policy, whether or not in the midst of a pandemic. Progressive universal social protection is particularly important, and while government has now in place a universal health care policy, we have yet to see every Filipino accessing quality health care. An unconditional cash transfer for all (i.e. a universal basic income) could have been a faster opportunity for government to provide support in the midst of the effects of the economic slowdown, but government opted to focus only on Pantawid beneficiaries, farmers, indigent senior citizens, etc. (a total of 90 percent of all households) in the absence of a full database of information of all households regarding their incomes (or income proxies).

Government has yet to put more attention into investing in data (and the quality of data), including having databases that are interoperable. The case for continuing the lockdown, or easing it had be weighed against economic implications. Quality data on infections have been important to build a trustworthy portrait of areas that are most critical to ease and have a relatively low risk of facilitating the transmission of the virus. Across both the public and private sectors, transition plans and health protocols for a safe return to work have been critical, including ensuring workers who are made to go to their offices would find proper transportation services.

Government has to seriously strengthen digitalization efforts, improve access to and cost of technology, especially the internet, that can help not only citizens but firms retrofit in the midst

of current uncertainties. The Department of Information and Communications Technology (DICT) estimates that as of 2019, the number of towers in the country at less than 20,000⁷, far lower than Vietnam's 70,000 and Indonesia's 90,000 towers, and especially given that the Vietnam has a slightly smaller population, while Indonesia's population is less than thrice that of the Philippines, but its number of cell towers is 4.5 times that in the Philippines. Efforts could be made to substantially increase the number of cell towers, that can be employment generating in the short term. while also improving long-term competitiveness and productivity, with improved connectivity.

Government also has its role to play in improving digitalization in the country by leveraging various financial innovations for reaching out to the unbanked people (comprising about two thirds of the adult population), promoting digital payments particularly in using government services (such as provision of civil registration documents, passports, and the like), aside from promoting the acceleration of QR code-enabler merchants. Such policies to boost the acceptance of digital payments can help many migrate out of the "cash is best" paradigm that has put people more at risk of infection during the pandemic. These policies for transitioning into digitalization can provide clear signals of a transformative shift to the market that can create a lot of employment opportunities, and make technology and development more inclusive. Government, after all, is limited in its capacity to generate employment, but it can provide the environment that is conducive to the creation of quality jobs.

Unlike many countries that have harnessed the digital economy and are at the frontiers of innovation, the Philippines has to work more systematically also in investing in its human capital. There is a lot of room not only for improving the health system, but also the entire system for formal education and learning. The latter is important to prepare the workforce, especially the poor and low income, for possible consequences of changes in the entire economy, whether among big businesses or micro-small-and-medium enterprises (MSMEs), triggered by the pandemic. While government is working toward a stimulus package in the neighborhood of 10 percent of GDP, it will have to find a proper balance for supporting businesses, i.e. selected large firms, say in the aviation industry, as well as MSMEs, especially given that the concentration of the country's workforce is in MSMEs.

The Philippines, and the entire world, now face a critical junction in history, an inflection point to a new normal. The public and private sectors, and the entire society by our collective decisions and practices in this moment of crisis. Resolute action is needed toward progressive universal social protection, with first priority on the poor and vulnerable (in the pursuit of social justice). We should mainstream the SDGs in the COVID-19 policy responses, and recognize that the virus has had the different impacts across various sub-populations, so that we can eventually resume our poverty reduction trajectories prior to the onset of COVID-19, and hit our national development targets with renewed vigor in the years to come.

 $^{^{7}\ \}underline{\text{https://dict.gov.ph/dict-hikes-tower-company-partners-to-five/}}$

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Table A-1. Distribution of Filipino Population (in Thousands) by Province and by Income Groups: 2018

Region/ Province		Poor	Low	Lower	Middle	Upper	High	Rich	All
			income	middle	middle	middle	income		persons
			but not	income	income	income	but not		
			poor				rich		
Ilocos Region	Ilocos Norte	28.7	241.0	223.1	80.1	22.1	7.6	3.2	605.8
	Ilocos Sur	54.1	285.4	247.4	81.2	24.9	8.8	4.2	706.0
	La Union	36.8	243.9	342.5	107.7	59.7	16.7	5.2	812.6
	Pangasinan	394.1	1,545.1	807.1	234.0	56.1	17.2	0.4	3,054.0
	Total	513.7	2,315.5	1,620.1	503.0	162.8	50.4	13.0	5,178.4
Cagayan Valley	Batanes	1.7	7.2	5.7	1.6	1.0	0.3	0.0	17.6
	Cagayan	201.4	470.1	380.0	135.6	43.4	11.6	3.3	1,245.4
	Isabela	282.7	743.6	442.0	124.9	44.2	9.4	4.1	1,650.9
	Nueva Vizcaya	75.6	172.8	142.0	53.3	20.3	5.0	2.3	471.3
	Quirino	24.8	85.0	56.3	17.0	7.4	2.8	1.1	194.5
	Total	586.1	1,478.7	1,025.9	332.5	116.4	29.1	10.9	3,579.7
Central Luzon	Bataan	64.3	297.8	292.1	106.5	32.5	11.6	2.9	807.6
	Bulacan	178.6	1,257.7	1,337.2	539.3	165.4	32.4	1.3	3,512.0
	Nueva Ecija	192.2	996.8	737.7	228.2	91.5	8.9	14.9	2,270.0
	Pampanga	83.6	1,062.7	1,252.4	318.6	53.3	9.5	6.0	2,786.1
	Tarlac	152.8	618.6	472.2	137.0	33.3	7.5	3.2	1,424.6
	Zambales	134.3	358.5	259.1	83.7	24.0	6.1	2.0	867.5
	Aurora	36.3	101.4	52.5	21.7	7.1	1.8	1.7	222.5
	Total	842.1	4,693.4	4,403.2	1,435.0	407.0	77.8	31.9	11,890.3
CALABARZON	Batangas	330.3	1,216.6	951.3	277.7	81.5	25.3	7.8	2,890.6
	Cavite	211.2	1,314.3	1,580.1	656.2	205.8	35.9	4.1	4,007.6

Region/ Province		Poor	Low income but not poor	Lower middle income	Middle middle income	Upper middle income	High income but not rich	Rich	All persons
	Laguna	125.0	810.2	1,288.3	686.9	242.2	50.1	24.1	3,226.9
	Quezon	300.8	952.5	643.8	205.8	76.8	22.2	6.4	2,208.3
	Rizal	137.6	845.3	1,347.0	481.9	199.6	44.3	29.8	3,085.6
	Total	1,105.0	5,138.8	5,810.5	2,308.5	805.9	177.8	72.3	15,418.9
MIMAROPA	Marinduque	35.1	108.6	62.1	20.7	8.3	2.0	1.5	238.3
	Occidental Mindoro	109.8	218.6	107.1	37.9	18.9	8.6	3.8	504.6
	Oriental Mindoro	96.6	383.7	267.1	82.1	31.2	11.9	6.9	879.6
	Palawan	144.3	589.8	314.4	84.1	30.0	8.5	2.5	1,173.7
	Romblon	84.4	138.3	51.7	14.2	6.3	1.4	1.8	298.1
	Total	470.1	1,439.0	802.4	239.0	94.8	32.5	16.5	3,094.4
Bicol	Albay	287.2	628.2	282.7	112.4	44.3	7.5	2.9	1,365.3
	Camarines Norte	185.2	277.1	102.0	27.5	12.3	2.3	1.4	607.6
	Camarines Sur	573.6	877.0	362.7	135.1	50.4	15.3	4.8	2,018.9
	Catanduanes	54.5	126.8	58.0	18.3	7.6	2.6	0.7	268.4
	Masbate	303.3	432.4	126.7	36.0	12.5	7.2	2.0	920.1
	Sorsogon	215.6	416.4	130.1	41.2	17.0	4.3	1.1	825.7
	Total	1,619.3	2,758.0	1,062.1	370.5	144.1	39.1	12.8	6,005.9
		72.1	282.4	164.8	46.0	19.7	6.3	2.7	593.9
	Antique	118.0	272.6	141.3	42.7	20.5	5.0	0.9	600.9
	Capiz	50.1	419.2	237.8	51.3	19.1	6.8	1.4	785.7
	Iloilo	411.0	994.4	660.7	268.0	91.7	35.1	10.5	2,471.4

Region/ Province		Poor	Low income but not poor	Lower middle income	Middle middle income	Upper middle income	High income but not rich	Rich	All persons
	Negros								
	Occidental	606.7	1,412.7	741.2	256.4	81.9	22.5	9.2	3,130.8
	Guimaras	16.8	94.2	51.3	11.6	4.8	1.8	0.6	181.2
	Total	1,274.7	3,475.6	1,997.1	675.9	237.8	77.5	25.3	7,763.9
Central Visayas	Bohol	277.5	563.1	316.8	119.9	50.5	15.6	2.2	1,345.6
	Cebu	723.3	1,973.2	1,473.3	503.9	184.9	45.3	10.0	4,913.8
	Negros Oriental	352.3	582.2	278.5	93.4	49.3	26.6	4.6	1,386.9
	Siquijor	10.3	42.3	27.9	10.7	5.2	1.3	1.0	98.8
	Total	1,363.4	3,160.7	2,096.5	727.9	290.0	88.8	17.8	7,745.0
Eastern Visayas	Eastern Samar	241.9	163.6	52.4	23.1	5.2	2.0	0.1	488.3
	Leyte	586.1	835.1	378.6	154.6	71.6	25.0	7.4	2,058.4
	Northern Samar	223.9	273.8	99.7	38.8	12.0	4.4	2.3	654.9
	Samar (Western)	234.2	371.3	136.5	44.7	16.3	1.5	1.7	806.3
	Southern Leyte	103.6	201.8	85.0	30.8	10.1	2.6	1.1	434.9
	Biliran	34.8	84.1	36.1	12.2	5.8	2.5	0.9	176.4
	Total	1,424.6	1,929.8	788.3	304.1	120.8	38.0	13.5	4,619.2
Zamboanga Peninsula	Zamboanga del Norte	470.5	371.0	131.7	46.4	12.1	1.1	0.9	1,033.7
	Zamboanga del Sur	454.6	882.8	399.8	114.1	40.5	11.6	3.7	1,907.0
	Zamboanga Sibugay	234.8	263.7	96.7	41.8	15.5	6.6	2.8	661.8
	Isabela City	61.9	37.3	15.3	5.9	1.6	0.0	0.0	122.0

Region/ Province		Poor	Low income but not poor	Lower middle income	Middle middle income	Upper middle income	High income but not rich	Rich	All persons
	Total	1,221.8	1,554.8	643.5	208.1	69.7	19.2	7.3	3,724.6
Northern Mindanao	Bukidnon	407.1	694.6	255.9	82.6	21.5	9.3	3.0	1,474.1
	Camiguin	22.0	41.9	18.8	5.2	2.3	0.4	0.2	90.9
	Lanao del Norte	276.7	476.9	214.7	70.9	20.5	4.8	1.8	1,066.3
	Misamis								
	Occidental	166.3	277.2	114.3	42.6	12.2	4.3	0.7	617.7
	Misamis Oriental	261.1	667.2	459.2	154.3	73.2	20.1	8.6	1,643.5
	Total	1,133.3			355.6	129.7	38.9	14.3	-
	Total	1,133.3	2,157.8	1,062.9	333.0	129.7	30.3	14.5	4,892.5
		139.5	517.5	291.1	71.6	12.8	5.5	3.1	1,041.2
	Davao de Sur	287.1	885.9	749.8	343.9	113.6	22.2	10.9	2,413.4
	Davao Oriental	124.4	146.7	42.4	10.2	5.2	0.9	0.5	330.4
	Compostela Valley	191.2	370.4	145.1	35.0	10.9	5.8	1.4	759.7
	Davao								
	Occidental	239.7	247.8	72.7	16.9	4.3	2.2	1.1	584.7
	Total	982.0	2,168.4	1,301.1	477.7	146.7	36.5	17.0	5,129.3
SOCCSKSARGEN	Cotabato	428.2	577.8	351.6	79.5	17.8	4.3	11.9	1,471.2
	South Cotabato	288.3	682.1	418.1	140.6	44.1	14.8	5.1	1,593.1
	Sultan Kudarat	264.3	340.8	166.4	40.9	19.1	5.8	1.5	838.8
	Sarangani	239.8	220.6	83.7	21.4	1.9	1.3	0.0	568.8
	Cotabato City	129.1	128.1	36.4	10.9	0.5	0.6	0.0	305.6

Region/ Province		Poor	Low income but not poor	Lower middle income	Middle middle income	Upper middle income	High income but not rich	Rich	All persons
	Total	1,349.8	1,949.4	1,056.3	293.2	83.5	26.8	18.5	4,777.4
National Capital Region	Manila	55.3	463.5	888.3	322.1	89.3	25.5	6.0	1,849.9
	NCR-2nd Dist.	111.0	1,184.8	2,102.6	957.7	342.9	114.7	28.2	4,841.9
	NCR-3rd Dist.	100.2	970.5	1,304.4	414.0	89.7	18.5	2.5	2,899.7
	NCR-4th Dist.	42.2	832.1	1,752.8	819.3	296.5	85.6	33.8	3,862.2
	Total	308.6	3,450.8	6,048.0	2,513.2	818.3	244.2	70.6	13,453.7
Cordillera Administrative	Abra	47.1	108.2	60.6	20.1	7.7	1.2	0.1	245.1
Region	Benguet	49.9	214.2	297.0	161.5	75.0	21.1	8.4	827.0
	Ifugao	30.0	86.3	59.9	23.9	5.1	1.8	0.6	207.7
	Kalinga	26.9	96.2	59.8	20.7	10.1	2.5	1.1	217.3
	Mountain								
	Province	38.7	65.9	34.5	11.3	3.6	1.4	0.6	156.1
	Apayao	24.0	52.2	32.3	8.5	3.4	1.2	0.5	122.1
	Total	216.6	623.0	544.1	246.0	104.9	29.2	11.2	1,775.2
BARMM	Basilan	271.8	77.7	17.3	2.2	0.5	0.2	0.0	369.7
	Lanao del Sur	787.3	255.9	51.4	5.9	3.5	0.0	0.0	1,104.0
	Maguindanao	612.4	512.1	114.5	17.2	3.2	0.0	0.2	1,259.6
	Sulu	721.7	135.5	18.0	1.0	0.0	0.0	0.0	876.2
	Tawi-tawi	90.2	233.7	69.5	9.6	1.9	0.0	0.2	405.0
	Total	2,483.4	1,214.8	270.7	35.9	9.0	0.2	0.4	4,014.6
CARAGA	Agusan del Norte	177.3	318.6	144.8	50.2	20.8	6.7	2.4	720.9
	Agusan del Sur	274.2	294.1	94.4	37.6	14.2	4.2	3.1	721.9

Region/ Province		Poor	Low income but not poor	Lower middle income	Middle middle income	Upper middle income	High income but not rich	Rich	All persons
	Surigao del								
	Norte	175.3	215.5	75.9	26.3	14.7	1.9	0.6	510.1
	Surigao del Sur	155.1	263.5	120.8	41.9	19.1	7.2	2.2	609.8
	Dinagat Island	42.4	57.9	20.3	5.8	2.2	0.4	0.3	129.4
	Total	824.3	1,149.6	456.2	161.9	71.0	20.4	8.7	2,692.1
PHILIPPINES	Grand Total	17,718.8	40,658.2	30,989.1	11,188.0	3,812.5	1,026.6	362.1	105,755.2

Table A-2. Distribution of Filipino Households (in Thousands) by Province and by Income Groups: 2018

Region/ Province		Poor	Low income but not poor	Lower middle income	Middle middle income	Upper middle income	High income but not rich	Rich	All households
Ilocos Region	Ilocos Norte	4.8	49.2	57.8	25.0	7.4	3.4	1.7	149.3
	Ilocos Sur	9.6	61.3	64.1	25.4	8.5	3.8	2.1	174.9
	La Union	5.7	48.5	81.9	32.0	17.9	5.8	2.2	194.1
	Pangasinan	66.1	326.0	218.2	69.9	22.5	6.6	0.4	709.7
	Total	86.2	485.0	422.0	152.4	56.2	19.7	6.5	1,228.0
Cagayan Valley	Batanes	0.3	1.8	1.8	0.6	0.4	0.2	0.0	5.1
	Cagayan	36.4	101.8	95.6	38.1	13.4	3.5	0.9	289.7
	Isabela	54.0	168.3	128.7	38.6	12.6	3.8	1.7	407.8
	Nueva Vizcaya	12.7	35.9	36.9	15.6	5.6	1.7	0.7	108.9
	Quirino	4.2	17.9	15.5	5.4	2.1	0.9	0.3	46.3
	Total	107.6	325.7	278.5	98.3	34.0	10.1	3.6	857.9
Central Luzon	Bataan	10.4	57.6	67.3	30.5	9.5	3.5	0.6	179.4
	Bulacan	28.8	245.7	318.1	157.5	52.7	11.2	1.3	815.4
	Nueva Ecija	33.6	203.9	182.0	61.7	28.7	3.4	4.1	517.5
	Pampanga	12.3	179.2	282.1	90.1	19.7	3.6	2.2	589.2
	Tarlac	25.0	121.7	115.2	40.0	12.1	3.0	1.1	318.1
	Zambales	21.9	74.2	64.8	26.5	8.6	2.4	0.8	199.1
	Aurora	6.0	21.7	14.5	5.6	2.2	0.7	0.4	51.1
	Total	138.0	904.0	1,044.0	411.9	133.5	27.7	10.6	2,669.7
CALABARZON	Batangas	58.5	258.6	245.4	81.7	27.7	6.8	2.9	681.6
	Cavite	34.0	252.9	368.3	178.0	68.9	11.9	2.3	916.2

Region/ Province		Poor	Low income but not poor	Lower middle income	Middle middle income	Upper middle income	High income but not rich	Rich	All households
	Laguna	20.1	151.3	284.9	180.1	79.8	17.7	10.5	744.4
	Quezon	49.7	200.2	175.9	61.6	25.6	8.0	3.5	524.5
	Rizal	22.4	150.4	289.7	130.2	56.8	11.9	9.4	670.8
	Total	184.6	1,013.4	1,364.2	631.6	258.7	56.3	28.7	3,537.5
MIMAROPA	Marinduque	5.9	24.1	17.8	6.8	3.0	0.9	0.6	58.9
	Occidental Mindoro	18.4	45.9	29.1	11.3	6.1	2.5	1.2	114.5
	Oriental Mindoro	15.3	78.9	71.8	24.3	10.6	4.1	2.3	207.3
	Palawan	22.2	119.9	81.5	25.9	10.9	3.5	1.1	265.0
	Romblon	14.0	33.5	15.6	4.6	2.1	0.7	0.7	71.2
	Total	75.8	302.3	215.8	72.8	32.7	11.7	6.0	717.0
Bicol	Albay	44.9	132.9	77.0	29.3	13.4	3.2	1.4	302.1
	Camarines Norte	30.2	60.3	29.3	9.5	4.2	1.0	0.5	134.9
	Camarines Sur	86.2	170.2	93.9	38.5	17.2	4.3	1.2	411.6
	Catanduanes	8.4	25.3	15.7	5.4	2.4	1.0	0.4	58.6
	Masbate	50.9	96.6	33.1	9.9	3.8	2.2	0.9	197.3
	Sorsogon	34.8	87.5	35.7	12.2	4.8	2.1	0.5	177.7
	Total	255.5	572.8	284.7	104.8	45.8	13.8	4.9	1,282.3
		11.7	56.8	44.0	12.5	5.4	2.5	1.0	133.9
	Antique	17.9	57.8	38.6	13.0	6.2	1.5	0.5	135.4
	Capiz	7.7	85.5	66.5	16.1	5.5	2.2	0.4	183.9

Region/ Province		Poor	Low income but not poor	Lower middle income	Middle middle income	Upper middle income	High income but not rich	Rich	All households
	Iloilo	66.1	211.0	166.0	67.9	28.0	10.2	3.6	552.8
	Negros								
	Occidental	103.4	301.5	195.1	76.9	25.4	9.1	3.5	714.9
	Guimaras	2.9	19.8	15.0	3.6	1.5	0.6	0.2	43.6
	Total	209.6	732.3	525.2	190.0	72.0	26.1	9.2	1,764.6
Central Visayas	Bohol	44.9	119.2	79.5	31.8	13.6	4.8	0.7	294.5
	Cebu	122.2	383.8	351.7	138.1	56.0	17.2	4.2	1,073.2
	Negros Oriental	62.9	135.8	72.5	28.7	15.2	8.3	2.1	325.5
	Siquijor	1.8	9.3	8.3	3.2	1.7	0.6	0.4	25.3
	Total	231.9	648.1	512.1	201.8	86.5	30.8	7.4	1,718.5
Eastern Visayas	Eastern Samar	44.2	39.9	14.6	6.5	1.8	0.9	0.1	107.9
	Leyte	104.3	192.5	108.1	43.2	21.6	8.3	3.9	481.9
	Northern Samar	36.8	57.3	24.4	9.4	3.6	1.1	0.7	133.4
	Samar								
	(Western)	36.7	77.9	34.8	11.6	3.9	0.5	0.6	166.1
	Southern Leyte	18.3	47.4	25.2	9.6	3.4	1.1	0.5	105.5
	Biliran	5.4	17.8	9.7	3.4	1.6	0.8	0.3	38.9
	Total	245.6	432.8	216.8	83.8	36.0	12.8	5.9	1,033.6
Zamboanga Peninsula	Zamboanga del								
	Norte	84.8	92.7	34.6	12.6	3.6	0.4	0.3	229.0
	Zamboanga del Sur	73.6	180.8	97.9	29.9	11.6	3.6	1.5	398.9

Region/ Province		Poor	Low income but not poor	Lower middle income	Middle middle income	Upper middle income	High income but not rich	Rich	All households
	Zamboanga								
	Sibugay	38.5	59.1	26.7	10.7	4.3	1.9	0.9	142.1
	Isabela City	9.7	8.3	3.5	1.4	0.5	0.0	0.0	23.4
	Total	206.6	341.0	162.7	54.6	19.9	5.9	2.7	793.5
Northern Mindanao	Bukidnon	72.0	152.7	65.9	21.6	6.8	2.7	0.9	322.7
	Camiguin	3.6	8.8	4.7	1.7	0.8	0.2	0.1	19.9
	Lanao del Norte	43.6	97.8	56.3	19.8	6.2	1.8	0.7	226.2
	Misamis								
	Occidental	27.8	62.9	33.1	11.5	4.1	1.9	0.7	142.0
	Misamis								
	Oriental	42.8	137.5	111.6	43.3	22.0	6.4	2.8	366.4
	Total	189.7	459.8	271.6	97.9	39.9	13.0	5.2	1,077.2
		24.3	109.3	76.6	20.7	4.3	1.5	1.0	237.6
	Davao de Sur	47.5	183.0	200.7	102.6	36.5	7.4	4.2	582.0
	Davao Oriental	20.8	35.9	13.2	3.0	1.5	0.5	0.2	75.1
	Compostela								
	Valley	32.3	83.2	41.7	10.7	3.4	2.0	0.6	173.9
	Davao								
	Occidental	45.7	64.8	23.9	4.9	1.6	1.1	0.4	142.5
	Total	170.5	476.4	356.0	142.1	47.2	12.5	6.3	1,211.0
SOCCSKSARGEN	Cotabato	78.2	127.1	93.0	24.1	5.5	1.9	3.0	332.8
	South Cotabato	50.7	142.4	110.5	41.5	13.9	5.3	1.6	365.8

Region/ Province		Poor	Low income but not poor	Lower middle income	Middle middle income	Upper middle income	High income but not rich	Rich	All households
	Sultan Kudarat	46.4	77.4	45.5	13.6	5.8	1.8	0.5	191.0
	Sarangani	44.9	49.9	22.3	5.6	0.8	0.4	0.0	124.0
	Cotabato City	20.4	26.1	8.1	2.8	0.1	0.2	0.0	57.8
	Total	240.5	422.8	279.4	87.6	26.2	9.6	5.1	1,071.3
National Capital Region	Manila	8.2	85.8	194.0	90.7	32.0	9.2	3.3	423.1
	NCR-2nd Dist.	15.5	207.9	462.9	243.4	101.9	42.0	13.1	1,086.6
	NCR-3rd Dist.	15.0	182.1	296.9	122.7	30.7	7.0	1.0	655.3
	NCR-4th Dist.	6.4	148.1	376.1	217.7	96.9	33.1	16.1	894.3
	Total	45.1	623.8	1,329.9	674.5	261.5	91.2	33.5	3,059.4
Cordillera Administrative	Abra	8.2	22.7	15.8	5.5	2.2	0.5	0.1	55.0
Region	Benguet	8.5	42.0	67.7	44.0	22.8	7.6	3.3	195.7
	Ifugao	4.5	17.2	15.7	6.3	1.6	0.6	0.2	46.1
	Kalinga	3.8	16.5	12.5	4.8	2.5	0.7	0.3	41.2
	Mountain Province	6.6	15.5	10.5	3.6	1.4	0.5	0.3	38.3
	Apayao	4.3	11.1	8.0	2.2	0.8	0.3	0.1	26.8
	Total	36.0	125.0	130.1	66.3	31.3	10.2	4.3	403.1
BARMM	Basilan	45.1	18.1	4.2	0.4	0.2	0.1	0.0	68.0
	Lanao del Sur	118.0	52.8	10.3	1.8	0.8	0.0	0.0	183.7
	Maguindanao	95.2	105.9	28.5	3.7	0.8	0.0	0.2	234.2
	Sulu	114.3	33.7	3.8	0.3	0.0	0.0	0.0	152.2
	Tawi-tawi	11.5	44.0	17.0	2.9	0.5	0.0	0.1	76.0
	Total	384.1	254.6	63.8	9.1	2.2	0.1	0.2	714.1

Region/ Province		Poor	Low income but not poor	Lower middle income	Middle middle income	Upper middle income	High income but not rich	Rich	All households
CARAGA	Agusan del								
	Norte	29.8	66.5	36.6	13.6	6.0	2.3	0.8	155.6
	Agusan del Sur	46.2	63.9	25.1	8.8	4.2	1.1	0.9	150.3
	Surigao del								
	Norte	30.1	46.9	20.1	6.9	3.8	0.6	0.4	108.9
	Surigao del Sur	25.7	55.5	32.4	11.9	5.2	2.2	1.0	134.0
	Dinagat Island	7.9	13.5	5.7	1.7	0.5	0.2	0.1	29.5
	Total	139.7	246.3	120.0	43.0	19.7	6.5	3.1	578.4
PHILIPPINES	Grand Total	2,947.1	8,366.0	7,576.8	3,122.4	1,203.3	357.9	143.4	23,716.9