

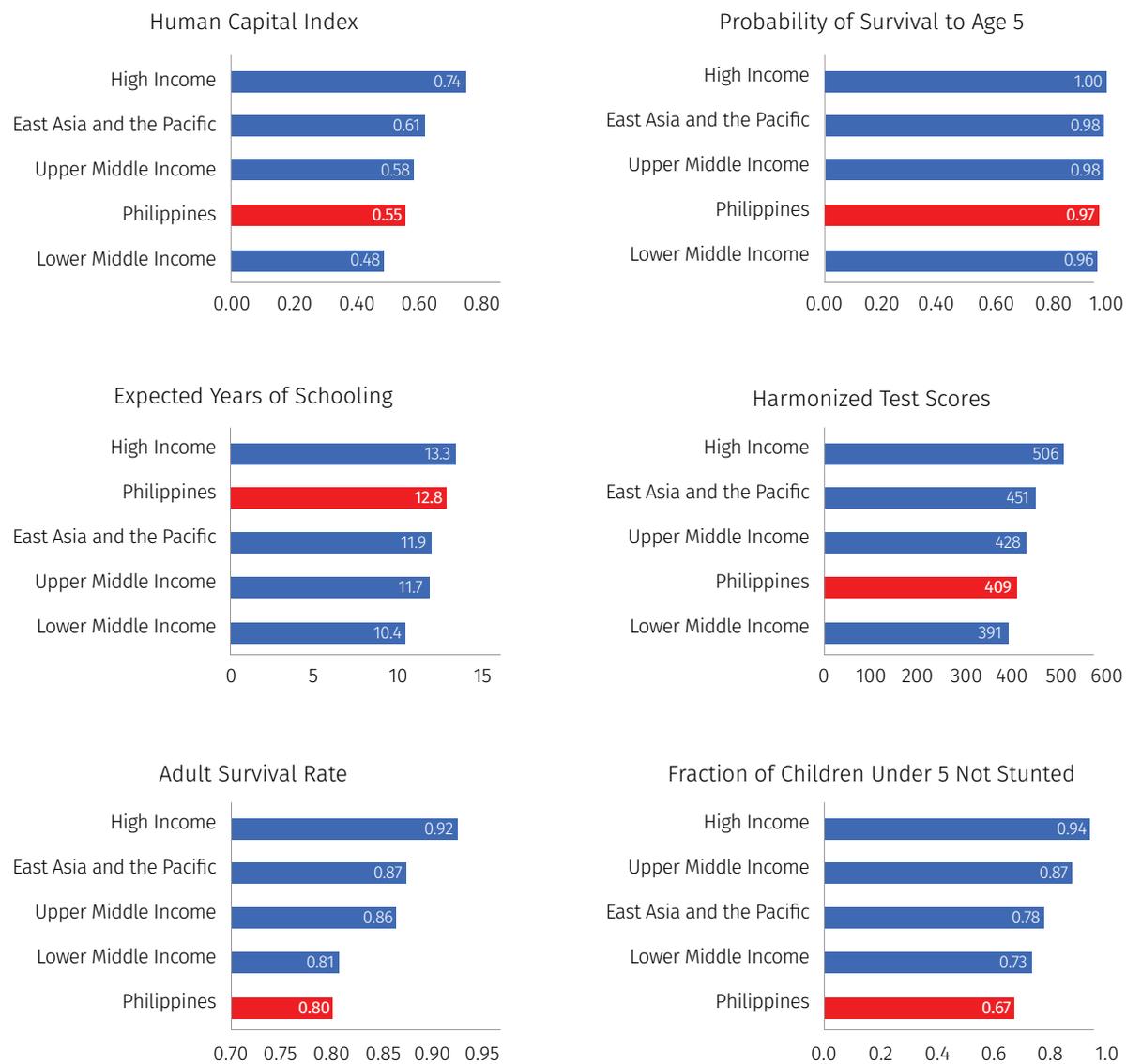


4 HUMAN CAPITAL

Human capital is critical to both economic growth and inclusion. The prospects for continuing economic growth in the Philippines will depend on its ability to harness the rising tide of technological change and expand its high-skill services sector. The Human Capital Index (HCI), which captures the impact of human capital on future growth prospects, is a useful starting point for considering human capital challenges. The country's HCI of 0.55 indicates that the future productivity of a

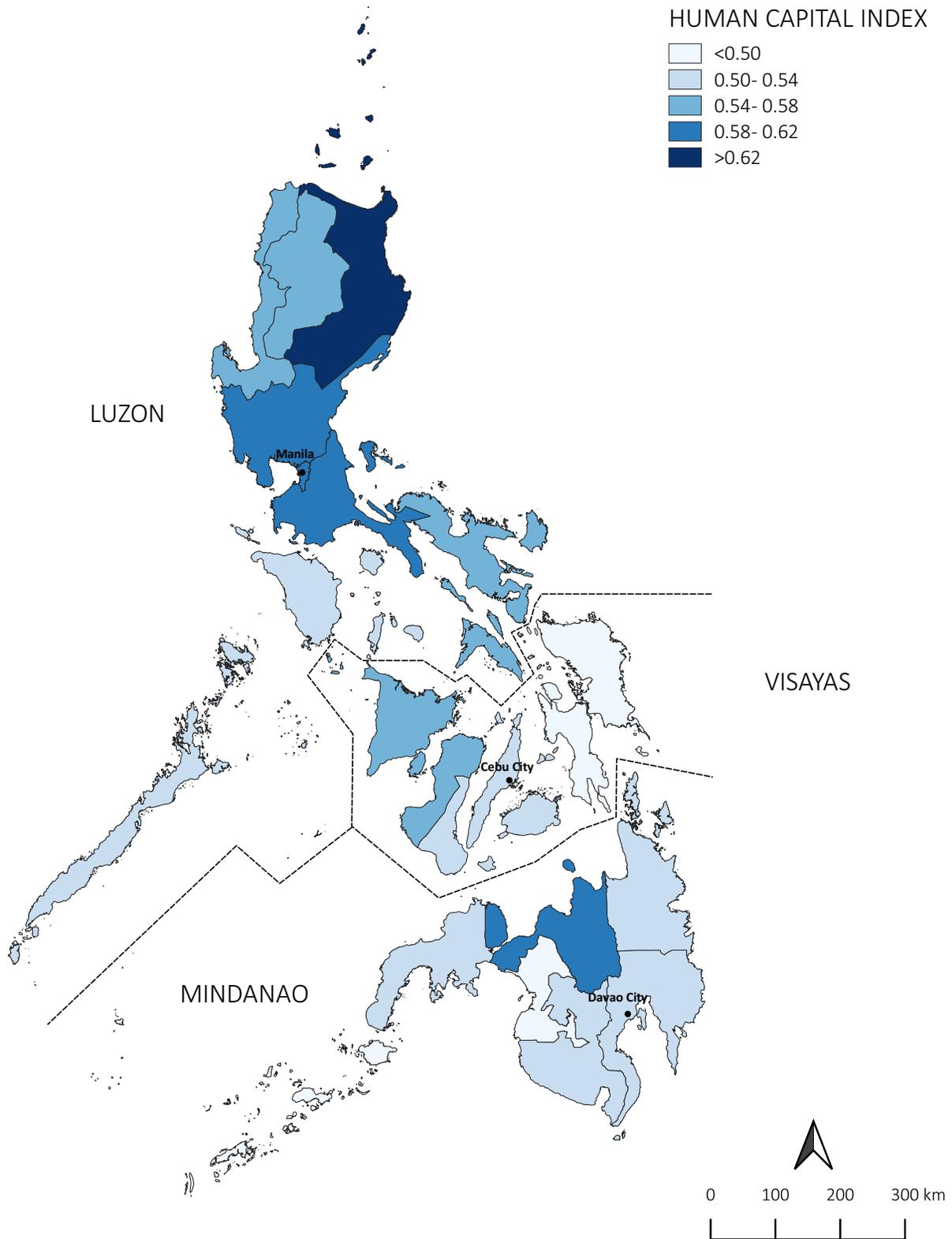
child born today will be 45 percent below what could have been achieved with complete education and full health (Figure 45). The Philippines ranks 84th in the world and 14th (among 24) in East Asia and the Pacific in the index. In terms of the HCI's subcomponents, the country ranks high in quantity (expected years) of schooling but low in education quality—measured by harmonized test scores—and low in health and nutrition measures.

Figure 45: Human Capital Index



Source: World Bank (2019b).

Map 3: Human Capital Index by Region



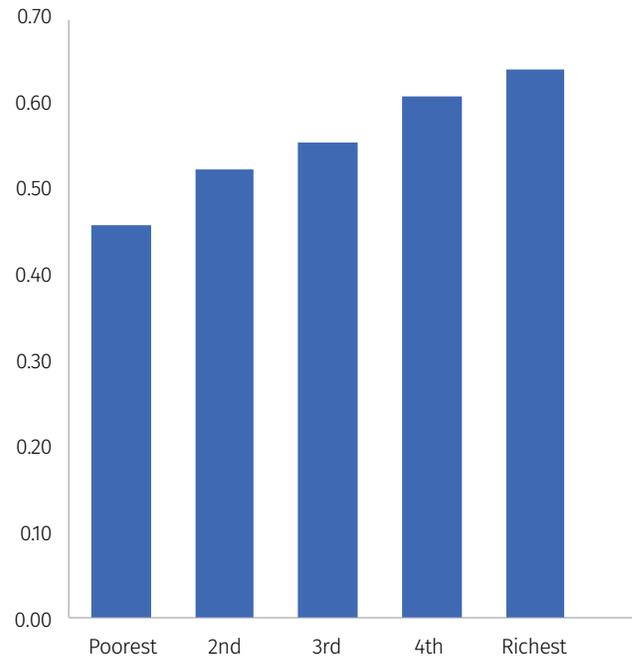
Source: World Bank (2019b).

There is a wide disparity in human capital development in the country. Just as economic outcomes are widely disparate, human capital development across regions varies greatly. Regions with higher rates of poverty have lower rates of immunization and fewer years of schooling. As a result, children born in poorer regions have dramatically lower opportunity to achieve their full potential. This perpetuates the vicious cycle that traps generation after generation in poverty. The lowest levels of human capital development are found in the regions with the highest poverty rates: ARMM and Eastern Visayas (Map 3).

Absent interventions to shore up human capital investments the gaps between wealthy and poor households and areas will widen. Children from the wealthiest one-fifth of families accumulate 40 percent more human capital than those from the poorest one-fifth of households (Figure 46). Children born poor are more likely to be undernourished and suffer from poor health. They have less access to high quality education and are less likely to complete high school. They face an uphill climb through the education system because their family's income is unstable and disproportionately vulnerable to shocks resulting from natural disasters and catastrophic health expenses.



Figure 46: Human Capital Index by Wealth Quintile



Source: World Bank (2019b).

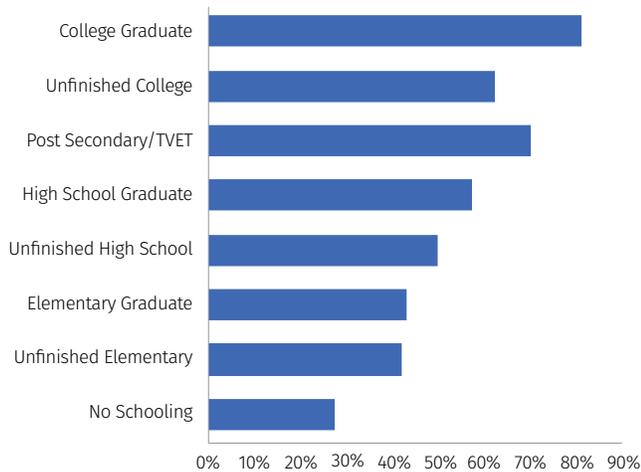
4.1. Education and Skills

Education is a path out of poverty. As in many other countries, more schooling leads to access to wage employment and higher income in the Philippines.

The probability of employment in the formal sector rises with high educational attainment (Figure 47). For each additional year of education, the potential to earn income increases by 15 percent for women and by 9 percent for men. The rate of return to education is higher for postsecondary and tertiary education, particularly for women. Almost no households headed by a college graduate are poor (World Bank 2018a), as shown in Figure 48.

Compulsory basic education has expanded from 10 years to one year of kindergarten plus 12 years, supported with substantial increases in public education spending. Completion of kindergarten became mandatory for enrollment in first grade through the Enhanced Basic Education Act of 2013. In June 2016, the two-year senior high school program was implemented nationwide, admitting 1.5 million grade 11 students for the first time. That year, the Universal

Figure 47: Formal Employment Rate by Education Level, 2018



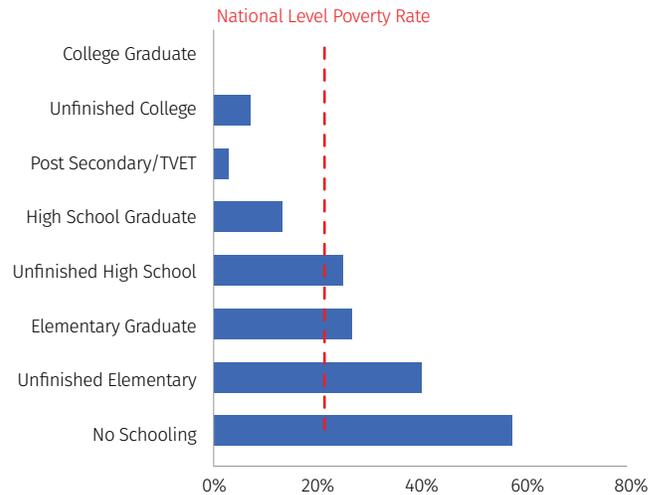
Source: World Bank staff calculations based on January 2018 Labor Force Survey.

Access to Quality Tertiary Education Act was enacted, providing free tuition to Filipino students in state and local universities and colleges and subsidies to poor students in private higher education institutions. To implement these reforms, among others, public education spending rose from 2.6 percent of GDP in 2013 to 3.8 percent in 2017 (World Bank forthcoming).

The basic education reform has greatly increased enrollment rates. The enrollment rate of five-year-olds increased from 57 percent in 2010 to 84 percent in 2017. An impact evaluation shows an early childhood development program (ECD) in the Philippines significantly improved the cognitive, social, motor, and language development and the short-term nutritional status of children who lived in the program areas, particularly for those under age 4 (Armezin et al. 2006). At the primary level, enrollment among children in the poorest income quintile improved to close to universal for those up to age 12 and exceeds 80 percent for those up to age 16. Nearly all Filipino children up to age 17 in the richest 20 percent of households were enrolled in school in 2017 (Figure 49).

Pockets of low enrollment remain, and many students drop out before completing compulsory basic education. About half of Filipino students are

Figure 48: Poverty Rate by Education Level of Household Head, 2015



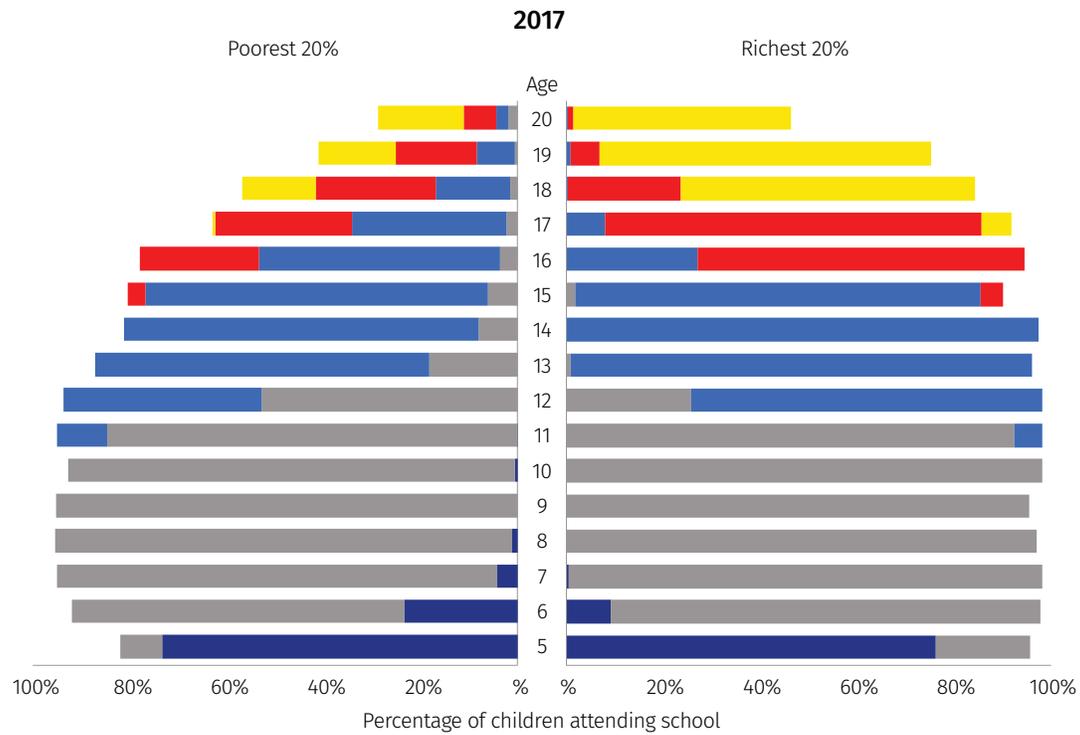
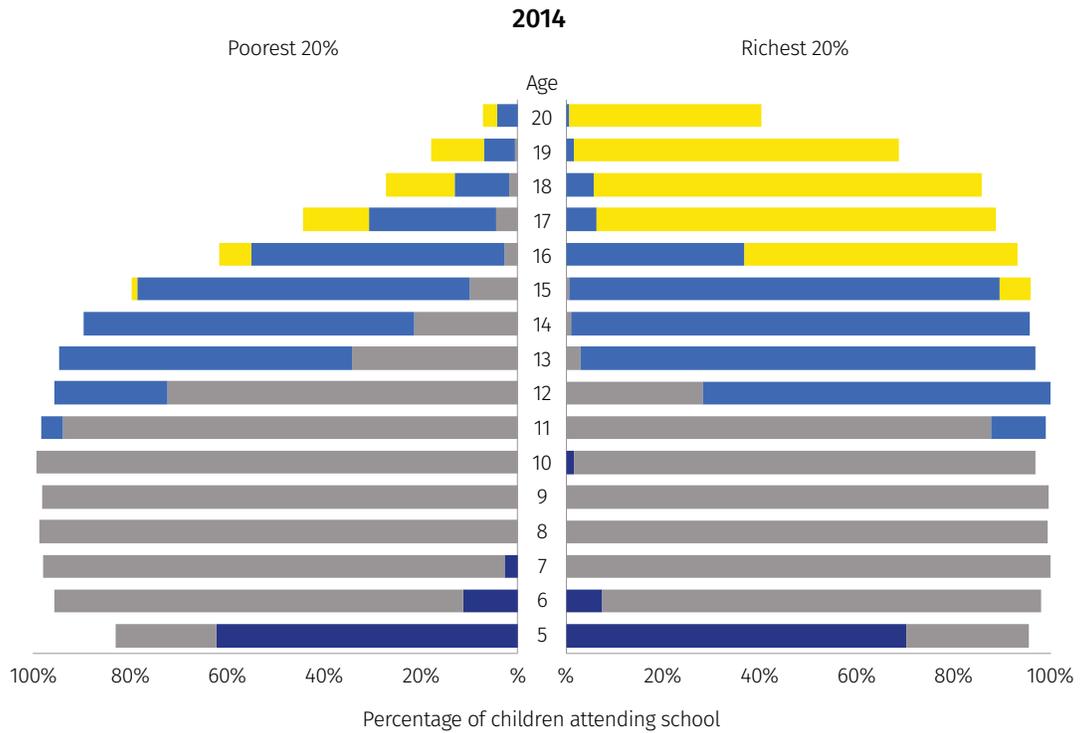
Source: World Bank (2018a).

struggling to complete basic education on time (World Bank 2018d). Among the bottom 20 percent, the main reason for not attending school is “lack of personal interest” for primary and junior high school age groups (Figure 50). About 65 percent of the total out-of-school children ages 5-15 in 2017 are boys. Especially when families are poor, boys are more likely than girls to drop out early because they can work for pay at an earlier age than girls. One out of four youths ages 15–24 is not in employment, education, or training (NEET). Students in conflict-affected areas still have limited access to education: school closures are prevalent and absence rates are high for both teachers (31 percent) and students (29 percent) in ARMM (Australia DFAT and World Bank 2015).

The rapid expansion of the education system has not been accompanied by quality improvements.

Despite a high level of commitment by teachers and an improved learning environment, quality remains limited. In terms of learning 12.8 years of education in the Philippines is equivalent to just 8.4 years of education in a high performing system (Figure 51). Poor education quality, alongside financial pressures on poor families, contributes to loss of interest in schooling, which causes many students to drop out early, particularly among the poor.

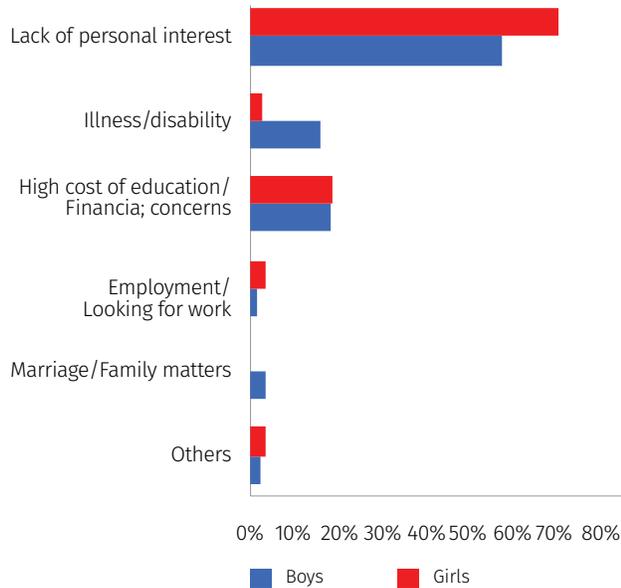
Figure 49: School Enrollment Rates by Age for the Poorest 20 Percent and Richest 20 Percent



■ Post-High School
 ■ Senior High School
 ■ Junior High School
 ■ Elementary
 ■ Kindergarten

Source: World Bank staff calculations based on 2014 and 2017 Annual Poverty Indicators Survey.

Figure 50: Reasons for Not Attending Junior High School among 12- to 15-year-Olds in the Poorest Quintile, 2017

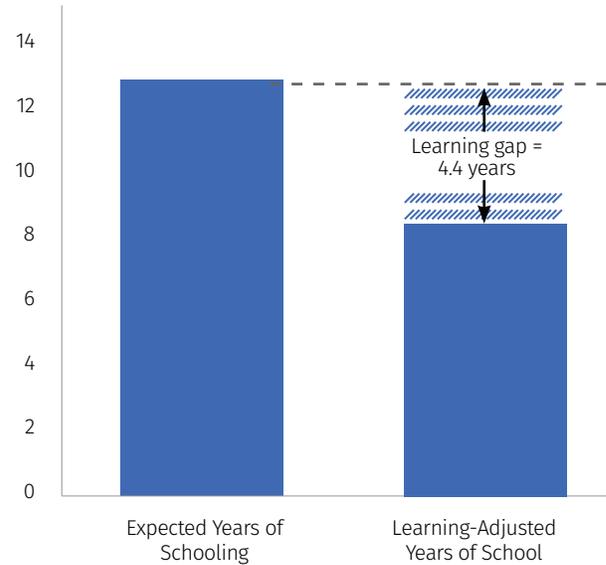


Source: World Bank (2019b).

A shortage of qualified teachers with adequate knowledge and skills is a core constraint to improving learning outcomes. Teachers have on average insufficient knowledge of the subjects they teach and are poorly prepared in pedagogical techniques (Al-Samarrai 2016). Further, the demand of the public school system for teachers has increased sharply, exceeding supply. Not enough teacher education graduates qualify to take the annual licensure exam to allow the Department of Education a high level of selectivity and competition in the hiring process (David and Ducanes 2018). Because of lack of administrative support, teachers are often overloaded with non-teaching tasks, eroding teaching quality.

The low quality of basic education means that even Filipinos who complete secondary school may lack the skills they need for the job market. About 80 percent of unemployed workers have completed secondary education or higher, yet one-third of employers in the Philippines reported unfilled vacancies because

Figure 51: Gap between Expected Years of Schooling and Learning-Adjusted Years



Source: World Bank (2019b).

of a shortage of applicants with the necessary skills (Acosta et al. 2017). This signals a mismatch between skills supply and demand in the labor market, including for traditional technical and cognitive skills as well as socioemotional skills. The mismatch is more acute for workers in skill-intensive occupations. Technical and vocational education and training (TVET) and tertiary education have largely been ineffective in imparting to students advanced technical knowledge and skills relevant and responsive to the needs of technology-intensive manufacturing and service-oriented industries (Orbeta and Paqueo 2017).

Socioemotional skills are highly valued in the job market in the Philippines. These skills are particularly important for women and youth.¹⁹ As a partial compensation to traditional technical and cognitive skills, socioemotional skills can offer a route to higher earnings for workers with low levels of formal education.

¹⁹ One standard deviation in socioemotional skills is associated with a 9 percent increase in average daily earnings (approximately \$2).

The tertiary enrollment rate has increased rapidly over the last decade, but with wide gaps between the wealthiest and poorest quintiles.

The gross tertiary enrollment rate rose from 27.5 percent in 2005 to 35.7 percent in 2014. Only about 10 percent of college-age youth in the poorest quintile are enrolled in or have graduated from tertiary education, far from the 72 percent for those in the wealthiest quintile. The enactment of the Universal Access to Quality Tertiary Education Act in the 2018-19 school year—which provides free tuition at state universities and colleges (SUCs)—could serve as a critical step toward increasing enrollment of the poor in tertiary education. Nevertheless, concerns have been raised that the spending associated with the new law may go largely to wealthier students, who would have enrolled even without the free tuition, and the costs of the program may be unsustainable.

The Philippines' higher education system faces persistent issues, including rapid expansion—without quality monitoring, skills mismatch, low productivity in research and development, and weak governance (Licuanan 2017). The TVET sector faces challenges such as a huge loss of existing jobs due to innovation, technological advancements and the global transition to the Fourth industrial revolution.²⁰ A study on the TVET system stresses the need to increase enterprise-based training, continuously update relevance of training to industry need and increase performance-based funding (Orbeta and Esguerra 2014).

4.2. Health and Nutrition

Access to health services has improved dramatically, particularly among the poor. Coverage of PhilHealth, the national health insurance system, expanded from 38 percent of the population in 2008 to 66 percent in 2017 (Figure 52). The coverage rate for the bottom quintile increased from 20 percent in 2008 to 59 percent in 2017. The benefits package was also

expanded to include outpatient services. With these changes, public expenditure on health rose from 0.5 percent of GDP in 2013 to 0.9 percent in 2016. Health spending in the Philippines remains well below the levels of regional and structural peers.

The quality and scope of coverage remain insufficient to protect households from catastrophic health costs.

Out-of-pocket household spending remains high (Figure 52). The poor utilize PhilHealth less due both to lack of awareness of their eligibility and administrative challenges (Bredenkamp and Buisman 2016). The share of the population driven into poverty by health spending has doubled over the past decade.

The country still fares poorly on many health outcome indicators in comparison with peers.

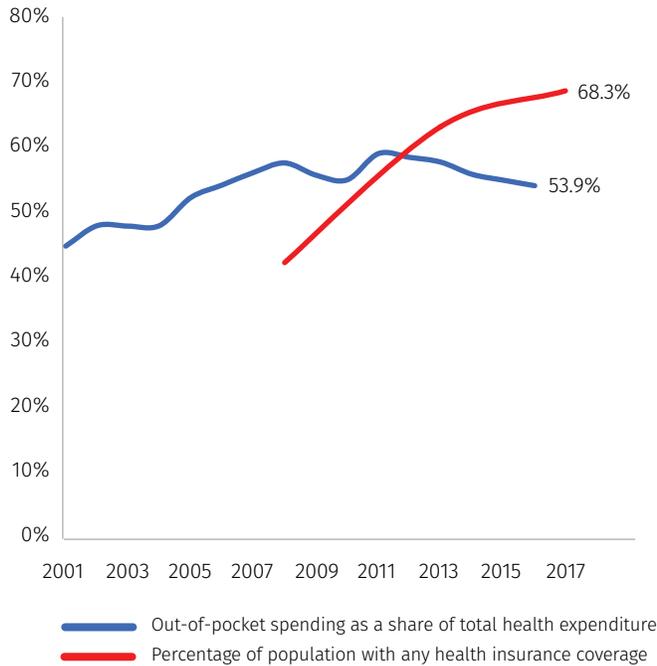
The Philippines was unable to meet the Millennium Development Goal (MDG) targets for child and maternal health in 2015. Wide differences in access to good-quality health care remain across socioeconomic groups, genders, and regions. Noncommunicable diseases contribute increasingly to mortality and morbidity, challenging the health system to adapt to appropriate service delivery modalities to manage chronic disease conditions in the community. Communicable, maternal, neonatal, and nutritional diseases continue to be very significant. Given increasing levels of urbanization, government policy attention has also turned toward diseases associated with highly urbanized communities.

The expansion of PhilHealth has yielded some tangible gains.

The combination of PhilHealth and the “No Home Birthing Policy” instituted in 2009 have boosted the fraction of births that take place in a health facility from just 28 percent in 1993 to 78 percent in 2017 (Figure 53). However, the health system is still weak in terms of basic service delivery, particularly in the areas where poorer Filipinos live.

²⁰ The Technical Education and Skills Development Authority (TESDA) is currently finalizing the *National Technical Education and Skills Development Plan (NTESDP) 2018-2022*.

Figure 52: Health Insurance Coverage and Out-of-Pocket Spending on Health, 2000–16



Source: WHO Global Health Expenditure, World Health Organization.

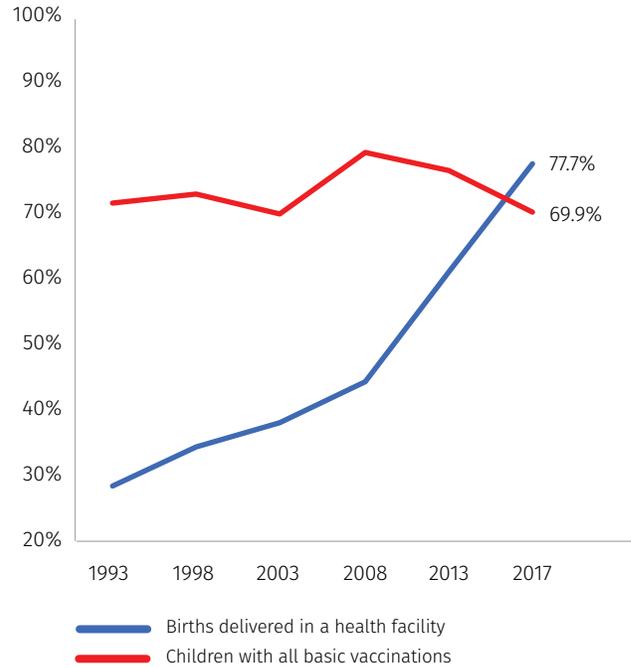
A key indicator of poor performance of the health system is the low immunization rate.

The fraction of children who received all basic vaccinations fell 1998-2017 to 70 percent—dropping below the level of 1993 (Figure 53). Basic vaccinations include BCG vaccine, which protects against tuberculosis; three doses of DPT-containing vaccine, which protects against diphtheria, pertussis, and tetanus; three doses of polio vaccines; and one dose of measles vaccine. The Philippines now has the fifth largest number of children in the world not vaccinated for diphtheria, tetanus, and pertussis (Table 1), and the ninth largest number not vaccinated for measles. Much more effort and attention are required to expand the coverage of this very cost-effective childcare intervention.

Vaccination rates, other outcomes, and the quality of health care overall are worse in poorer areas.

Rural health units (RHUs) in poorer areas score low service readiness. RHUs in wealthier municipalities have better basic infrastructure, more basic equipment, and higher diagnostic capacity than those in poorer municipalities (Morimoto et al. 2019)

Figure 53: Time Trends for 2 Key Health Service Indicators



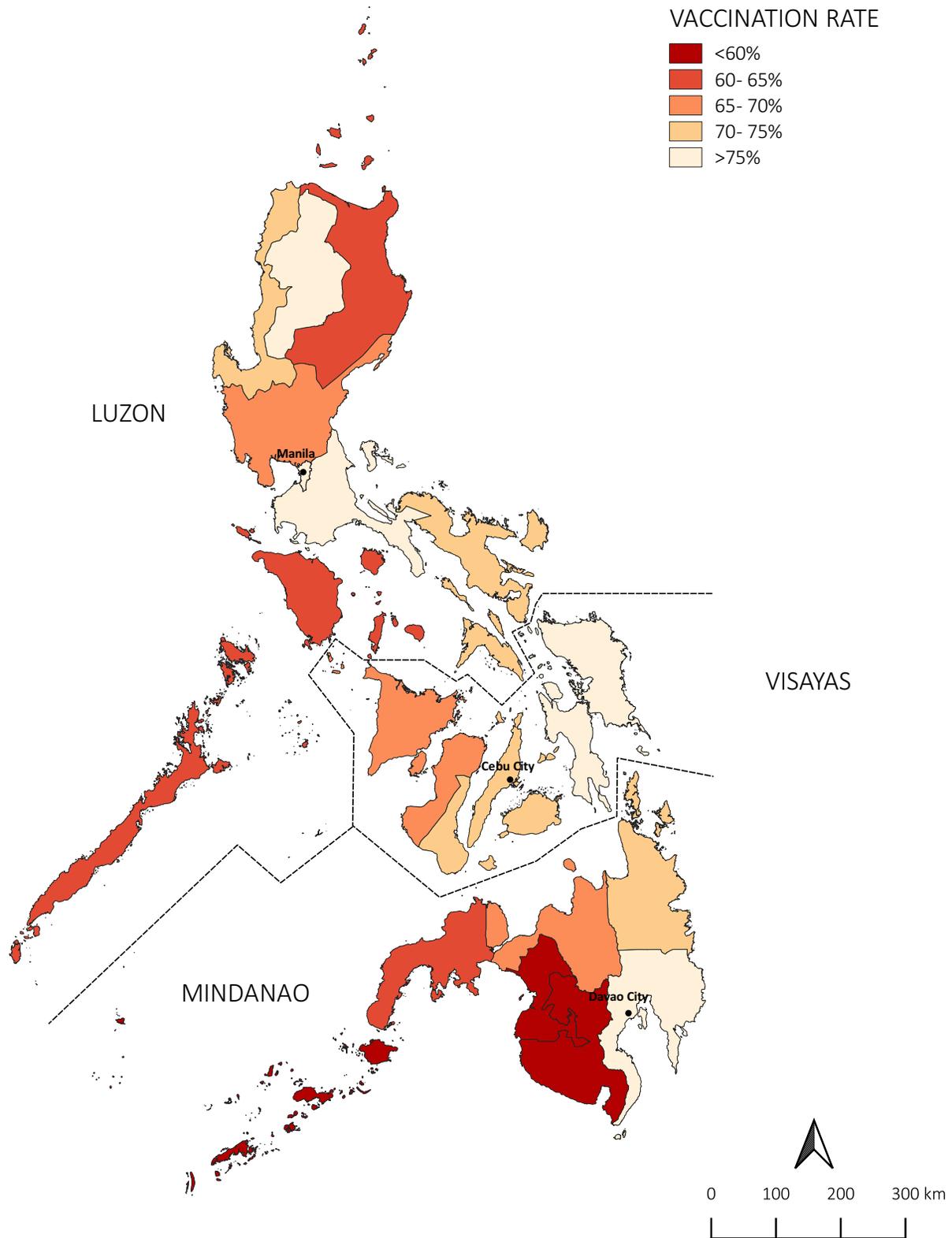
Source: Philippines Demographic and Health Survey data.

Table 1: Top 10 Countries in Number of Children Not Vaccinated for Diphtheria, Tetanus, and Pertussis

Rank	Country	Not Vaccinated
1	India	6,126,000
2	Nigeria	5,740,000
3	Pakistan	2,810,000
4	Indonesia	1,913,000
5	Philippines	1,872,000
6	Congo, Dem. Rep.	1,129,000
7	Iraq	971,000
8	Ethiopia	867,000
9	Angola	772,000
10	South Africa	716,000

Source: Kenny, Snyder and Patel. 2018.

Map 4: Vaccination Rates by Region



Note: 2017 National Demographic and Health Survey, Philippine Statistics Authority.

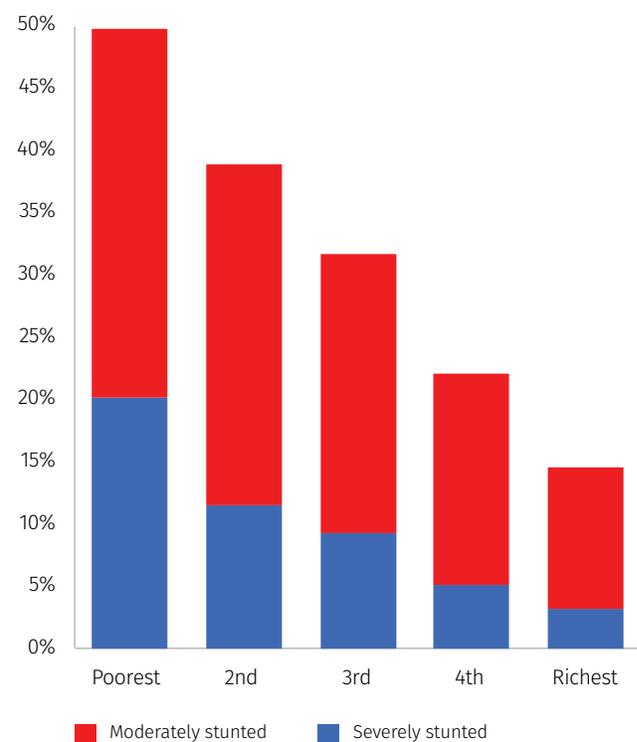
Conflict-affected areas suffer from particularly weak health outcomes and services. In ARMM, only two in 10 children ages 12-23 months are immunized (Map 4). Malnutrition is especially prevalent in ARMM, and levels of micronutrient supplementation are very low. Nationally, 94 percent of pregnant Filipino women access antenatal care from a skilled provider, but only 69 percent of ARMM women do so. Infectious diseases such as tuberculosis and other respiratory infections remain prevalent. ARMM has systematic gaps in the availability of key inputs to deliver services, including significant gaps in essential medicines.²¹

The levels of child malnutrition in the Philippines are shockingly high.²² One in three children under the age of five is stunted—the principal marker of malnutrition—and stunting rates have been stagnant for over a decade. Malnutrition is particularly severe among children in poor households. Stunting in the Philippines is not only above that of wealthier countries in East Asia, including Thailand, Malaysia, and China, but also above that of Cambodia, Myanmar, and Vietnam.

Malnutrition is severe among poor households. Half of children in the poorest income quintile are stunted, and one in five is severely stunted (Figure 54). In poorer regions, particularly conflict-affected regions such as ARMM, stunting rates are particularly high. These data points demonstrate one facet of intergenerational poverty: children who grow up in poor households are often inadequately nourished and more likely to suffer from limited cognitive and physical development, putting them on a trajectory to poverty in adulthood.

Malnutrition in the womb and during the first two years of life inhibits brain development. A study tracking children born in Cebu has estimated the long-term impact of malnutrition. Children who were not stunted in their early years performed significantly better in school. They started school at a younger age, learned more during each year of schooling, were less likely to repeat grades, and stayed in school longer. Children who were better nourished also had a higher IQ at the age of eight. These effects endured into adulthood: those who were not stunted at a young age were more likely to hold formal sector wage jobs in their early twenties (Carba, Tan, and Adair 2009; Mendez and Adair 1999).

Figure 54: Stunting Rate by Wealth Quintile, 2015



Source: 2015 National Nutrition Survey, Food and Nutrition Research Institute.

21 Results from a health facilities survey conducted in ARMM in 2017 were compared with the same indicators in the earlier national survey. ARMM scored lowest among the regions in seven out of eight tracer conditions that can be compared.

22 “Malnutrition” refers to a deviation from optimal nutrition status and includes both overnutrition and undernutrition. Overnutrition represents an oversupply of nutrients relative to the body’s physiological needs. Undernutrition refers to a state of nutritional deficiency and presents the most serious risks to health and development when experienced by women before and during pregnancy and lactation, and infant and young children. There are a variety of measures of undernutrition. This section focuses on child stunting, defined as low height-for-age in children under five years of age. Stunting results from chronic undernutrition and indicates a failure of a child to attain the height expected among healthy children.

Poor health and nutrition of mothers before and during pregnancy is a key cause of child stunting. In 2015, one in four pregnant women in the Philippines was categorized as “nutritionally at risk,” and a substantial number of mothers were anemic or iodine deficient. International research shows that a child with low weight at birth (less than 2.5 kilograms) is at very high risk of being stunted, and 14.5 percent of Filipino children had low birth weights. Low birth weight is principally a consequence of the mother’s health and nutrition before and during pregnancy.

Stunting can be addressed at scale effectively through a multisector approach. Key interventions include health and nutrition programs for pregnant women, vaccinations to protect children from illnesses, monitoring the growth of infants and young children, and promoting feeding and hygiene practices at home (PSA and ICF 2018).

The high rate of adolescent pregnancy is one contributing factor to the high rate of malnutrition. Women start childbearing in their teenage years, and the country ranks high in Asia in terms of adolescent fertility rate. One in 10 girls ages 15–19 is pregnant or has given birth. While the overall fertility rate has declined over time (3.7 in 1998 to 2.7 in 2017), the adolescent fertility rate remained unchanged (PSA and ICF 2018). Overall, women in the poorest 20 percent of the population have an average of 4.3 children, compared with 1.7 children for those in the richest 20 percent.

Poor women and young girls have high rates of unplanned pregnancies, reflected in the country’s high unmet need for modern methods of family planning. Twenty-two percent of married women want to delay childbearing (delay first birth or space another birth) for at least two years. Additionally, 49 percent of married women do not want any more children (PSA and ICF 2018). The total demand for family planning among married women ages 15–49 is 71 percent, but only 57 percent satisfied their family planning need by modern methods.

Recent government initiatives provide opportunities to address the country’s health and nutrition challenges. The First 1000 Days Law of 2018 directs policy attention to address malnutrition. The new Universal Health Coverage (UHC) Law mandates insurance coverage for all Filipinos and will shift a greater element of health financing to the PhilHealth channel. The law can be the platform for the government to leverage expanded access to improve the quality of service delivery, which is the core challenge for the country’s health system.

While health care in the Philippines is principally financed and delivered by the public sector, the private sector could fill some gaps. The private sector can help by investing in digital initiatives such as telemedicine, private primary care networks, health infrastructure, and pharmaceutical manufacturing.

4.3. Social Protection

Social protection programs have been critical for reducing poverty, empowering communities, and building human capital. Over the last decade, the Philippines has been successful in establishing the main building blocks of a well-functioning social protection system. It has one of the most advanced social protection systems in East Asia, with more of the poor benefitting from at least one intervention. Government transfers account for one-quarter of the poverty reduction in the past decade (World Bank 2018a). The national household targeting system, Listahanan, has enabled the government to target programs to the poor and vulnerable, increasing efficiency and effectiveness of public spending and improving governance.

The national conditional cash transfer (CCT) program has been important in increasing the human capital of beneficiary children and reducing the extent and incidence of poverty. The beneficiaries of the *Pantawid Pamilyang Pilipino* Program are objectively selected using a survey of the physical structure of the house, number of rooms and occupants, access to running water, and other living conditions. The poverty targeting system, Listahanan, is one of the most comprehensive

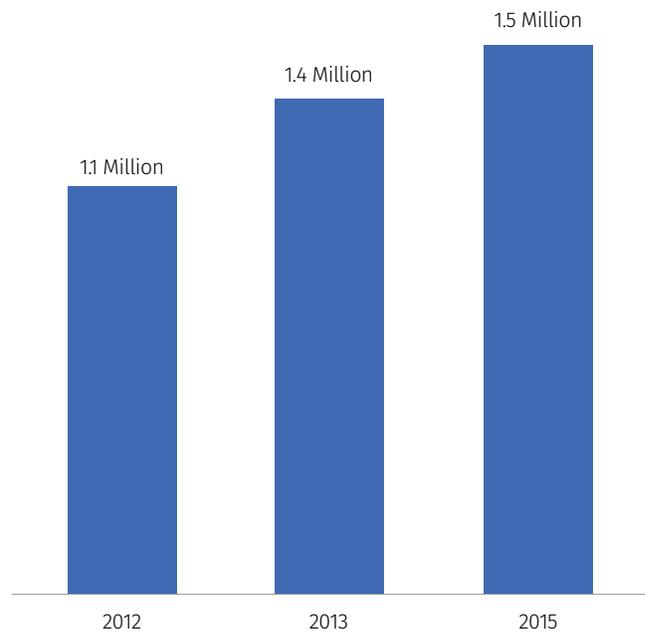
databases in the world, covering 75 percent of the country's population. Aside from the CCT, it has been used extensively to identify poor and near-poor beneficiaries of national government (e.g., PhilHealth) and LGU programs.

The national CCT program expanded rapidly over 2007-2015. Coverage increased from 6,000 households in 2007 to 4.1 million in 2019, making *Pantawid Pamilya* the primary government social assistance program for the poor. The program extends cash grants to 77 percent of poor households and contributes both to reducing poverty and to building human capital. Its budget accounted for 0.5 percent of GDP in 2018.

***Pantawid Pamilya* has made a large contribution to reducing poverty.** The grant received by beneficiary households every month allowed them to deal with one-fifth of their current income shortfall. Without the cash assistance, poverty among beneficiaries would have been higher by 6 percentage points. Thus, the program kept nearly 1.5 million poor beneficiaries out of poverty in 2015. At the national level, the cash grants filled 3.7 percent of the income gap of poor households and helped reduce the poverty rate by 1.5 percentage points in 2015 (Figure 55). While the real value and progressivity of the program's cash grants have declined over time, the latest National Household Survey shows that it remains an important resource for poor households.

***Pantawid Pamilya* has multiple beneficial impacts on behavior changes that improve human capital building and stimulate local economies.** It has improved school enrollments among older children, encouraged early childhood education, and increased the health-seeking behaviors of beneficiaries. Studies show that gross enrollment rate for the CCT beneficiary high school students is 6 percent higher, and the CCT contributes to reducing severe stunting among beneficiary children by up to 10 percentage points.

Figure 55: Number of People Kept Out of Poverty by *Pantawid Pamilya*



Source: World Bank staff calculations based on various rounds of FIES and APIS.

The *Pantawid Pamilyang Pilipino* Program was recently institutionalized by law. The government is launching an updated Social Protection Framework and Strategy to enhance its labor market and social insurance components, as well as coordination across multiple agencies besides those that work on the CCT. The updated framework seeks to improve delivery aspects of social protection interventions, including targeting, payments, links to identification (National ID), and new expanded roles of the system in terms of more integral response to shocks and disasters.

Social insurance and active labor market programs

The Philippines has one of the most advanced social protection systems in East Asia, with more of the poor benefitting from at least one intervention. Other social protection programs are discussed in Box 5.

Box 5: Other Social Protection Programs

Sustainable Livelihood Program (SLP): The program has two tracks. The micro-enterprise development track supports poor households in their self-employment efforts. The employment facilitation track focuses on skills development training. Since 2011, SLP has served 1.3 million people, a large majority of whom are beneficiaries of *Pantawid Pamilya*.

Community-Driven Development (CDD) Program: This program, in existence since 2002, serves as an infrastructure and service delivery and empowerment program at the local community level. It has helped enhance the supply side of health and education services needed for the CCT.

Social Pension: In 2011, the Senior Citizens Act was amended to provide a ₱500 monthly social pension to poor elderly not receiving a pension through the social security system. Initially, this benefit was granted to those ages 77 and over, but the age was lowered to 65 in 2015. The number of beneficiaries has expanded

rapidly, from 1 million in 2015 to 3 million (40 percent of total elderly) in 2018.

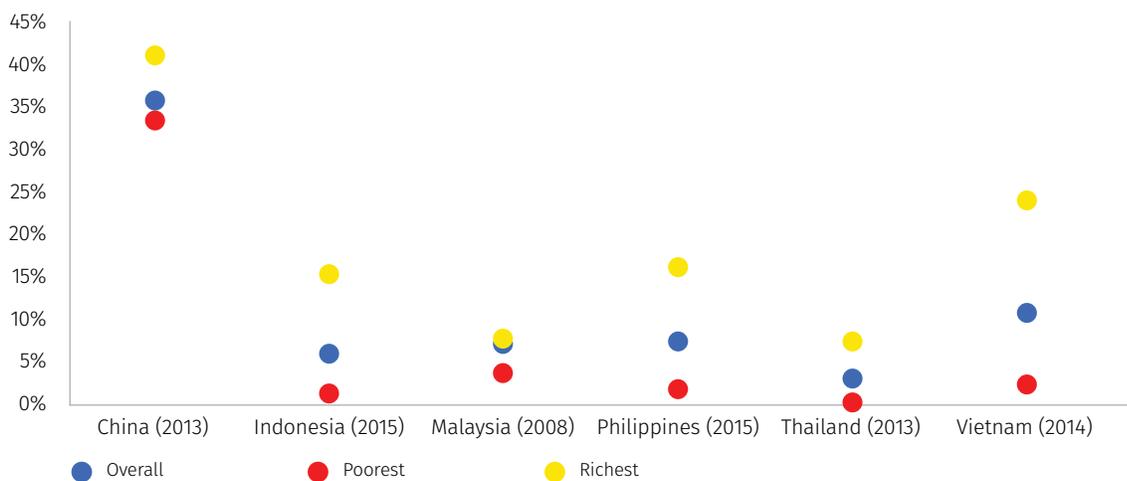
Disaster Relief: The Department of Social Welfare and Development (DSWD) is responsible for disaster relief and early recovery. It has taken significant steps to strengthen its capacity to effectively perform its disaster risk reduction management functions. Super Typhoon Yolanda in 2013 brought attention to the lack of a flexible emergency income support program for affected households, which the government is trying to address. DSWD also coordinates cash-for-work, food, and temporary shelter assistance with LGUs.

Social Care: Delivery of the programs devolved to local governments has remained an important concern. These programs include the provision of social work and care services for the homeless, orphans, and victims of abuse and trafficking through the local social welfare offices. However, the resources and capacity of local governments remain underdeveloped.

The role of social insurance, remains limited. As the country moves toward upper-middle-income status and as the population ages, the role of pensions need to be strengthened, particularly for the poor. Coverage is comparable to its Southeast Asian neighbors, but within

the country coverage continues to be lowest among the poorest 20 percent of the population (Figure 56). Pensions account for a small share of total household income, particularly for the poor.

Figure 56: Coverage of Contributory Pensions (%)



Source: The Atlas of Social Protection: Indicators of Resilience and Equity, World Bank.



The Philippines faces a challenge to improve social security coverage of workers and to increase the income protection coverage of the elderly. The pension system consists of nationwide compulsory contributory programs for wage employees in the formal sector (the Social Security System) and for government employees (the Government Social Insurance System). About 31 percent of elderly persons are covered by such pensions. Contributory pensions also include disability, temporary work stoppage, and life insurance for formal sector and government employees. The contributory system is complemented by an old-age noncontributory social pension (Social Pension for Indigent Senior Citizens), which has expanded to reach another 30 percent or 3 million elderly (but with low generosity, just \$10 a month).

Labor market policies and programs have yet to reach the population beyond the formal sector (about a quarter of employment). Performance of the labor market regulation and policies as social protection instruments has been constrained by the structure of the economy where low-productivity, precarious jobs in the informal sector dominate and poor-performing agriculture is still a major employer. Thus, they remain

out of reach for most people, except those in the top 20–30 percent of the income distribution. Despite efforts to improve them, labor market programs—including many livelihood support programs—remain small, fragmented, and poorly coordinated.

The social protection system has helped as a response to calamities and natural disasters. The Philippines has introduced some cash transfers for emergencies as part of its disaster response toolkit, which consists of a number of relatively small-scale programs (such as emergency public works employment and relief services) that can be expanded rapidly in the event of natural disasters. In addition, the country uses an adaptive system whereby standing programs can be ramped up quickly to cover large numbers of additional beneficiaries in response to disasters. The most notable large-scale use of cash transfers to respond to emergencies was in 2013 when Super Typhoon Yolanda left massive devastation, killing 6,300 people and affecting more than 1.4 million families. The government is considering institutionalizing the use of emergency cash transfers as a main instrument to respond to disasters.

Box 6: Women's Health, Education, Employment, and Empowerment

The Philippine government and nongovernmental organizations have taken steps to improve women's lives in various ways. The overall gender gap is small in the Philippines by global and regional standards. Challenges, however, lie in two critical areas: health care and equal pay.

Voice and agency. Women have steadily improved their agency in Philippine society. Although women still have limited property rights, they have good control over their own resources and spending, regardless of their level of household wealth. Women's participation in business ownership is unusually high—69 percent of firms. The share of women with political power has increased. The proportions of seats held by women in the national Congress reached nearly 30 percent in 2017, compared with the world average of 24 percent. Women also participated in the peace negotiations between the government and the Moro Islamic Liberation Front (MILF).

The role of women in business leadership, however, remains a challenge. Women tend not to occupy middle to high management positions; only 30 percent of firms report women in top management positions. The Philippines is among the best countries in low vulnerability of violence at home. Still, almost 5 percent of Filipinas surveyed concurred that wife beating was justified for arguing with the husband, refusing to have sex, or burning food.

Health. The government has upgraded national and local government health facilities to support the provision of maternal health care services and has expanded PhilHealth coverage, especially to poor households. Still, household spending on health remains high, and the quality of health services is uneven. Recent data indicate that health outcomes for the poor have improved little, and rates of maternal mortality, infant mortality, and malnutrition among children remain high. The Philippines did not meet the Millennium Development Goal (MDG) targets for child and maternal health by 2015.

Life expectancy at birth in the Philippines is higher for females than for males but below the average of developing countries in the region. Nearly 20 percent of women in the Philippines do not access family planning because of opposition by the woman, her partner, or religion. However, over 60 percent lack relevant knowledge about family planning, also among the highest for all countries with data. This high level of unmet needs for family planning also reflects the challenges of women's agency. The country's high fertility rate continues to drive high population growth relative to the regional average (1.7 percent per year compared to 0.7 percent for the region). Adolescent pregnancy—57 births per 100,000 population in 2017, an increase from 46 births per 100,000 in 1998—is particularly high. Adolescent pregnancies have implications for poor health of newborns and contribute to high infant mortality.

Education and labor market. The government has carried out ambitious basic education sector reforms in the past decade and increased public spending on education. Enrollment and completion rates at all levels have improved over the period with women's enrollment at all levels exceeding that of men. Primary and tertiary enrollment is close to the regional average, but secondary enrollment falls far below it. Higher returns accrue for educational attainment among females: An additional year of education offers a 16 percent rate of return for women compared with 9 percent for men.

The average daily wage by sex over time reveals a greater increase for females compared with the increase for males. The average daily wage of females increased by 15 percent, after adjusting for inflation, from 2006 to 2017. The average wage for men did



not increase significantly during that period. In 2006, males earned more than females, but starting in 2012, females earned more than males for two main reasons. First, there was a larger improvement in education among female workers. The share of female workers with tertiary education grew 5.7 percentage points from 32.7 percent in 2006 to 38.4 in 2015. In contrast, the share of male workers with tertiary education increased by only 2.6 percentage points from 22.2 percent in 2006 to 24.8 percent in 2015. Second, there was a higher increase for employed women taking more well-paying jobs than for men. The share of professional to total female workers increased by 2.5 percentage points from 16.2 percent in 2006 to 18.7 in 2015; for males it only increased by 1.3 percentage points from 8.8 to 10.1 percent. Interestingly, females more commonly work as professionals in information, communication, finance, education, and science (about 19 percent) than males (10 percent). Women are also a higher share of the government workforce, which typically offers higher wages.

Still, women have much lower levels of labor force participation than men and earn less than men for every single level of education. While half of working-age women participate in the labor market, three-quarters of men do. The ratio of employment to working-age population is nearly 60 percent, but only 45 percent for women compared with 70 percent for men. ARMM, the most conflict-ridden region, has a typical male labor force participation rate like that of

other regions in the country (76.8 percent on average). However, its women's labor force participation rate (28.6 percent) is significantly lower than in the other regions (50.6 percent on average). One recent labor market initiative for women is maternity leave, which was enacted in February 2019. This allows female workers to enjoy 105 days of maternity leave in both the public and private sectors, with an option to extend to additional 30 days without pay.

While more women entered the higher-paid sectors, a significant share remained in low-paid jobs, particularly low-end services jobs. Most females (73 percent) are employed in the services sector, compared with only 44 percent for males. Among employed females, 10 percent are in manufacturing and industry and 17 percent in agriculture, compared with 21 percent of males in manufacturing and industry and 35 percent in agriculture. Within the services sectors, about 29 percent of the females are involved with wholesale and retail trade, compared with only 12 percent for males. About 15 percent of the females work in other services activities (the lowest paid), compared with only about 3 percent of males. As a result, women have lower wages for any given education level. For workers with less than a tertiary education, female wages are only 65 percent to 80 percent of those for males with similar education; for workers with a tertiary education, the wage gap between female and male narrows to 92 percent.