

ECONOMIC ANALYSIS

1. The Social Protection Support Project will support expansion and implementation of two programs that are emerging as central pillars in the government's poverty reduction and social protection agenda: (i) a major new conditional cash transfer (CCT) program, the Pantawid Familyang Pilipino Program (4Ps);¹ and (ii) the national household targeting system for poverty reduction (NHTS-PR).

2. CCT programs provide cash payments to poor households that meet conditions typically linked to human capital investments. Many of the most important benefits of CCTs (e.g., impacts on welfare and cross-generational effects) are not directly quantifiable in financial or economic terms. Given the nature of CCTs as well as the project's support to nationwide social protection reform, the project's full returns cannot be assessed through conventional economic and financial analyses. However, CCTs are among the most rigorously evaluated programs internationally, and substantial quantitative and qualitative evidence is available on significant benefits in several dimensions.

3. Evidence from the Philippines and other developing countries suggests that the nationwide implementation of the 4Ps and NHTS-PR will bring significant expected benefits in at least three areas: (i) substantial short-term effects on income- and consumption-related poverty (income poverty) and vulnerability; (ii) broader and longer-term socioeconomic impacts, particularly through human capital accumulation that can break down intergenerational poverty traps; and (iii) improved efficiency of government programs aimed at reducing poverty and vulnerability, and providing services to the poor. The first two benefits are discussed here, while impacts on government programs are discussed in the financial analysis (linked document to the report and recommendation of the President). Although the discussion focuses on household behavior, given the high degree of cross-agency coordination under the 4Ps, demand-side pressures will likely translate into increased supply (e.g., classroom construction, teacher mobilization).

A. Short-Term Effects on Income Poverty and Vulnerability

4. Persistent poverty and inequality remain major development challenges and constraints to inclusive growth in the Philippines. Using the national poverty line, the share of poor households rose from 24.4% to 26.9% during 2003–2006, while the headcount poverty incidence rose from 32.1% to 32.9% during 1994–2006, suggesting that the first Millennium Development Goal will not be met.² Despite relatively rapid economic growth, poverty remains high, suggesting a need for new approaches that better target the poor and address the key causes of poverty.

5. Poverty in the Philippines has both chronic and transient elements. About three-fifths of the poor (one-fifth of Filipino households) are estimated to be chronically poor, while two-fifths have fallen into poverty due to shocks. Low-income and poor families are most vulnerable to shocks and least equipped to respond to them: according to 2004 data from the annual poverty indicators survey (APIS) and other sources, the leading causes of vulnerability among the poor are natural disasters, unexpected reduction of income, and lack of savings.³ Although CCT

¹ Building Bridges for the Filipino Family Program.

² ADB. 2009. *Poverty in the Philippines: Causes, Constraints, and Opportunities*. Manila; United Nations Statistics Division. 2009. *Millennium Indicators Database Online*. <http://mdgs.un.org/unsd/mdg/>.

³ The most recent (2007) APIS did not include a question on source of vulnerability. In more recent years, rising food prices and the economic crisis may have had larger impacts. See also R. Manasan. 2009. Reforming Social

programs are often conceived as a tool to address transient poverty and act as a cushion against short-term shocks, international experience shows significant benefits for the chronic poor, including increased incomes and consumption of critical goods and services, as well as breaking intergeneration poverty traps by encouraging increased investment in human capital.

6. The magnitude of cash grants to 4Ps beneficiaries will vary by household structure and by compliance—from P300 per month to a per-household ceiling of P1,400 per month. The grant size is similar to those in many CCT programs in other developing countries, where experience suggests that such grant amounts will significantly increase income and consumption among target households, while not being large enough to create adverse incentives for adult participation in the workforce. Recent ex-ante analysis of 4Ps education grants suggests that, if accurately targeted to children in all poor households nationwide, this component alone could lift 31.1% of poor households in the Philippines out of poverty and decrease the national poverty gap measure by 52.5%.⁴ Given the 4Ps' geographic focus on poor areas, the impact on these localities would be much larger. Based on simulations using NHTS-PR data and proxy means testing, the World Bank⁵ estimates that total incomes among poor and eligible households in 4Ps areas could increase by 23%, and the poverty rate fall by 6.1 percentage points.

7. An additional important aspect of the 4Ps cash transfers is their predictability (assuming households meet conditions). Given that the rural poor have limited access to credit and insurance markets, this stability enhances the ability of grants to address vulnerabilities, including helping families to smooth consumption despite seasonal fluctuations and shocks to income. The project will support quantitative and qualitative evaluation of the 4Ps impact on outcomes related to income-based poverty, human capital outcomes, and broader facets of poverty.

B. Broader and Longer-Term Socioeconomic Impacts, including Human Capital Accumulation

8. The Philippines is lagging on several Millennium Development Goal targets.⁶ Low human capital accumulation results in lost economic opportunities and increased income poverty, in addition to cross-generational impacts. By addressing core constraints, particularly on the demand side, the 4Ps is expected to yield considerable social and economic benefits in project areas through (i) increased educational attainment and (ii) improved nutrition and health outcomes.

9. **Education.** Although supply-side factors such as student–teacher ratios and infrastructure are critical for education quality, demand-side factors (particularly poverty and parents' education) are stronger determinants of enrollment and other education outcomes.

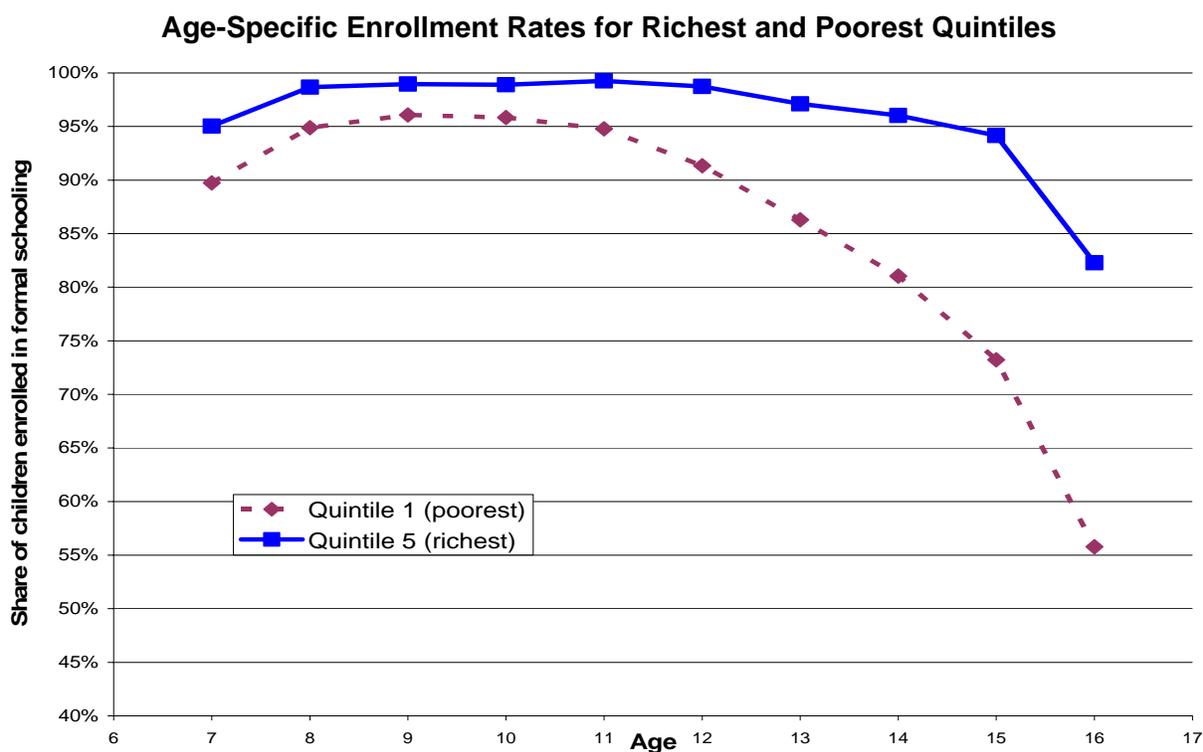
Protection Policy: Responding to the Global Financial Crisis and Beyond. *Philippine Institute for Development Studies Discussion Paper Series*. No. 2009-22. Manila.

⁴ The former figure would imply a decline in the national poverty incidence of 8.3 percentage points. H. Son and J. Florentino. 2008. Ex-Ante Impact Evaluation of Conditional Cash Transfer Program on School Attendance and Poverty: The Case of the Philippines. *ADB Economics Working Paper Series*. No. 142. Manila: ADB.

⁵ World Bank. 2009. *Project Appraisal Document on a Proposed Loan in the Amount of US\$405.0 Million to the Republic of the Philippines for the Social Welfare and Development Reform Project*. Washington, D.C.

⁶ As reported at www.nscb.gov.ph/stats/mdg/mdg_watch.asp and using more recent Department of Education figures, off-track targets and latest values include (i) elementary enrollment (85.1%), cohort survival (75.3%), and completion rates (73.2%) in school year 2008/09; (ii) literacy rate of 14–24 year-olds (96.6% in 2003); (iii) infant immunization rate for measles (82.7% in 2007); and (iv) maternal mortality (162.0 per 100,000 live births in 2006).

Using APIS data for 2002, 2004, and 2007, Maligalig et al. (2010)⁷ find that for girls 7–12 years old, the lead reasons for being out of school are lack of interest and high cost of education.⁸ For children 13–16 years old, the number of out-of-school youth rose markedly during 2002–2007, with the leading causes being lack of interest (especially for boys), cost of schooling (particularly for girls), and work or job-seeking.⁹ As shown in Figure 1, APIS data point to an accelerated drop-off in enrollment rates for children from the poorest quintile of households after age 11; by age 14, nearly 1 in 5 are out of school, compared with less than 4% among the richest quintile.



Source: Author's calculations using data from Annual Poverty Indicators Survey 2007.

10. CCTs can positively affect all of these demand-side constraints. Cash transfers directly address the costs of schooling, both direct expenses and opportunity costs, as well as the decision to remove children from school to contribute to household income via labor: recent APIS data indicate that 7.5%–8.8% of children 13 years old and 10.7%–12.6% of children 14 years old nationwide are working. Similarly, children's lack of interest often reflects the value that parents place on education. This will be directly addressed by the provision of cash incentives as well as advocacy through family development sessions. In view of such factors, Maligalig et al. (2010) conclude that the 4Ps has the greatest potential among existing programs to address the problem of dropouts in the Philippines.

11. Extensive international evidence demonstrates the very strong track record of CCTs in improving education. Among these, a rigorous randomized impact evaluation of one of the

⁷ D. Maligalig, R. Caoli-Rodriguez, A. Martinez, Jr., and S. Cuevas. 2010. Education Outcomes in the Philippines. *ADB Economics Working Paper Series*. No. 199. Manila: ADB.

⁸ Since 1995, the official age of elementary school entry is 6; however, surveys indicate that a roughly equal share of students enters at age 7, with children from poor families particularly likely to start school late. The study thus uses 7–12 year-olds to roughly proxy children who should be in elementary education, and 13–16 year-olds for secondary education.

⁹ Factors such as illness, distance from schools, and lack of transportation were cited far less frequently.

longest running CCTs—Mexico's Oportunidades program (formerly Progresa, launched in 1997)—by Schultz (2004)¹⁰ finds that participation in the program led to a rise in total enrollment for grades 1–8 of at least 3.4 percentage points, with an effect on girls' lower secondary enrollment of more than 14.5 percentage points. Average educational attainment for the poor rose by 0.66 years. As summarized in International Evidence of Conditional Cash Transfer Impacts on Education (linked document to the report and recommendation of the President), studies of CCTs in many other countries point to similar and often larger impacts on enrollment.

12. A wide array of literature documents the high individual and social returns to education. Economic rates of return are typically estimated at around 10% per year of schooling, and may be especially high in developing countries.¹¹ Conversely, families' lack of investment in education due to either chronic poverty, or the removal of children from school in response to even short-term shocks, depresses human capital accumulation. This in turn leads to lower employment opportunities, productivity, and incomes in adulthood. Data for recent years show that completion rates for primary and secondary schooling have hovered at or below 75%, meaning that about one in four entrants will leave the system without completing education. As noted by Maligalig et al. (2010) and implied by Figure 1, both initial enrollments and completion rates conditional on enrollment tend to be substantially lower in poor areas and for children in poor households. Given that returns to education may be nonlinear (rising sharply with completion of a given level of schooling), midlevel dropout represents a considerable loss to both individuals and the schooling system.

13. **Nutrition and health.** Supply-side factors such as availability of drugs, equipment and supplies, and health personnel continue to pose a key constraint for the poor to access quality health care. At the same time, demand-side issues such as financial barriers, health awareness, and cultural norms are critical barriers to service utilization, particularly in poor rural areas and among indigenous peoples. Although many public health services are provided free of charge, figures from the 2008 national demographic and health survey indicate that the average cost of treatment for outpatient care was P1,872 per visit. The average travel cost was P109, and is considerably higher for the rural poor. Nearly half of health care costs are paid out of pocket, and the 2008 survey shows that 79% of poor households have no insurance, with only 20% covered under the Philippine Health Insurance Corporation. The 4Ps has considerable potential to increase utilization of health services among the poor by providing additional cash to offset direct and indirect costs, as well as by promoting increased use of health and reproductive services, and better sanitation awareness and practices through family development sessions.

14. International evidence suggests that CCTs can play a key role in averting life-long productivity losses and intergenerational poverty caused by malnutrition. In some developing countries, moderate malnutrition in infancy and childhood is estimated to decrease average individual productivity in adulthood by upward of 10%, including due to permanent cognitive impairment, decreased learning, and physical stunting. Research in the rural Philippines points to a strong correlation between height (determined in part by nutrition in early years) and a person's productivity, with a 1% decrease in height associated with a 1.4% loss in expected income from agricultural activities.¹² International experience suggests that the 4Ps will have multiple impacts on reversing such outcomes, improving the nutritional status of children both directly—through

¹⁰ T.P. Schultz. 2004. School Subsidies for the Poor: Evaluating the Mexican PROGRESA Poverty Program. *Journal of Development Economics*. 74(1). pp. 199–250.

¹¹ For Progresa, Schultz (2004) estimates a real internal rate of return of 8% per year of additional schooling. See also Psacharopoulos and Patrinos (2002) on wage returns, and Spohr (2003) on broader workforce outcomes.

¹² See evidence summarized in G. Gleason, C. Spohr, and J. Huo. 2005. *Strengthening Public Nutrition Planning and Policy in the PRC*. Manila: ADB.

increased and more stable household income, nutritional counseling, infant growth monitoring, and decreased parasites due to deworming—and indirectly via the effects on pregnant and lactating women participating in the 4Ps. Estimates by Manasan (2009) suggest that increased household income from the 4Ps cash transfers will translate into a roughly 19% increase in food spending and 3.2% increase in calorie intake. Decreased mortality and morbidity due to the 4Ps interventions is expected to have important short- and long-term impacts in terms of decreased health care costs and less productivity losses, in addition to welfare benefits. In the 4Ps pilot areas, indicative Department of Social Welfare and Development (DSWD) estimates suggest that the number of children 0–2 years old to be fully immunized increased by about 66%.

15. **Broader potential benefits.** In addition to cash grants linked to education and health conditions, other 4Ps interventions are expected to provide significant, if nonquantifiable, socioeconomic benefits. For example, payment of grants to women may magnify the multiplier effect of cash inflows on local economic activity, since research shows that women typically invest more in domestically and locally produced goods and services such as food and other basic necessities and services for their families, including school supplies and health care. At the same time, the receipt of regularly scheduled grants and counseling during beneficiary assemblies and family development sessions may help to increase financial literacy of poor women. Combined with increased exposure to the banking system in connection with grant receipt, this could potentially seek to increase savings behavior, identified as a major constraint to investment by the poor in productive assets and human capital. Anecdotal evidence also suggests that the receipt of 4Ps grants has allowed the poor to obtain credit from other sources, potentially magnifying their effect. Finally, grant receipt—particularly if received by women, will likely increase bargaining power within the household—along with participation in family development sessions; other 4Ps interventions could promote decreased fertility rates among the poor, by encouraging a shift in household strategy from investing in quantity to quality of children.¹³ Given that poor households often have four or more children, even a small impact on fertility could have major implications for poverty reduction and sustainable development in the Philippines.

C. Conclusion

16. Based on international experience and analysis of the Philippine context, the project's support for the 4Ps and NHTS-PR is expected to have significant impacts on household outcomes ranging from income and poverty rates in the short term, to increased investment in human capital, which in turn contributes to poverty reduction and a range of other outcomes in the longer term. Beyond the benefits accruing to poor households and communities, the nationwide rollout of the 4Ps and NHTS-PR is expected to generate substantial gains by enhancing the efficiency of government services that directly support the poor—see Financial Analysis (linked document to the report and recommendation of the President).

17. Under the project, ADB will work closely with the DSWD, the World Bank, the Government of Australia, and other partners in conducting evaluations of such expected impacts. These assessments will in turn help inform improved 4Ps implementation and contribute to the evidence base on CCTs globally.

¹³ T.P. Schultz. 1994. Human Capital, Family Planning and Their Effects on Population Growth. *American Economic Review*. 84 (2). pp. 155–260.