

REGIONAL ECONOMIC INTEGRATION **AND INCLUSIVE GROWTH** Engaging nations, embracing people Rafaelita M. Aldaba, Adoracion M. Navarro Celia M. Reyes, Josef T. Yap and Associates



Regional economic integration and inclusive growth Engaging nations, embracing people



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Foreword

"World connectivity has never been greater In this age of globalization As family members drift apart, Each to his own device Creating rifts and as consequence Progress made less inclusive Societies less equal, lives more distant."

> Justin Young February 2013

Economic growth in the Philippines in 2012 was impressive. At 6.6 percent, gross domestic product (GDP) growth was the highest among Asian countries except China. However, the questions of sustainability and inclusiveness of economic growth have been raised again. GDP growth was driven primarily by the recovery of government expenditure, particularly in public construction. Even with increased infrastructure spending, the investment-GDP ratio remained below 20 percent, which is significantly lower than the 30–40 percent average of East Asian economies at the time they experienced rapid growth. Meanwhile, the employment record has been disappointing, focusing attention again on the specter of jobless growth. The low investment rate and lack of employment opportunities are related and this is discussed at length in this volume.

The theme of the third issue of the 2012 Economic Policy Monitor (EPM) is "Regional Economic Integration and Inclusive Growth: Engaging Nations, Embracing People," which is also the theme for the 10th Development Policy Research Month (DPRM). Inclusiveness is thus examined in the context of regional economic integration. One important reason for the choice of this theme is the establishment of the ASEAN Economic Community (AEC) in 2015. With the AEC, ASEAN countries are expected to form a contiguous market and production base that will encourage inflows of foreign direct investment (FDI) into the region. Free flow of capital and goods will expand the opportunities of domestic firms, which would have profound implications on inclusiveness of economic growth.

Consistent with past issues of the EPM, the first chapter looks at recent macroeconomic developments. Apart from the issue of low investment rate and jobless economic growth, another important issue is the rapid accumulation of foreign exchange reserves. This has been accompanied by an appreciation of the peso. A box in Chapter 1 looks at the issue of large foreign exchange reserves and examines various policy options on how to deal with this phenomenon.

Chapter 2 highlights policy developments in important areas of the economy. Policy updates in international economic cooperation, fiscal policy, education, agriculture, mining, energy, infrastructure, and housing are presented. Among those discussed are the country's policy options amid closer integration among the economies of East Asia and key players outside the region. Notable domestic policy developments in 2012 were both remedial and forward looking like the amendment to the sin tax law which espouses a progressive reduction in the number

of excise tax tiers, and the rationalization of student financial support for tertiary education. Production and market support, good governance and inclusiveness are underscored with policy reforms and pronouncements in pursuit of rice self-sufficiency in agriculture, stability and sustainability in the primary industries of mining and energy, transparency in infrastructure provision, and inclusive urban development and slum improvement.

The EPM and DPRM theme is discussed extensively in Chapter 3. Data show that poverty incidence in the Philippines is higher when compared with many other East Asian economies. One major reason is that domestic firms have not been able to latch on to regional production networks, which are the backbone of economic integration in East Asia. The relatively low level of FDI and stagnation of the manufacturing sector are evidence of the inability to participate more extensively with the regional production networks. Among the major sectors of the economy, the manufacturing sector is the one that generates high-paying jobs that require only medium-level skills. Hence the stagnation of the manufacturing sector is one major reason why regional economic integration has not been as inclusive in the Philippines as in other East Asian economies.

One possible response to make economic growth more inclusive is to upgrade the skills of the Philippine labor force, particularly the poor. In Chapter 4, the *Pantawid Pamilyang Pilipino Program* (4Ps), the national government's key strategy for poverty reduction and social development was examined. In particular, the program's salient features were assessed with respect to its ability to upgrade the country's human capital. The impact of 4Ps on children's school participation was also analyzed using a nationally representative survey data. Based on the assessments done, recommendations on how to fine-tune the program are presented.

I would like to take this opportunity to express gratitude to all those who contributed to this year's EPM. Special mention goes to the Senior Research Fellows who are co-authors of Chapters 1, 3, and 4: Rafaelita M. Aldaba, Adoracion M. Navarro, and Celia M. Reyes. Sheila V. Siar and Jane C. Alcantara ably edited the manuscript.

The EPM is another example of the commitment of the Philippine Institute for Development Studies to make useful contributions to the policy debates. We look forward to sustaining this effort in years to come.

Josef T. Yap, Ph.D. President, PIDS

February 18, 2013

Executive Summary

This third issue of the *PIDS Economic Policy Monitor* (EPM) has the theme "Regional Economic Integration and Inclusive Growth: Engaging Nations, Embracing People," which is also the theme of the 10th Development Policy Research Month. With barely three years remaining before the establishment of the ASEAN Economic Community (AEC), it is but fitting to take a look at the effects of the rapid pace of regional economic integration on the achievement of sustained, inclusive growth in the Philippines. Despite increasing interrelatedness of markets and freer flows of capital, labor, and technology—which are anticipated to significantly narrow development gaps—income inequalities are rising within countries and between countries in the region.

The papers in this issue show that regional economic integration can become a double-edged sword for the Philippines when its pursuit of full integration into the regional and global economy is not complemented by domestic policy reforms in key economic sectors, the strengthening of industrial capacity, and deepening of poverty reduction efforts.

Chapter 1 sets the tone of this volume through a discussion of global macroeconomic trends that took place during the year, followed by an evaluation of the Philippines' performance. The year 2012 was a significant one for the country in several fronts. First, the conviction of Supreme Court Chief Justice Renato Corona has not only been a big boost to the current administration's reform initiatives but was also seen as a sign of the strengthening of the country's democratic institutions. Second, the revised Sin Tax Law—viewed as both a revenue-enhancing and a health-promoting measure—was finally passed before the end of the year. The shift from a multitier tax structure to a uniform tax structure for cigarettes and alcoholic products is envisioned not only to increase tax revenues resulting from an improved tax system, but also moderate the rising incidence of drinking- and smoking-related diseases. And third, the Philippines scored an impressive economic performance of 6.6 full-year growth rate, the highest among the ASEAN countries.

The sources of this growth include: (1) the increase in government final consumption expenditure, particularly the expansion of the conditional cash transfer program and increased allotments for other agency programs and projects; (2) the rise in capital outlay for infrastructure and other banner programs of the administration; (3) the strong rebound of the construction industry; (4) the increase in investments in durable equipment; and (5) the surge of personal remittance from overseas Filipino workers despite the peso appreciation and sluggish growth of advanced economies where most of them are employed.

Despite these gains, it is clear that economic growth in the Philippines over the past 30 years has not been inclusive. Poverty incidence is still relatively high. The unemployment rate remains elevated and even slightly increased in 2012. The phenomenon of jobless growth persists.

Chapter 2 highlights the key policy reforms that were considered by the Philippine government during the year in response to key development challenges and opportunities in the international and domestic fronts. Aside from the tax reforms, other developments are worth mentioning. In the area of regional economic cooperation, the Regional Comprehensive Economic Partnership Agreement and the Trans-Pacific Partnership are promising routes toward more coherent regional and global economic cooperation. In the agriculture sector,

the goal of rice self-sufficiency by 2013 through the Food Staples Self-Sufficiency Program is laudable, but equating it to zero rice importation may not be the right path to pursue. Not only is the rice production target required to meet the local demand unfeasible. Zero importation also raises the price of rice and makes it less affordable for most Filipinos.

An important development in the environment sector is the signing into law of Executive Order 79, which was intended to institutionalize and implement reforms in the mining sector. While some negative issues have been raised against some provisions in its implementing rules and regulations (IRR), which pushed the government to issue an amended IRR, the passage of this law sends a positive signal to the public that the mining sector is being reinforced to act as a significant public revenue provider and a social and environmental advocate at the same time.

In the housing sector, the implementation of the National Slum Improvement Plan for 2011–2016 is expected to make a significant difference in effectively addressing the presence of large settlements in the metropolitan area. Taking stock from past lessons which indicate the failure of off-city resettlements to solve the problem, the current Slum Upgrading Plan intends to formulate inclusive housing solutions through in-city relocation. Additionally, there are three major legislative acts that are intended to address current deficiencies in social housing policy. The analysis of policy implications of each proposal reveals critical issues that should be considered by policymakers.

In the infrastructure sector, the provision of adequate infrastructure service is anticipated to improve with the strengthening of internal rules, review and approval processes, and institutions, and better coordination among concerned agencies. Auspiciously, their plans and programs are in line with this goal.

Meanwhile, certain policy responses in the energy sector have remained as works in progress as 2012 ended. These include the application of the approved feed-in tariffs (FIT) for selected renewable energy technologies, the rationalization of electric power in Mindanao, and the issuance of rules for open access and retail competition (OARC) but for a transitional stage only. Policy recommendations consist of addressing shortcomings in the FIT policy to ensure fair and efficient implementation and promotion of consumer welfare. Short-term and long-term measures are offered to address the inadequate baseload generating capacity in Mindanao. The OARC setup, on the other hand, calls for coordinated efforts among the industry stakeholders as well as accompanying institutional capacity building.

In the education sector, addressing the weaknesses of the current student financial assistance programs (StuFAPs) in tertiary education deserves urgent attention. Among these shortcomings include the small number of students covered, the limited value of assistance that is not adequate to cover schooling needs, and the unsustainability of the student loans program as evidenced by the high incidence of unpaid loans. The proposed Unified Student Financial Assistance System for Higher Education and Technical Education, which is being considered in the Committee for Tertiary Education, addresses these issues and is intended to improve the effectiveness of the current StuFAPs.

The remaining chapters are allotted to two special papers that mainly address the topic of this EPM. Chapter 3 provides a critical analysis of why the Philippines has not been as successful as its East Asian neighbors in harnessing the gains from regional economic integration, particularly in reducing poverty incidence. One major reason is the stagnation of the manufacturing industry and thus its failure to generate growth and employment for the economy. This stagnation stems

from the low inflow of foreign direct investments and the absence of structural transformation in the manufacturing sector.

An important related point is the fact that while domestic firms may have been able to latch on to regional production networks, which are the backbone of economic integration in Asia, their participation is mainly through the exports of manufactured automotive and electronic parts and components. These products belong to the low value-added segments of the manufacturing sector and are labor intensive and highly import dependent. Other subsectors where the country has posted significant exports are again on the low-skilled, labor-intensive manufacturing subsectors such as processed food, garments, and footwear. These subsectors employ less-educated workers who normally receive relatively lower wages than those with higher educational attainment.

Moreover, although there was a significant growth in some manufacturing subsectors that are net exporters, more capital intensive, and more technology intensive, the potential gains from this aspect, in terms of poverty reduction, have also remained untapped. This is because these subsectors have higher educational requirements which the country's large pool of less-educated (who are essentially the poor) labor force cannot provide.

The chapter resonates with the recommendation to revive the manufacturing industry in order to achieve more inclusive economic growth. A more dynamic manufacturing sector would have the capacity to provide more higher-paying jobs to the less-educated workforce. With higher wages, the poor would have a better chance to avail of higher education, which could facilitate their employment in higher-skilled and better-paying jobs. The country stands to gain significantly from the revival of the manufacturing sector because it has higher labor productivity than agriculture and services and thus, there would be more high-paying jobs in this sector.

Chapter 4 reinforces the education argument. It reiterates the importance of upgrading the country's human capital, particularly that of the poor, to make economic growth more inclusive. This chapter gives an in-depth analysis of the *Pantawid Pamilyang Pilipino Program* (4Ps), one of the government's flagship programs, and ascertains its effectiveness as a poverty reduction and social development tool.

The 4Ps is the Philippines' version of the conditional cash transfer. It provides cash grants for health and educational expenses. The target beneficiaries are poor families with children up to 14 years of age. Once a child reaches 15 years, he or she no longer becomes eligible for the educational component. The cash benefit includes PHP 6,000 annually (PHP 500 per month) to each family-beneficiary for health and nutrition expenses and PHP 3,000 per child for one school year (i.e., 10 months) for educational expenses. Each family-beneficiary shall receive the educational grant for up to a maximum of three children. The receipt of the grant is subject to certain conditionalities, such as attendance in day-care or preschool classes of children 3–5 years for at least 85 percent of the time and enrollment in elementary or high school of children 6–14 years and attendance for at least 85 percent of the time.

As of September 2012, the Department of Social Welfare and Development, the 4Ps' main implementing agency, reported a total of 3,038,420 families reached and assisted by the program. From merely 340,391 beneficiaries in 2008, the number of beneficiaries increased by a rate of 54 percent per year, on the average.

The analysis of the program, however, reveals some weaknesses in its design and implementation. At least two important points are worth noting here. First, while the 4Ps focuses on younger children, the data show that the more pressing problem lies in the school participation of older children. The program is generating positive impact on younger children or those at the primary level, but at 13–14 years of age, their school attendance wanes. The school attendance rate between the top 70 percent and the bottom 30 percent, which represents the poor, is very small among children aged 7–12. But this gap widens steadily as they grow older such that at age 18, the school attendance of the bottom 30 percent for this age group is only 29 percent, compared to 54 percent for those at the top 70 percent.

Second, gender was not incorporated in the program design; data show it is an important factor to consider. Boys were found to have lower school participation than girls particularly as they grow older. In 2011, while about 90 percent of girls aged 14 were in school, only 84 percent of boys were. This gap is also visible among children 15–18 years old.

Re-examining the design of the 4Ps before its programmed expansion in 2013 is therefore crucial. One of the major recommendations is the deepening of the program instead of expanding its coverage. Given the weaknesses discussed earlier, expanding the program by providing a longer period of assistance to current beneficiaries until they finish high school is recommended rather than increasing the number of beneficiary families. With a high school education, the poor would have better opportunities to transition into the tertiary level and receive better wages than if they only have an elementary education. Additionally, if the program were to concentrate on older children, the amount of assistance for boys should be higher than for girls given the lower school attendance of boys.

Acknowledgment

The 2012 Economic Policy Monitor (EPM) is the third issue of this publication series of the Philippine Institute for Development Studies. This issue benefited from the concerted efforts of several individuals.

Chapter 1 was jointly written by Adoracion M. Navarro and Josef T. Yap. Chapter 2, which highlighted policy updates in key sectors, consists of the inputs of the following: Erlinda M. Medalla and Melalyn C. Mantaring for updates on international economic cooperation; Rosario G. Manasan and Danileen Kristel C. Parel for developments in the amendment of the sin tax law; Roehlano M. Briones for the agriculture sector; Danilo C. Israel for the mining sector; Gilberto M. Llanto for the infrastructure sector; Marife M. Ballesteros for the housing and urban development sector; Adoracion M. Navarro for the energy sector; and Aniceto C. Orbeta, Jr. for the education sector. Sonny N. Domingo did the consolidation of individual inputs in Chapter 2.

Chapter 3, the paper on the role of the Philippine manufacturing sector in regional economic integration and inclusive growth, was written by Rafaelita M. Aldaba, Fatima Lourdes E. del Prado, Christian D. Mina, Celia M. Reyes, Aubrey D. Tabuga, and Josef T. Yap.

Chapter 4, which tackled promoting inclusive growth through the 4Ps, was written by Celia M. Reyes, Aubrey D. Tabuga, Christian D. Mina, and Ronina D. Asis. Sincere appreciation is extended to the National Statistics Office for sharing the 2011 Annual Poverty Indicators Survey data with the team.

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List of Acronyms

4Ps – Pantawid Pamilyang Pilipino Program

ADB – Asian Development Bank

AEC – ASEAN Economic Community
APIS – Annual Poverty Indicators Survey

ARMM – Autonomous Region in Muslim Mindanao ASEAN – Association of Southeast Asian Nations

ATM – automated teller machine

BCDA – Bases Conversion and Development Authority

BIR – Bureau of Internal Revenue

BLES – Bureau of Labor and Employment Statistics

BPO – business process outsourcing BSP – Bangko Sentral ng Pilipinas

CALABARZON - Cavite, Laguna, Batangas, Rizal, and Quezon

CAR – Cordillera Administrative Region
CBMS – community-based monitoring system

CCT – conditional cash transfer

CEPEA – Comprehensive Economic Partnership in East Asia

CHED – Commission on Higher Education
 CMP – Community Mortgage Program
 COMP – Chamber of Mines of the Philippines
 DBM – Department of Budget and Management

DENR – Department of Environment and Natural Resources
DHUD – Department of Housing and Urban Development

DOE – Department of Energy
DOF – Department of Finance

DOTC – Department of Transportation and Communication

DPWH – Department of Public Works and Highways
DSWD – Department of Social Welfare and Development

EAFTA – East Asia Free Trade Agreement

EEWIN – Strategic Eco-Efficient Water Infrastructure

EO – Executive Order

EPM – Economic Policy Monitor
ERC – Energy Regulatory Commission

FDI – foreign direct investment

FIES – Family Income and Expenditure Survey

FIT – feed-in tariff

FTA – free trade agreement
GDP – gross domestic product

GIA – grants-in-aid

HDMF – Home Development Mutual FundHGC – Home Guaranty Corporation

HUDCC - Housing and Urban Development Coordinating Council

IMF – International Monetary FundINFRACOM – Committee on Infrastructure

IPs – indigenous peoples

IRR – implementing rules and regulations

ISFs – informal settler families

kWh – kilowatt-hour
LFS – Labor Force Survey
LGUs – local government units

MMDA – Metro Manila Development Authority

MRT – Mass Rail Transit

NAIA – Ninoy Aquino International Airport

NCR – National Capital Region

NEDA – National Economic and Development Authority

NFA – National Food Authority

NGCP – National Grid Corporation of the Philippines

NHA – National Housing Authority

NHMFC – National Home Mortgage Finance Corporation

NHTS-PR – National Household Targeting System for Poverty Reduction

NSCB – National Statistical Coordination Board

NSO – National Statistics Office

OARC – open access and retail competition

OFW – overseas Filipino worker

PEMC – Philippine Electricity Market Corporation

PDP – Philippine Development Plan PMO – Project Management Office

PMT – proxy means test

PPP – public-private partnership

PSIC – Philippine Standard Industrial Classification

PSM - Propensity Score Matching
QR - quantitative restriction
R&D - research and development

RA – Republic Act

RCEP – Regional Comprehensive Economic Partnership Agreement

RE – renewable energy
SAE – Small Area Estimates
SDAs – special deposit accounts

SHDFC – Social Housing Development and Finance Corporation

SHFC – Socialized Housing Finance Corporation StuFAP – student financial assistance program

SUCs – state universities and colleges

TEI – tertiary education institution TPP – Trans-Pacific Partnership

UDHA – Urban Development and Housing Act

UniFAST – Unified Student Financial Assistance System for Higher Education

and Technical Education

US – United States

WTO – World Trade Organization

1 Macroeconomic Developments in 2012

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HE YEAR 2012 was a momentous one for the Philippines. On May 29, the Senate found Supreme Court Chief Justice Renato C. Corona guilty of some of the charges that led to his impeachment in December 2011. His conviction was a significant boost to the "Daang Matuwid" program of President Aquino.

Consequently, two major legislative bills were enacted into law. The Responsible Parenthood and Reproductive Health Act of 2012 was signed by President Aquino on December 28, closing a controversial chapter in Philippine history after years of acrimonious and passionate discussions and debates. Meanwhile, Republic Act (RA) No. 10351 or "An Act Restructuring the Excise Tax on Alcohol and Tobacco" was signed into law on December 20. The new excise taxes are expected to generate substantial government revenue as well as lower the incidence of smoking-related noncommunicable illnesses and diseases associated with excessive drinking. Another important reform measure with long-term effects is the K-to-12 program that extends basic education from 10 years to 12 years. The changes to the curriculum were introduced this year and the required legislation has made progress in Congress.

Another highlight of 2012 was the 6.6 percent growth of gross domestic product (GDP) that exceeded even the most optimistic forecast. The economy received a huge boost from public construction, which grew by 32 percent after contracting at the same rate in 2011. In this context, the government was simply making up for lost ground. This is largely consistent with the prognosis of the authors, who last year stated: "Economic growth in 2012, therefore, hinges a great deal on the pace of government spending" (Navarro and Yap 2012, page 2). Nevertheless, economic activity was fairly broad-based with the services sector leading the way.

A favorable macroeconomic environment also contributed to the impressive economic performance. Average inflation was lower in 2012 than in 2011, allowing the monetary authorities to maintain a low interest rate regime. World food prices eased while the average crude oil price increased by just 1 percent. Owing to the catch-up process in government

spending, the fiscal deficit widened as expected but remained within manageable levels. Meanwhile, the current account surplus increased in 2012. Higher savings, however, did not translate into a higher investment-GDP ratio. Instead, there was a surge in foreign exchange reserves that was accompanied by an appreciation of the peso.

The key question remains to be whether the growth can be sustained in the medium term. Unfortunately, the growth outcome in 2013 will not be a reliable gauge owing to the elections in May. Election spending has significantly increased economic growth in 2007 and 2010. A growth rate of between 6 and 7.5 percent can be labeled as a region of uncertainty. If growth falls below 6 percent in 2013, it can safely be concluded that the performance in 2012 was just a temporary blip. On the other hand, a growth rate higher than 7.5 percent is a sign that the economy had made a breakthrough in 2012.

Another important issue is whether economic growth has been inclusive. The 2012 PIDS Economic Policy Monitor situates this issue in terms of the impact of regional economic integration. Over the past 30 years, economic growth in the Philippines has not been as inclusive as that of other countries in East Asia. Poverty incidence is still higher. The disappointing employment record in 2012 is evidence that this trend has persisted.

Global Trends

As expected, world GDP decelerated in 2012 (Table 1.1). Global economic turmoil emerged in the second quarter of 2012, triggered by the massive sell-off of Spanish debt and the increased likelihood that Greece would pull out of the euro zone. As a result, the fore-

cast for 2013 was consistently downgraded. The forecast stabilized as the crisis in Europe was averted.

The economic disruption in the euro zone caused by the sovereign debt and political crises spawned a deep recession and high unemployment. Aggregate GDP contracted by 0.4 percent in the region in 2012.

A significant slowdown in China's economy contributed to the global deceleration. China's economic growth fell from 9.3 percent in 2011 to 7.8 percent last year owing to weaker exports as a result of economic problems in advanced economies, tightening of the credit market to prevent a real estate bubble, and a reduction in the pace of public investment to a more manageable level.

Meanwhile, the United States (US) economy was bogged down by political polarization. GDP growth was actually higher in 2012 than in 2011 as the economy responded to "Operation Twist" wherein the Federal Reserve purchased USD 400 billion of long-term Treasury bonds by June 2012, funding the purchases by selling shorter-term bonds. Labor market and consumer demand conditions improved along with inventory stocks. However, the recovery was muted by sluggish investment growth and industrial output, which was a result of uncertainty over the elections and the fiscal cliff.

The Japanese economy benefited from the reconstruction spending in the aftermath of the Tohoku earthquake and tsunami and government incentives to encourage the purchase of energy-efficient automobiles. However, the economy contracted in the second and third quarters of 2012 as exports to China became a casualty of the border dispute between the two countries.

Table 1.1. Global economic outlook (output growth in percent)

Country	2008	2009	2010	2011	2012	2013a	2013b	2013c
World	2.8	-0.6	5.1	3.9	3.2	4.1	3.6	3.5
United States	-0.3	-3.1	2.4	1.8	2.3	2.4	2.1	2.0
Japan	-1.0	-5.5	4.5	-0.6	2.0	1.7	1.2	1.2
Euro Area	0.4	-4.4	2.0	1.4	-0.4	0.9	0.2	-0.2
China	9.6	9.2	10.4	9.3	7.8	8.8	8.2	8.2

Notes: a-April 2012 forecast; b-October 2012; c-January 2013 forecast Source: International Monetary Fund, World Economic Outlook Database

global financial conditions Nevertheless, improved significantly in the second half of 2012. This was underpinned by progress to improve the fiscal conditions and policy environment in the European Union. Measures that were undertaken include (World Bank 2013, page 4): fiscal austerity measures that have reduced deficits in the euro zone economies by an estimated 3.3 percent of GDP since 2009; the agreement to create and provision pan-European institutions to bail out economies in distress; the agreement to create a pan-European banking supervision authority; and the decision by the European Central Bank to do whatever is necessary to support economies in difficulty.

Another factor that contributed to more favorable financial conditions is the substantial progress in recapitalizing banks in both the United States and Europe. Meanwhile, the decision by the central banks of the United States, the Euro Area, and Japan to engage in a further series of quantitative easing has all contributed to an improvement in market sentiment at the global level.

This situation has led to the easing of spreads, the surge in equity prices in many economies, and the resurgence of capital flows to emerging markets after a sharp contraction in the second and third quarters of 2012. A key indicator of improved confidence is the narrowing of the spread between the London interbank offer rate and the overnight indexed swap rate that offers a measure of the risk of default in interbank lending. The US stock market recorded a year-on-year 16.5 percent increase in the first week of February 2013. Net portfolio equity flows to developing countries are estimated to have recovered to USD 44.4 billion in 2012 after falling to USD 8.9 billion in 2011.

The improved global financial situation will allow world GDP to increase slightly in 2013. Fiscal consolidation will take center stage in the United States and euro zone. Japan also adopted a mediumterm tax reform program. Moderate US GDP growth rate of 2 percent is expected while economic activity in the euro zone will continue to contract albeit at a reduced pace. Japan is expected to recover from the

recession owing mainly to a weaker yen that resulted from aggressive monetary easing. However, growth in 2013 is forecast to be lower than in 2012. The effects of the stimulus packages in 2011–2012 are expected to fade in succeeding years.

China's higher economic growth will bolster world GDP. The new president, Xi Jinping, is known to support the acceleration of economic reforms. This will favorably affect investor sentiment in China. Stronger exports are expected to push China's growth to 8.2 percent in 2013.

The Philippine Economy in 2012

GDP and its components

Philippine GDP grew by 6.6 percent in 2012, the highest growth rate in the Association of Southeast Asian Nations (ASEAN) region (Table 1.2). Meanwhile, Thailand experienced a sharp rebound having recovered from the devastating floods in the last quarter of 2011. Indonesia continues to maintain steady economic growth at the 6 percent level owing largely to strong private consumption and investment.

Among the components of GDP expenditure, government final consumption exhibited the highest growth at 11.8 percent, followed by household final consumption at 6.1 percent (Table 1.3). Overall capital formation declined by 4.4 percent, mostly due to a decline in inventories; however, fixed capital formation—the more relevant indicator of investment performance—grew by 8.7 percent. Exports grew by 8.7 percent in constant peso terms, higher than the expansion of imports, which increased by 4.2 percent. However, overall net exports level remained negative in 2012.

The high growth of government final consumption expenditure can largely be attributed to the expansion of the *Pantawid Pamilyang Pilipino Program* (4Ps) and the increased allotments for other national agency programs and projects. The fourth and last tranche of the Salary Standardization Law III was implemented in June 2012. Increases in capital outlay for infrastructure and other banner programs of the administration

Table 1.2. GDP growth rates in selected Southeast Asian countries

	Indonesia	Malaysia	Philippines	Singapore	Thailand	Viet Nam
2009	4.6	-1.5	1.1	-1.0	-2.3	5.3
2010	6.2	7.2	7.6	14.8	7.8	6.8
2011	6.5	5.1	3.9	4.9	0.1	5.9
2012	6.2	5.1	6.6	1.2	5.7	5.0
2013	6.3	4.7	4.8	2.9	6.0	5.9

Sources:

2009-2011 figures: World Bank and International Monetary Fund (IMF)

2012 figures:

Indonesia - Central Bureau of Statistics of Indonesia

Malaysia - Forecast by Malaysian Institute of Economic Research. GDP growth for 2012Q3 is 5.2 percent.

Philippines - National Statistical Coordination Board (NSCB)

Singapore - Ministry of Trade and Industry

Thailand - Ministry of Finance

Viet Nam - General Statistics Office of Viet Nam

2013 figures: Forecasts from the IMF World Economic Outlook, October 2012 update.

raised the maintenance and operating expenditures for these programs.

Among the components of capital formation, construction recorded a strong rebound. From a decline of 4.1 percent in 2011, construction posted a robust 13.7 percent growth, with value added in public and private construction expanding by 32.4 and 8.6 percent, respectively. As mentioned in the introduction, the government was simply making up for lost ground.

Investments in durable equipment also grew by 5.7 percent. This can be attributed to increases in expenditures on machinery specialized for particular industries (7.2% growth), general industrial machinery and equipment (3.8% growth), and transport equipment (11.5% growth); spending on miscellaneous equipment such as office machinery and data processing equipment declined by 6 percent but did not significantly affect the overall growth of the durable equipment expenditures.

A major cause for concern is that the fixed capital-GDP ratio in 2012 was only 19.6 percent, even lower than the 20.5 percent level in 2010. The low investment-GDP rate has historically been a major constraint to economic development and transformation. The data, therefore, indicate that there has been no significant advancement toward sustainable economic growth.

Among the components of GDP by industrial origin, the services sector posted the highest growth

rate at 7.4 percent. This is followed by industry at 6.5 percent, and agriculture, hunting, forestry, and fishing at 2.7 percent. The expansion in the services and industry sectors is a big improvement from the 2.6 percent and 1.9 percent expansion, respectively, in 2011. Among the subcomponents of the services sector, transportation, storage, and communication posted the highest growth (9.1%), followed by real estate, renting, and business activity (7.9%). Among the subcomponents of the industry sector, construction posted the highest growth rate at 14.4 percent. Mining and quarrying posted a decline of 3.7 percent, which is mainly due to the contraction in gold mining and decline in crude oil, natural gas, and condensate production.

percent overall growth agriculture, hunting, forestry, and fishing is a slight improvement from the modest 2.6 percent growth in the previous year. All major crops exhibited growth except sugarcane (8.7% decline), mango (1.6% decline), and coffee (0.8% decline). Forestry and fishing, however, contracted by 6.4 and 0.7 percent, respectively. The total log ban issued through Executive Order (EO) 123 series of 2011 was reported to have been adversely affecting the wood industry. The decline in fishing, on the other hand, is due to the drop in commercial and municipal fishing and aquaculture output, which is, in turn, due to unstable fuel prices, implementation of fish moratorium, scarcity of some species in

Table 1.3. Selected macroeconomic indicators, Philippines Annual growth rates and share to GDP

At constant 2000 prices and in percent, unless otherwise stated

	2007	2008	2009	2010	2011	2012
Gross national income	6.2	5.0	6.1	8.2	3.2	5.8
Gross domestic product (GDP)	6.6	4.2	1.1	7.6	3.9	6.6
GDP by expenditure shares						
Household final consumption expenditure	4.6	3.7	2.3	3.3	6.3	6.1
Percent share to total GDP	71.6	71.2	72.1	69.2	70.8	70.5
2. Government final consumption expenditure	6.9	0.3	10.9	3.4	1.0	11.8
Percent share to total GDP	9.8	9.4	10.4	10.0	9.7	10.2
3. Capital formation	-0.5	23.4	-8.7	31.6	8.1	-4.4
Percent share to total GDP	15.9	18.8	17.0	20.8	21.6	19.4
4. Exports	6.0	-2.9	-21.9	33.7	-6.9	7.6
Percent share to total GDP	52.9	49.4	45.0	50.6	46.7	47.6
5. Imports	7.2	2.0	-24.1	26.9	9.5	1.0*
Percent share to total GDP	50.1	48.9	44.4	50.6	48.8	47.7
GDP by industrial origin						
1. Agriculture, fishery, and forestry	4.7	3.2	-0.7	-0.2	2.7	2.7
Percent share to total GDP	12.9	12.8	12.5	11.6	11.5	11.1
of which:	72.0	12.0	72.0	77.0	11.0	,,,,
Agriculture and fishery	5.0	3.2	-0.7	-20.2	4.5	3.5
Percent share to total GDP	12.8	12.7	12.5	9.2	9.3	9.0
Forestry	-24.5	2.1	-2.0	3401.8	-4.1	-0.7
Percent share to total GDP	0.1	0.1	0.1	2.4	2.2	2.1
2. Industry sector	5.8	4.8	-1.9	11.6	2.3	6.5
Percent share to total GDP	32.2	32.4	31.5	32.6	32.1	32.1
of which:	02.2	02.7	01.0	02.0	02.1	02.1
Mining and quarrying	18.6	-1.4	16.1	11.4	7.0	-3.7
Percent share to total GDP	1.0	1.0	1.1	1.2	1.2	1.1
Manufacturing	3.6	4.3	-4.8	11.2	4.7	5.4
Percent share to total GDP	22.8	22.8	21.5	22.2	22.4	22.1
Construction	14.6	7.0	6.8	14.3	-7.3	14.4
Percent share to total GDP	5.0	5.1	5.4	5.7	5.1	5.5
Electricity, gas, and water	5.5	6.8	-0.8	9.9	0.6	5.1
Percent share to total GDP	3.5	3.6	3.5	3.6	3.5	3.4
3. Service sector	7.6	4.0	3.4	7.2	5.1	7.4
Percent share to total GDP	54.9	54.8	56.0	55.8	56.4	56.9
of which:	34.3	54.0	30.0	55.6	50.4	30.3
Transportation, storage, and communication	8.4	3.9	-0.1	1.0	4.3	9.1
Percent share to total GDP	8.1	8.1	8.0	7.5	7.5	7.7
Trade and repair of motor vehicles, motorcycles,	8.6	1.4	1.4	8.4	3.3	7.5
personal	0.0			0.4	0.0	7.0
Percent share to total GDP	16.9	16.5	16.5	16.6	16.6	16.7
Financial intermediation	10.2	1.8	5.5	10.1	5.2	7.8
Percent share to total GDP	6.3	6.2	6.4	6.6	6.7	6.7
Real estate, renting, and business activity	7.9	9.0	4.1	7.5	9.3	7.9
Percent share to total GDP	9.6	10.0	10.3	10.3	10.9	11.0
Public administration and defense:	3.0	10.0	70.0	70.0	10.5	11.0
compulsory social security	1.4	2.0	6.1	5.8	0.3	3.3
Percent share to total GDP	4.4	4.3	4.5	4.5	4.3	4.2
Other services	6.1	6.0	6.5	8.4	6.6	7.2
Percent share to total GDP	9.5	9.7	10.2	10.2	10.5	10.6
Inflation (2000=100) (average)	2.8	6.2	4.1	3.7	3.6	-
Inflation (2006=100) (average)	2.9	8.3	4.1	3.9	4.6	3.2
T-bills 91 days (averages on date of issue)	3.41	5.39	4.19	3.73	1.37	1.58

Note: *Growth rate is for January-November

Sources: National Accounts of the Philippines, NSCB; Selected Philippine Economic Indicators, Bangko Sentral ng Pilipinas (BSP); National Statistics Office (NSO)

some municipal fishing grounds, late stocking, and inadequate food supply for aqua farms.

Tracking the sources of the 6.6 percent GDP growth by industrial origin (Table 1.4) shows that the services sector has the highest contribution to GDP growth at 4.2 percent. The highest contributors are trade and repairs (1.2%), and real estate, renting, and business activities (0.9%).

Among the expenditure-side sources of growth, household final consumption expenditure has the highest contribution at 4.3 percent, followed by government final consumption expenditure at 1.1 percent. Unlike in 2011 where net exports were a heavy drag on GDP growth due to the negative 3 percent contribution, net exports in 2012 contributed 2 percent to GDP growth.

Fiscal performance and the recovery of government spending

The fiscal deficit in 2012 was programmed to reach PHP 279.1 billion (Table 1.5), which is equivalent to 2.6 percent of the projected GDP and an improvement relative to the 3 percent target set in 2011. By December 2012, the total fiscal deficit stood at PHP 242.8 billion. Compared to the previous year where fiscal deficit was controlled at the expense of lower government spending, the fiscal deficit in 2012 was lower than the programmed amount due to less pressure on borrowings, which was influenced, in turn, by the low interest environment, the fasterthan-expected GDP growth, and the increase in revenues. Total revenues in 2012 reached PHP 1,534.9 billion, which is 12.9 percent higher than the 2011 revenue collections but 1.7 percent short of the full-year target.

National government spending accelerated in 2012. Total expenditures during the year reached PHP 1,777.8 billion and were 14 percent higher than the expenditures during the same period in 2011, and showed the highest growth for the same period for the last six years. This growth also stood in contrast to the 2.1 percent contraction in 2011. The 2012 expenditures, however, were still 3.5 percent short of the programmed amount for the year. Infrastructure

and other capital outlays increased by 57 percent, from PHP 118.2 billion in January–November 2011 to PHP 185.6 billion during the same period in 2012. Despite the increases in public spending for infrastructure, it appears that more investments in infrastructure are necessary to compensate for past neglect and to improve the country's competitiveness. In the *Global Competitiveness Report 2012–2013* (Schwab 2012), the Philippines ranks only 98th among 144 countries in the overall state of its infrastructure.

The accumulation of foreign exchange reserves and adjustment in the borrowing mix

Foreign exchange reserves continued with its increasing trend. Preliminary data from the Bangko Sentral ng Pilipinas (BSP) show that foreign exchange reserves reached USD 83.8 billion as of end-December 2012, which is 11.8 percent higher than the end-December 2011 level of USD 75.3 billion, and 3.7 times higher than the end-2006 level (Table 1.6).

The increase in foreign exchange reserves has caused the peso to appreciate. Other major issues with regard to the accumulation of foreign exchange reserves are discussed in Box 1.1.

To stem the further appreciation of the peso, the BSP throughout 2012 strongly urged the Department of Finance (DOF) to source the government's foreign borrowing requirement from the local market and then use the peso proceeds of local bond sales to buy dollars from the BSP. The argument is that this would help absorb the excess liquidity in the financial sector and prevent further peso appreciation. The alternative of issuing bonds directly in the foreign market would inject more dollars into the financial system, which the BSP would then end up buying in order to prevent rapid peso appreciation.

The BSP further argues that if 100 percent of the government's borrowing is sourced from the local market, interest rates would not move to levels that would constrain economic activity. One reason is the very high liquidity in the market, as evidenced by amounts in the special deposit accounts (SDAs). The DOF's stance, however, is to maintain a presence in the foreign market so that investors would still be

Table 1.4. Contribution to 2012 GDP growth by sector (GDP growth weighted by sectoral share in change in GDP)

Sector	Contribution	to Growth (%)
By industrial origin		
Agriculture, hunting, forestry, and fishing		0.3
Agriculture and forestry	0.3	
Fishing	0.0	
Industry		2.1
Mining and quarrying	0.0	
Manufacturing	1.2	
Construction	0.7	
Electricity, gas, and water supply	0.2	
Services		4.2
Transport, storage, and communication	0.7	
Trade and repairs	1.2	
Financial intermediation	0.5	
Real estate, renting, and business activities	0.9	
Public administration and defense	0.1	
Other services	0.8	
By expenditure		
Household final consumption expenditure		4.3
Government final consumption expenditure		1.1
Capital formation		-1.0
Fixed capital	1.7	
Construction	1.1	
Durable equipment	0.6	
Breeding stock and orchard development	0.0	
Intellectual property products	0.1	
Change in inventories	-2.7	
Exports		
Exports of goods	3.2	
Exports of services	0.9	
Imports	0.0	
Imports of goods	-1.0	
Imports of services	-1.0	
Net exports	1.0	2.0
Statistical discrepancy		0.1
GDP growth		6.6

Note: The sectoral contributions sum up to the GDP growth figure; details may not exactly add up due to rounding. Source: NSCB

Table 1.5. Indicators of fiscal performance (in billion pesos)

	Programmed	Actual Jan–Dec 2012	Difference
Revenues	1,560.62	1,534.93	1.67%
Expenditures	1,839.73	1,777.76	3.49%
of which:			
Interest payments	317.65	312.80	1.55%
Other expenditures	1,522.08	1,464.96	3.90%
Primary fiscal surplus / (Deficit)	38.54	69.97	-44.92%
Total surplus / (Deficit)	(279.10) ^a	(242.83)	14.94%

Note: $^{\rm a}$ from The People's Budget, Department of Budget and Management (DBM) Sources: DBM and Bureau of Treasury

Table 1.6. Current transfers, net capital flows, and foreign exchange reserves in the Philippines (in USD million)

							Jan-	-Sep
	2006	2007	2008	2009	2010	2011	2011	2012
Current transfers	13,197	14,153	15,247	16,279	16,648	17,642	12,875	13,194
Current account	5,341	7,112	3,627	9,358	8,922	6,988	5,112	7,156
Capital and financial account	20	3,527	-1,649	-1,627	7,388	5,228	6,209	395
Financial account	-118	3,503	-1,702	-1,731	7,290	5,057	6,089	301
Direct investment	2,818	-620	1,285	1,604	682	1,253	792	423
Portfolio investment	3,043	4,623	-3,627	-625	4,365	5,524	5,595	2,242
Financial derivatives	-138	-288	-113	32	-191	1,002	914	39
Other investment	-5,841	-212	753	-2,742	2,434	-2,722	-1,212	-2,403
Foreign exchange reserves (end-of-period)	22,967	33,751	37,551	44,243	62,373	75,302	75,302.41*	83,831.36 ^r

Notes: * Revised based on the final International Reserves (IR) report as of end-December 2011;

Source: BSP

Box 1.1. Rapid accumulation of foreign exchange reserves: boon or bane?

Foreign exchange reserves of the Philippines stood at USD 83.8 billion at the end of 2012. This was nearly double the foreign exchange reserves at the end of 2009, representing an average annual growth of 24 percent in the three-year period. The rapid accumulation of foreign exchange reserves is not unique to the Philippines. Many emerging countries, particularly China, are confronting the same phenomenon.

Holding foreign exchange reserves has both benefits and costs. The primary benefit is insurance against a balance-of-payments crisis or a financial crisis. The 1997 Asian financial crisis underscored the importance of maintaining an adequate level of foreign exchange reserves. The Chiang Mai initiative and its subsequent multilateralization allowed the pooling of foreign exchange reserves at a regional level in East Asia, thereby allowing countries to reduce individual holdings for insurance purposes.

A typical central bank will hold foreign exchange reserves to allow it to intervene in the foreign exchange market. This allows the central bank to influence the exchange rate when necessary. The other main benefit of reserves pertains to the mercantilist idea of promoting exports to promote growth. Buying foreign currencies to hold down domestic currencies so as to promote exports is known as the mercantilist demand for reserves.

Meanwhile, the costs of holding foreign exchange reserves relate to inflation, quasi-fiscal costs, and higher interest rates. An increase in foreign exchange reserves has a counterpart increase in domestic money supply that exerts inflationary pressure. Economic managers can opt for sterilized intervention where any increase in money supply that results from the increase in foreign exchange reserves is sterilized by the issuance of domestic bonds usually by the monetary authority. Sterilization, if effective, prevents domestic real interest rates from falling and limits the expansion of aggregate demand.

But sterilization entails maintaining or widening the differential between domestic and international interest rates. The interest rate differential becomes a source of "quasi-fiscal" deficits, since the central bank is placing commercial paper in the domestic market at higher interest rates than those it obtains on its international reserves. In the case of the Philippines, the major instrument for sterilization has been the special deposit accounts (SDAs), which peaked at PHP 1.82 trillion in September 2012. At the end of 2011, SDAs stood at PHP 1.64 trillion. As mentioned in the *Development Research News* January–February 2012 issue, the funds parked in SDAs could be viewed as missed opportunities to use private money for developmental financing.

To determine whether the costs of holding foreign exchange reserves outweigh the benefits, it would be useful to calculate the optimal reserve level. This is the subject of a paper by Park and Estrada (2010), who use the following criteria:

- The ratio of reserves to short-term external debt that has been found to be a significant determinant of an economy's vulnerability to financial crisis. According to the well-known Greenspan-Guidotti rule, the critical value of this ratio is one;
- The reserves-to-M2 ratio. The suggested critical values range from 5 percent to 20 percent; and
- The months of imports that reserves can cover. The suggested critical value is three to four months.

Revised based on the final IR report as of end-December 2012

Based on these three criteria, the foreign exchange reserves of the Philippines have been determined to be higher than the optimal level. The level of foreign exchange reserves reached USD 85.7 billion in January 2013 and this was 5.8 times the amount of the outstanding debt denominated in foreign currencies of private and government entities maturing within the short term. It was also enough to cover 12.3 months' worth of import requirements. Meanwhile, the ratio of reserves to money supply (M2) was calculated to be 60.3 percent. Hence, the Bangko Sentral ng Pilipinas (BSP) should explore measures on how to minimize the costs associated with holding foreign exchange reserves. These measures fall into three general categories.

The first set of policies relates to managing capital flows. One major source of rising foreign exchange reserves in the Philippines and other emerging markets are portfolio inflows. These are largely driven by push factors in developed economies. Low interest rates and slow economic growth in the United States, Western Europe, and Japan have driven capital away from these economies as investors search for higher returns. Low interest rates have also prompted some central banks in these countries to pursue quantitative easing to stimulate their economies. As observed earlier, net portfolio equity flows to developing countries are estimated to have surged to USD 44.4 billion in 2012 after falling to USD 8.9 billion in 2011. The policy options for the BSP to manage capital flows have been discussed elsewhere (e.g., Yap 2010). At present, the BSP has implemented macroprudential measures, including prohibiting the use of foreign funding for exposures in SDAs (Tetangco 2012). One important issue is the use of capital controls but these require regional cooperation to be effective.

The second set of policies is managing the foreign exchange reserves. There are a variety of useful recommendations. One is for the BSP and the Department of Finance (DOF) to coordinate in order for the government to source its dollar requirements—particularly for debt payments—from the BSP. Corollarily, the possibility of prepaying some of the government's debts has also been raised. Meanwhile, the BSP extended a USD 1 billion loan to the International Monetary Fund (IMF) in June 2012 to support "the global efforts in stabilizing the world economy and maintaining its growth path." The more elaborate proposal for managing foreign exchange reserves is to establish a sovereign wealth fund such that the strategic focus of using surplus reserves will shift from passive liquidity management to active profit-seeking investment (Park and Estrada 2010). There are, of course, critical issues that have to be addressed before a sovereign wealth fund can be established, particularly institutional arrangements and concerns about the quality of governance.

The final set of policies relates to the observation that the current account surplus is a major source of foreign exchange reserves. A current account surplus reflects an excess of savings over investment. The investment rate in the Philippines—defined as the ratio of fixed investment to GDP—has historically been low. It is also low compared with the more developed Southeast Asian economies, i.e., Indonesia, Malaysia, Singapore, Thailand, and even Viet Nam. A higher investment rate will lead to more imports, especially capital goods, which will reduce the current account surplus. Supply-side constraints and institutional factors can explain the low investment rate in the Philippines. The government has to address these issues and the private sector has to display more 'animal spirits' in order to raise the investment rate.

familiar with Philippine debt papers and such papers would still be actively traded in the secondary market.

In the end, although the national government did not borrow 100 percent locally, it decided to reduce its foreign borrowing requirement and increase local borrowings. The national government's new borrowing mix in 2012 ended at 84:16 in favor of the local currency. The last dollar bond issue was held domestically and not in the global market. Bids for the bonds were denominated in dollars but sold in the local market. The bond auction, which was conducted after the announcement that the economy grew by 7.1 percent in the third quarter, fetched a

coupon rate of 2.75 percent and was oversubscribed at USD 1.74 billion, but the Bureau of Treasury accepted only the programmed borrowing amount of USD 500 million.

Although revenues had been increasing, it is projected that the national government would still need to continue borrowing in 2013 because revenues are expected to fall short of programmed expenditures. The macroeconomic assumptions for the 2013 budget include a programmed borrowing of PHP 757.8 billion, with a borrowing mix of 75 percent local and 25 percent foreign, but the DOF announced that it might consider an 80:20 mix (Remo 2013).

Price movements

Decline in the price of foreign exchange (peso appreciation)

In 2012, the price of foreign exchange in terms of US dollars continued to decline; to put it simply, the peso continued to appreciate. The monthly average pesodollar exchange rate went down from PHP 43.6 to USD 1 in January 2012 to PHP 41 to USD 1 in December 2012 (Figure 1.1).

Many economists and business people argue that the peso is overvalued. One adverse impact of this is it makes Philippine exports, including exports of services in the business process outsourcing (BPO) sector, more expensive than those of its competitors. About 40 percent of respondents to a December 2012 survey by the Business Processing Association of the Philippines revealed that they already lost some of their business to other destinations (Montecillo 2012).

Despite the peso appreciation and the sluggish growth of advanced economies where most overseas Filipino workers (OFWs) are employed, personal remittances from OFWs registered an 8.2 percent year-on-year growth in October 2012 and reached USD 2.1 billion, according to BSP figures. For the first 10 months of 2012, total remittances were higher by 5.9 percent compared with the total in the same period in 2011. This implies OFWs are trying to maintain the same level of support to their families back home and, in the process, sending more money in foreign currencies, which ironically contributes to the peso appreciation.

Low and stable inflation

Inflation was moderate throughout 2012 (Figure 1.2). The December 2012 year-on-year headline inflation rate was 2.9 percent, which is below the BSP's target of 2.7–3.6 percent for the month. Average headline inflation rate for the entire year was 3.2 percent and is in the lower band of the government's 3–5 percent target range.

The abundant domestic supply of food items such as vegetables and oils for most months of the year contributed to low food inflation. Nonfood items also exhibited low inflation because of the reduction in gasoline and diesel prices. Given the low and stable inflation, some economists are

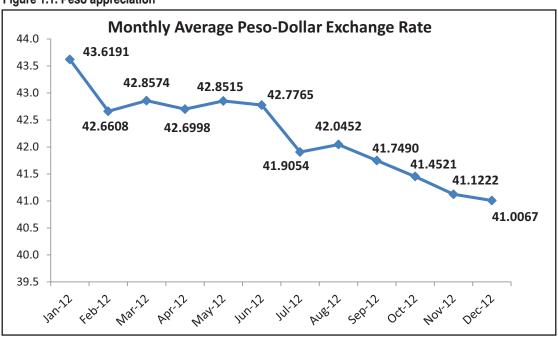
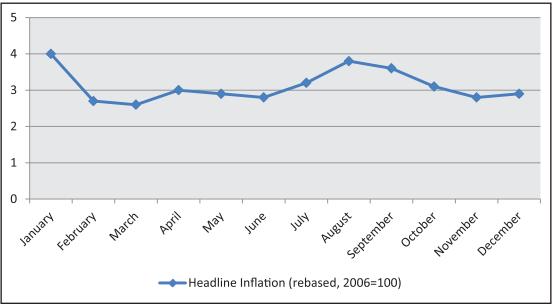


Figure 1.1. Peso appreciation

Source: BSP

Figure 1.2. Inflation rates



Source: NSO

arguing that the BSP should be concerned less with targeting inflation and more with controlling the peso appreciation.

Further decreases in the price of capital

The decline in the price of capital that was observed in previous years continued in 2012. Based on the reference rates published by the Philippine Dealing Exchange System, the yield curve for 2012 was lower than the curve for 2011 (Figure 1.3), with 25-year securities settling at 5.8962 percent and 30-day T-bills settling at 0.8827 percent when the market closed on December 28, 2012.

The decline in interest rates demonstrates the excess supply of funds and further liquidity growth in the financial sector. Excess liquidity is reflected in the SDAs, which reached a peak of PHP 1.8 trillion in September 2012, before declining to PHP 1.7 trillion in October 2012. As a result, banks' lending rates also continued to drop and borrowing locally became more affordable. The BSP reported in December 2012 that their survey showed a 62 percent decline in interest rates on housing, auto, business, and other related types of bank loans since the start of 2012.

The continuing climb of Philippine stocks

For four years in a row, the prices of Philippine stocks have been increasing on the average (Figure 1.4). The Philippine Stock Exchange index ended at 5,812.73 points on December 28, 2012, the last trading day of the year, which was 33 percent higher than the index in the previous year. Analysts observed that the positive macroeconomic fundamentals plus the erosion of returns in advanced economies have made the Philippines an attractive destination for capital flows. Moreover, the central banks of the advanced economies have resorted to quantitative easing to revive their economies. The resulting excess liquidity has found its way into emerging markets like the Philippines. The large inflow of foreign portfolio investment has contributed to the peso appreciation (Figure 1.4).

Given this development, the risk of reversal of capital flows should be closely monitored especially since Philippine stocks are being perceived by some observers (such as Bloomberg) as very expensive and overvalued beyond price-to-earnings ratios. Nevertheless, optimistic investors seem to be relying more on the expectation of increasing potential returns than indicators of past performance such as price-to-earnings ratios.

Figure 1.3. Philippine benchmark yield curve

Source: Philippine Dealing System Treasury Reference Rates

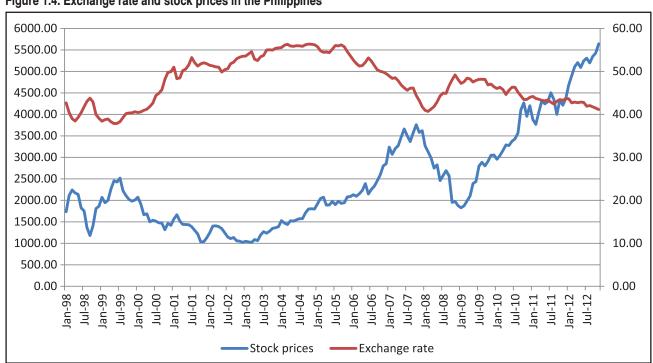


Figure 1.4. Exchange rate and stock prices in the Philippines

Sources: Philippine Stock Exchange and BSP

Unemployment and Underemployment

Based on the Labor Force Survey (LFS), the country's unemployment rate continues to be high in 2012, eliciting the label "jobless growth" when observers refer to the 2012 economic performance. The 7 percent unemployment rate in 2012 translates to 2.8 million Filipinos in the labor force without jobs. Underemployment rate also remains high and slightly increased to 20 percent, from 19.3 percent in the previous year (Figure 1.5). The primary reason for the disappointing employment performance remains to be the relatively low investment rate in the Philippines.

Data on the dynamics of labor movement are available only for enterprises in the National Capital Region (NCR), but these could suggest patterns on job creation and job losses as most large enterprises are located in this region. Table 1.7b shows that the accession or hiring rate is positive in the first to third quarters of 2012. First quarter hiring rate in 2012 is 8.1 percent, lower than the 11.36 percent hiring rate in the same period in the previous year (Table 1.7a); second quarter hiring rate is 8.93 percent, which is an improvement from the hiring rate in the same quarter in 2011; and third quarter hiring rate is 8.43 percent, which is slightly lower than the hiring rate in the same

quarter in 2011. The separation or termination rates in the first to third quarters of 2012, 7.47 percent, 8.08 percent, and 6.08 percent, respectively, are lower than the hiring rates, resulting in positive difference between hiring and termination rates and implying overall gains in employment at least in the NCR. Data on net gains or losses in employment for the latest quarter show that job losses occurred in the following sectors: agriculture, forestry, and fishing (-0.43%); electricity, gas, and steam and air conditioning supply (-0.91%); water supply, sewerage, and waste management and remediation activities (-7.78%); construction (-3.46%); accommodation and food service activities (-2.11%); and human health and social work activities (-0.49%).

Economic growth that creates jobs continues to be a challenge. Although the government is reporting improvements in unemployment and underemployment, the progress is rather slow and cannot belie the fact that in the ASEAN region, the Philippines has the highest unemployment rate. In 2012, our ASEAN neighbors had lower unemployment rates: Indonesia at 6.6 percent, Myanmar at 4.0 percent, Malaysia at 3.1 percent, Singapore at 2.7 percent, Brunei at 2.6 percent, Viet

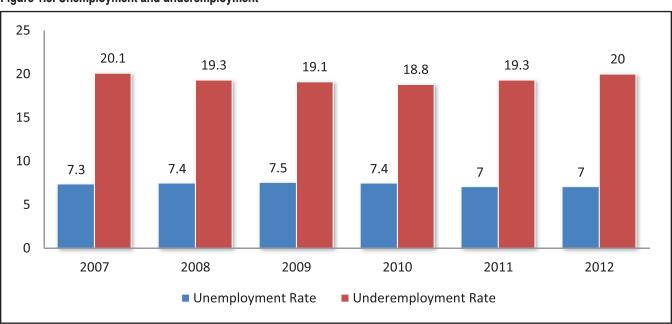


Figure 1.5. Unemployment and underemployment

Source: NSO

Table 1.7a. Labor turnover in large enterprises in the National Capital Region (NCR), 2011 (in percent)

Sector	2011											
	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
	Accession Rate	Separation Rate	Percent Difference									
All Sectoral Groups	11.36	9.47	1.89	8.6	10.65	(2.05)	<u>11.05</u>	<u>8.55</u>	2.51	10.38	<u>8.5</u>	1.88
Agriculture, fishery, and forestry	6.02	4.56	1.46	4.01	4.76	(0.75)	3.56	4.01	(0.45)	4.21	4.02	0.19
Agriculture, hunting, and forestry	4.21	2.62	1.59	3.71	2.46	1.25	3.21	2.3	0.92	2.94	3.33	(0.40)
Fishing	7.41	6.04	1.37	4.16	5.95	(1.79)	3.73	4.87	(1.13)	4.85	4.36	0.49
Industry	12.44	7.6	4.84	9.46	7.12	2.34	9.88	7.58	2.30	6.42	7.59	(1.17)
Mining and quarrying	25.78	9.05	16.73	15.21	9.29	5.92	14.55	18.34	(3.79)	12.98	18.59	(5.61)
Manufacturing	11.46	8.67	2.79	10.18	7.59	2.59	10.06	7.76	2.30	6.22	6.16	0.06
Electricity, gas, and water supply	2.68	3.89	(1.21)	2.62	2	0.63	1.39	2.24	(0.85)	1.66	2.35	(0.69)
Construction	15.18	5.78	9.40	8.28	6.53	1.76	10.04	7.04	2.99	6.86	10.41	(3.55)
Services	11.07	10.07	0.99	8.43	11.45	(3.02)	11.35	8.78	2.56	11.29	8.72	2.57
Wholesale and retail trade and										7.02	6.61	0.41
related services	11.04	7.36	3.68	9.14	7.05	2.08	6.71	7.29	(0.59)			
Hotels and restaurants	12.31	12.05	0.26	15.71	11.21	4.50	13.1	11.54	1.56	10.02	9.8	0.22
Transport, storage, and												
communications	3.57	5.21	(1.63)	4.53	4.16	0.37	5.6	3.2	2.40	3.27	3.46	(0.18)
Financial intermediation	7.76	2.92	4.83	6.36	3.79	2.56	5.49	4.09	1.40	4.11	2.28	1.83
Real estate, renting, and business												
activities	13.32	13.65	(0.33)	8.58	14.98	(6.40)	14.64	10.76	3.88	14.91	10.99	3.98
Private education services	2.16	3.3	(1.14)	11.33	13.42	(2.10)	6.47	2.92	3.55	4.36	7.4	(3.05)
Health and social work (private)	3.67	4.07	(0.39)	4.52	3.66	0.86	5.48	5.32	0.16	5.34	3.55	1.79
Other community, social and personal			. ,									
service activities	4.37	1.8	2.57	3.41	4.4	(1.00)	7.13	3.41	3.73	7.01	3.36	3.65

Source: Bureau of Labor and Employment Statistics (BLES)

Table 1.7b. Labor turnover in large enterprises in NCR, 2012 (in percent)

					2012					
		1st Quarter			2nd Quarter		3rd Quarter			
Sector	Accession Rate	Separation Rate	Percent Difference	Accession Rate	Separation Rate	Percent Difference	Accession Rate	Separation Rate	Percent Difference	
All Sectoral Groups	<u>8.1</u>	7.47	0.63	<u>8.93</u>	8.08	0.85	8.43	6.08	2.35	
Agriculture, fishery, and forestry	5.59	6.63	(1.04)	5.06	4.21	0.86	5.65	6.09	(0.43)	
Agriculture, forestry, and fishing	5.59	6.63	(1.04)	5.06	4.21	0.86	5.65	6.09	(0.43)	
Industry	6.03	4.9	1.13	8.18	7.94	0.24	7.17	6.19	0.98	
Mining and quarrying	19.16	9.35	9.81	12.95	9.16	3.79	12.28	9.13	3.15	
Manufacturing	4.09	4.04	0.04	5.51	8.30	(2.78)	5.86	2.03	3.83	
Electricity, gas, steam and air conditioning supply	1.32	1.86	(0.54)	1.2	1.75	(0.55)	0.64	1.55	(0.91)	
Water supply, sewerage, waste management and remediation										
activities	3.52	2.7	0.82	2.08	2.69	(0.61)	2.24	10.02	(7.78)	
Construction	8.55	6.4	2.16	11.93	7.84	4.09	9.14	12.6	(3.46)	
Services	8.6	8.06	0.54	9.11	8.12	0.99	8.71	6.06	2.66	
Wholesale and retail trade and related services	7.22	7.96	(0.74)	7.66	7.38	0.29	10.61	6.74	3.87	
Transportation and storage	5.29	4.35	0.94	3.56	4.28	(0.72)	4.92	4.24	0.68	
Accommodation and food service activities	11.34	8.92	2.41	12.09	8.49	3.60	7.55	9.66	(2.11)	
Information and communication	5.94	6.98	(1.04)	7.47	5.39	2.08	7.68	6.02	1.66	
Financial and insurance activities	5.88	4.15	1.73	4.83	3.63	1.20	4.07	3.35	0.72	
Real estate activities	10.68	10.15	0.53	8.25	5.45	2.80	7.26	5.42	1.83	
Professional, scientific, and technical activities	10.67	5.6	5.07	15.13	10.68	4.45	3.94	2.23	1.71	
Administrative and support service activities	12.7	10.59	2.11	13.48	13.08	0.40	10.49	6.95	3.54	
Education	1.74	4.9	(3.15)	13.86	12.94	0.92	3.26	1.04	2.23	
Human health and social work activities	5.96	5.71	0.24	5.75	5.23	0.52	5.32	5.81	(0.49)	
Arts, entertainment, and recreation	6.58	5.02	1.56	13.93	12.40	1.53	14.52	11.84	2.68	
Education	13.06	31.65	(18.59)	13.88	11.07	2.82	4.49	4.46	0.04	

Source: BLES

Nam at 2.0 percent, Cambodia at 1.7 percent, Lao People's Democratic Republic at 1.4 percent, and Thailand at 0.7 percent.¹

Whenever the challenge of a poor track record in reducing unemployment is being raised, the government cites job creation facilitation programs. These programs include the Special Program for the Employment of Students that provides short-term employment to poor but deserving students and outof-school youth, the Community-Based Employment Program that gives short-term employment for workers who are in distress and displaced by calamities and natural disasters, and the various training programs by the Technical Education and Skills Development Authority. However, it is evident that these programs are not enough and more rapid and constructive productivity improvements in job-creating sectors should be pursued. In Chapter 3 of this Economic Policy Monitor (EPM), Aldaba et al. (2013) show that the revival of the manufacturing sector is an effective strategy to curb unemployment and make economic growth more inclusive. The same study shows that productivity in the manufacturing sector is historically 2.5 times higher than in the services sector and 5 times higher than in the agriculture sector. Moreover, low-skilled workers in the manufacturing sector, on average, have higher wages than their counterparts in the service sector. There is strong basis, therefore, in promoting the revival of the manufacturing sector to help alleviate poverty and increase employment.

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2 Policy Updates: Developments and Implications

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HIS CHAPTER PRESENTS some of the relevant policies that were considered and adopted by the Philippine government in 2012 in response to key development challenges and opportunities in the international and domestic fronts. The policies mentioned here are those that occupied policymakers during the year, and promised the greatest potential impacts for the country.

Two major policy options are explored in the face of closer integration among the economies of East Asia and key players outside the region. The Regional Comprehensive Economic Partnership Agreement (RCEP) and the Trans-Pacific Partnership (TPP) are highlighted as promising routes toward more coherent regional and global economic cooperation. At the domestic scene, the path to the amendment of the sin tax law is traced and briefly assessed. Policy updates on the sectors of agriculture, mining, infrastructure, housing, energy, and education are also presented. Subsequent sections discuss the rationale behind each policy, assess policy implications, and provide recommendations where applicable.

Policy Updates on International Economic Cooperation

The character of global trade has changed considerably during the past decades. While the WTO Doha round has been stalled, the number of regional and bilateral free trade agreements (FTAs) has continued to increase all over the world. In East Asia, regional economic integration, which was mainly market-driven at the start, has taken on a more formal process of regionalism (Balboa and Medalla 2011). By 2010, the ASEAN has forged partnerships with all countries in the region

through the ASEAN plus One dialogue mechanism. In effect, the Philippines has kept up with East Asian regionalism by being a member of ASEAN.

A key motivation for the trend toward the formal process of economic integration is to drive regional (and national) economic growth further by leveraging on the strengths of the region. However, while the various ASEAN plus One FTAs (ASEAN-China, ASEAN-Japan, ASEAN-Korea, ASEAN-India, and ASEAN-Australia-New Zealand) have been so oriented, the outcome has been limited by its fragmented, 'noodle-bowl' character. There is consensus among the leaders and policymakers in the region on a need for a more coherent approach. In this regard, parallel proposals for an East Asia Free Trade Agreement (EAFTA) and the Comprehensive Economic Partnership in East Asia (CEPEA)1 have been included in the past agenda of the ASEAN plus Three (ASEAN-China-Japan-South Korea) and the East Asian Summit. The discussions culminated with the ASEAN initiative to establish RCEP.

In November 2011, the framework for RCEP was endorsed by leaders during the 19th ASEAN Summit. The framework sets out the general principles for broadening and deepening ASEAN's engagement with its FTA partners: China, Japan, South Korea, India, Australia, and New Zealand. RCEP will cover trade in goods, trade in services, investment, economic and technical cooperation, intellectual property, competition, dispute settlement, and other issues.² RCEP works on an

open accession principle that allows participation of any of the ASEAN FTA partners, either from the outset or when they are ready to join at a later date. It also takes into consideration the different levels of development of the participating countries thereby including appropriate forms of flexibility.

RCEP is potentially the largest regional trading arrangement that could lead to the creation of an integrated market that spans 16 countries, with a combined market population of more than three billion people and a combined GDP of about USD 19.78 trillion based on 2011 figures.³ The RCEP negotiations were launched on November 20, 2012 during the 21st ASEAN Summit and Related Summits in Phnom Penh, Cambodia. ASEAN with its six dialogue partner countries agreed to start the negotiations in early 2013.

Another development that the Philippines needs to watch and consider is the United States-led TPP. The TPP originated as the so-called P4—the Trans-Pacific Strategic Economic Partnership Agreement among Brunei, Chile, New Zealand, and Singapore, signed and enforced in 2006.⁴ The United States shortly thereafter picked it up, becoming its primary driver. It is currently at an advanced stage of negotiations,⁵ joined by Australia, Malaysia, Peru, Viet Nam, and most recently by Canada and Mexico. This trade alliance now represents more than 658 million people, with a combined GDP of USD 20.5 trillion or 26 percent of the global trade.⁶ The ultimate goal is to include additional Asia-Pacific countries⁷ in successive clusters to eventually cover a region that represents

¹ EAFTA covers the 10 ASEAN member countries and three Northeast Asian neighbors (China, Japan, and Korea) while CEPEA covers, in addition, the other three dialogue partners (Australia, New Zealand, and India). The proposals for EAFTA and CEPEA were led by China and Japan, respectively.

² As listed in the Guiding Principles and Objectives for Negotiating the Regional Comprehensive Economic Partnership.

³ Figures lifted from http://www.bangkokpost.com/news/local/322261/asean-leaders-begin-rcep-negotiations (accessed November 22, 2012).

⁴ At the time, the possibility of a formal East Asian integration was emerging and there were apprehensions about an Asia-Pacific divide as a result. There was a proposal for a Free Trade Area for Asia Pacific but this failed to gather enough support.

⁵ The 15th round of Trans-Pacific Partnership (TPP) negotiations will be held in Auckland, New Zealand on December 3–12, 2012 as indicated in the USTR website http://www.ustr.gov/tpp (accessed November 22, 2012).

⁶ Estimates taken from http://www.globalmeatnews.com/Industry-Markets/Mexico-and-Canada-become-TPP-members (accessed November 22, 2012).

South Korea, Japan, Taiwan, Philippines, and Thailand are among the Asia-Pacific countries that have expressed their interest in TPP membership (cited as potential members taken from http://en.wikipedia.org/wiki/Trans-Pacific_Strategic_Economic_Partnership#Potential_members (accessed November 22, 2012).

more than half of global output and over 40 percent of world trade.8

The TPP is a vehicle for Asia-Pacific-wide economic integration. It is labeled as the 21st century regional agreement, a "high-quality" agreement because of its broader and wider coverage. It includes wider FTA coverage, and deeper and wider liberalization of the services sector and investments. It also calls for stronger intellectual property rights, stricter labor and environmental standards, regulatory discipline of state-owned enterprises, and transparency, among others (Robles 2012).

Policy implications

On the TPP, considering that the United States remains to be its major trading partner, the Philippines stands to gain from this economic partnership, particularly in increasing its exports or defending its market share (for example, in garments and footwear). The value of total trade between the Philippines and the current TPP members reached USD 32 billion in 2011.10 However, being a "high-quality" FTA, the TPP is heavily burdened with a need for significant legal and administrative reforms, e.g., in intellectual property rights system and opening the service sectors. These reforms are expected to be extremely difficult to undertake, from both political and capability perspectives. This is not to say that the required reforms would not be good for the country eventually. Nonetheless, one cannot ignore the political impediments, supply-side and capability constraints, and possible adjustment costs of the agreement.

In contrast, with the RCEP, the Philippines would be forging an agreement with its existing FTA partners. The value of total trade between the Philippines and the RCEP members (with five of the country's top export markets—China, Japan, South Korea, Singapore, and Thailand) in 2011 is roughly USD 60 billion.¹¹

From a standpoint of East Asian integration, the RCEP could be a next logical step. This makes the RCEP more feasible. Negotiations are already due to start in 2013. The conclusion of the RCEP would hopefully stem the proliferation of fragmented FTAs. The RCEP could actually serve as a building block for multilateralism because of its adherence to the open accession principle. More importantly, it could provide the needed consolidation, consistency, and coherence of the various ASEAN plus One FTAs. Finally, perhaps from a more political perspective, another advantage of the RCEP is its ASEAN centrality. If the three Northeast Asian countries of China, Japan, and Korea manage to forge an FTA independently among themselves, the value of ASEAN centrality would be diminished. The RCEP, while serving as a bridge to the three countries, would help to retain, if not strengthen, ASEAN centrality.

Ultimately, the direct benefits from the RCEP would come from the depth of the provisions it eventually incorporates, and how it consolidates the various ASEAN plus One FTAs. For it to be meaningful, it should be of "high-enough quality". If instead RCEP ends up subscribing to the least common denominator, then it would just be a "nominal" FTA¹² with minimal economic impact.

Hence, a key issue in the RCEP is the level of harmonization of the various ASEAN plus One FTAs that it requires. For the Philippines (and other prospective members), the initial question would be how much it would be willing to 'multilateralize' or yield the most-favored-nation advantage on its most generous ASEAN and/or ASEAN plus One FTA provisions to other parties. In the end, the constraints in implementing necessary reforms would be similar to the case of the TPP, although possibly not to the same extent.

⁸ Calculation taken from TPP Frequently Asked Questions, USTR website http://www.ustr.gov/sites/default/files/TPPFAQ.pdf (accessed November 22, 2012).

⁹ Also quoted from TPP Frequently Asked Questions, USTR website.

¹⁰ Figures lifted from Robles (2012).

¹¹ Ibio

i.e., of little use to exporters, who would of course utilize the FTA with highest preferential benefits.

Model simulations of the impacts of both the RCEP and the TPP are both likely to be substantially positive, based alone on the combined size of the prospective members. In addition, they are not mutually exclusive. However, the issue boils down to their feasibility and the ability of the Philippines to realize benefits and manage costs from these agreements. This makes addressing supply-side constraints a first priority.

Policy Update: Amendment of the Sin Tax Law

Tobacco and alcohol excise tax rates in the Philippines are among the lowest not just in Asia, but worldwide (Sunley 2009; Nakayama et al. 2011). Thus, it is perhaps not a coincidence that the Philippines is the foremost consumer of tobacco in Southeast Asia. The Department of Health estimated that there are 17.3 million cigarette consumers in the country.

Up until the end of 2012, the excise tax on tobacco and alcoholic products followed a multitiered schedule that is based on the net retail price (exclusive of value-added tax and the excise tax itself) of each brand with cheaper brands being taxed less than the more expensive brands. For instance, the excise tax schedule for cigarettes consists of four tiers referring to low-, medium-, high-, and premium-priced brands while those for fermented liquors and distilled spirits produced from raw materials other than nipa, coconut, cassava, camote, buri palm, or sugar cane consist of three tiers each (Table 2.1).

Health advocates have argued that the social costs of cigarette smoking and alcohol consumption in terms of their harmful effects on health are the same regardless of the net retail price of any one brand of the excisable product. Therefore, a uniform rate makes more sense than the existing multi-tier rate structure because it eliminates the opportunity

for consumers to switch from higher-priced, highertaxed brands to cheaper, lower-taxed (but just as harmful) brands.

To appreciate the advantage of moving to a uniform tax structure, it is useful to understand the features of the old structure and its drawbacks. The multi-tiered excise tax rate schedule based on the net retail price was first introduced in 1996 with the enactment of RA 8240 and was later amended by RA 9334 in 2005. The adoption of specific tax rates for excise taxes in lieu of ad valorem rates under RA 824013 meant that the specific rates were fixed until amended by Congress. This reduced the buoyancy of the excise tax system because the specific tax rates are not automatically indexed to inflation. While RA 9334 provided for discrete increases in the tax rate on tobacco and alcoholic products in 2005 and every other year thereafter until 2011, the mandated increases in the excise tax rates between 2005 and 2011 were, however, less than the actual rate of increase in the prices of tobacco and alcoholic products for the most part.

In addition, RA 9334 also pegged the classification of the various brands of excisable products for the purpose of ascertaining the tax rate that would apply on them on the average net retail price prevailing on October 1, 1996. If the reclassification of brands in accordance with the net retail prices prevailing in 2005 when RA 9334 became effective were allowed, the inadequate adjustment of the specific tax rates relative to inflation would have been mitigated due to bracket creep. For instance, had RA 9334 allowed a reclassification of the various brands of excisable products in line with the market prices prevailing in 2005, most of the cigarette brands that were in existence in 1996 would have been subjected to the tax rate that is applicable to either the next higher tier or the one above the next higher tier in the original schedule found in RA 8240.14

¹³ This move was meant to address tax evasion arising from the transfer pricing between the manufacturers of tobacco and alcoholic products and their related marketing arms.

¹⁴ This conclusion is based on 2004 retail prices of various brands of cigarettes as cited in dela Cruz (2004) and 2009 retail prices of various brands of cigarettes as cited in Latuja et al. (2010).

Table 2.1. Existing excise tax rates on tobacco and alcoholic products (RA 9334)

		Date of I	Effectivity	
	1/1/2005	1/1/2007	1/1/2009	1/1/2011
Tobacco				
 i) Tobacco twisted by hand or reduced into a condition to be consumed ii) Tobacco prepared/partially prepared with/without the use of any 	PHP 1/kilo	PHP 1.06/kilo	PHP 1.12/kilo	PHP 1.19/kilo
machine/instruments	PHP 1/kilo	PHP 1.06/kilo	PHP 1.12/kilo	PHP 1.19/kilo
iii) Fine-cut shorts, refuse, scraps, etc. of tobacco (provided these are to be exported or used in the manufacture of other tobacco				
products)	PHP 1/kilo	PHP 1.06/kilo	PHP 1.12/kilo	PHP 1.19/kilo
 iv) Tobacco specially prepared for chewing so as to be unsuitable for use in any other manner 	PHP 0.79/kilo	PHP 0.84/kilo	PHP 0.89/kilo	PHP 0.94/kilo
Cigars and cigarettes i) Cigars				
NRP of PHP 500 or less per cigar	10% of NRP	10% of NRP	10% of NRP	10% of NRP
NRP in excess of PHP 500	PHP 50 +	PHP 50 +	PHP 50 +	PHP 50 +
ii) Cigarettee neeked by head (each neek with 20 nices)	15% of NRP	15% of NRP	15% of NRP	15% of NRP
ii) Cigarettes packed by hand (each pack with 30 pieces)iii) Cigarettes packed by machine (each pack with 20 pieces)	PHP 2/pack	PHP 2.23/pack	PHP 2.47/pack	PHP 2.72/pack
NRP below PHP 5 per pack (low-priced)	PHP 2/pack	PHP 2.23/pack	PHP 2.47/pack	PHP 2.72/pack
NRP of PHP 5–PHP 6.50 per pack (medium-priced)	PHP 6.35/pack	PHP 6.74/pack	PHP 7.14/pack	PHP 7.56/pack
NRP above PHP 6.50–PHP 10 per pack (high-priced)	PHP 10.35/pack	PHP 10.88/pack	PHP 11.43/pack	PHP 12/pack
NRP of above PHP 10 per pack (premium-priced) Distilled spirits	PHP 25/pack	PHP 26.06/pack	PHP 27.16/pack	PHP 28.30/pack
 i) Produced from sap of nipa, coconut, cassava, camote, buri palm, or sugar cane 	PHP 11.65/ proof liter	PHP 12.58/ proof liter	PHP 13.59/ proof liter	PHP 14.68/ proof liter
ii) Produced in a pot still by small distillers (up to 100 liters/day	p . 00:	p . c c	p. 00	p. 00 10
and 50% alcohol by volume) iii) Produced from raw materials other than above				
NRP per bottle of 750 ml volume capacity is less than PHP 250	PHP 126/	PHP 136.08/	PHP 146.97/	PHP 158.73/
Will per bottle of 700 fill volume capacity is 1633 than 1 fill 200	proof liter	proof liter	proof liter	proof liter
NRP per bottle of 750 ml volume capacity is PHP 250 up to PHP 675	PHP 252/	PHP 272.16/	PHP 293.33/	PHP 317.44/
NRP per bottle of 750 ml volume capacity is more than PHP 675	proof liter PHP 504/	proof liter PHP 544.32/	proof liter PHP 587.87/	proof liter PHP 634.9/
NATE per bottle of 750 fill volume capacity is more than FTTF 075	proof liter	proof liter	proof liter	proof liter
Wines				
i) Sparkling wines/ champagne, regardless of proof				
NRP per bottle of PHP 500 or less	145.6	157.25	169.83	183.42
NRP per bottle of more than PHP 500	436.8	471.74	509.48	550.24
ii) Still wines containing 14 percent or less alcohol	17.47	18.87	20.38	22.01
iii) Still wines containing over 14 percent but not over 25 percent alcohol	34.94	37.74	40.76	44.02
iv) Fortified wines containing more than 25 percent of alcohol by volume	Taxed as	Taxed as	Taxed as	Taxed as
Fermented liquors	distilled spirits	distilled spirits	distilled spirits	distilled spirits
(e.g., beer, lager beer, ale, and other fermented liquors)				
i) NRP per liter is less than PHP 14.50	8.27	8.93	9.64	10.41
ii) NRP per liter is PHP 14.50 up to PHP 22	12.3	13.28	14.34	15.49
iii) NRP per liter is more than PHP 22	16.33	17.64	19.05	20.57

NRP – net retail price

The combined effects of inadequate adjustment of specific tax rates to inflation and the reclassification freeze led to the erosion of excise tax revenues in real terms. Thus, revenues from the excise tax on tobacco products declined persistently from 0.59 percent of GDP in 1997 to 0.27 percent of GDP in 2011. On the other hand, revenues from the excise tax on alcoholic products dipped from 0.50 percent of GDP in 1997 to 0.23 percent of GDP in 2011 (Figure 2.1).

By providing manufacturers of excisable product the opportunity to mis-declare higher-priced (and therefore, higher-taxed) brands as lower-priced (and therefore, lower-taxed) brands so as to evade paying the correct taxes, the multi-tier rate structure of the excise tax system may have also contributed to the deterioration of the excise tax effort in 1997-2011. For instance, Manasan (2010) noted that a shift toward the production of brands subjected to a lower tax rate and a decline in the volume of production of tobacco products, as measured by the total volume of cigarette removals from the plants reported by cigarette manufacturers to the BIR in 2005-2009, are not consistent with the positive growth in personal consumption of tobacco products in real terms as per the National Income Accounts during the same period. Also, the data on volume of removals indicate

that cigarette producers reported higher-thannormal volume of removals in 2004, 2006, and 2008, apparently in anticipation of the mandated increase in specific tax rates in 2005, 2007, and 2009.

The system also distinguished between the old and new brands. Brands that existed before 1996 were taxed based on their 1996 price while newer brands, including imports, were taxed based on their current prices which tend to be higher. The differential tax treatment of old and new brands resulted in an uneven playing field for the producers of excisable products with new brands or variants and imported brands being taxed more than locally manufactured older brands. Related to this, the taxation of distilled spirits has been ruled by the World Trade Organization (WTO) to have broken the rules of free trade. The WTO holds that the current excise tax structure of the country discriminates against imported spirits in violation of the General Agreement on Tariffs and Trade.

These issues served as the basis for a more determined effort to reform the sin tax law in 2012 during the 15th Congress. The deliberations on the proposed amendments on the excise tax on tobacco and alcoholic products had been tedious. A final bicameral committee version was adopted after the bill underwent transformation as it made its way

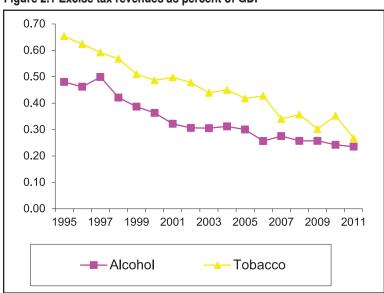


Figure 2.1 Excise tax revenues as percent of GDP

through the lower and upper chambers of Congress. The 2012 amendment to the sin tax law espouses a progressive reduction in the number of excise tax tiers until a uniform rate is achieved in the year 2017.

The bicameral committee version of the sin tax on tobacco and alcoholic products proposes to impose a two-tier excise tax system on cigarettes and fermented liquor in 2013–2016 before shifting to a uniform rate of PHP 30 per pack of cigarettes and PHP 23.50 per liter of fermented liquor in 2017 (Table 2.2). It also proposes to impose a hybrid tax of PHP 20 per proof liter of distilled spirits plus 15 percent of its net retail price. It also provided for a 4 percent increase in the specific rates yearly starting in 2018 and the removal of the price classification freeze.

The additional revenues from the bicameral version of the sin tax bill are estimated to be PHP 34 billion in 2013, PHP 43 billion in 2014, PHP 51 billion in 2015, PHP 57 billion in 2016, and PHP 64 billion in 2017. Eighty percent of the remaining balance of the said incremental revenues after deducting the 15 percent of incremental collections from the excise tax on tobacco products that will go to provinces where Virginia tobacco is produced (as mandated under RA 7171), and the 15 percent of the additional revenues collected from the excise tax on tobacco products that will be allocated among burley and native tobaccoproducing provinces (as mandated under RA 8240) shall be allocated for the universal health care under the National Health Insurance Program, the attainment of the Millennium Development Goals, and health awareness campaigns. On the other hand, the remaining 20 percent of the remaining balance shall be allocated based on political and district subdivisions for medical assistance and the health facilities enhancement program.

After passing both houses of Congress, the proposed amendments to the existing excise tax provisions of the National Internal Revenue Code was signed into law by President Benigno S. Aquino III under RA 10351 on December 20, 2012.

Policy implications

The bicameral version appears to have successfully put together the desirable provisions of the House and Senate versions of the sin tax bill. The bicameral version has greatly simplified the tax structure by adopting a unitary excise tax rate for cigarettes, fermented liquor, and distilled spirits. This shift—away from the existing multi-tiered tax structure—is predicted to result in greater ease in tax administration by minimizing the opportunities for mis-classification or mis-declaration of goods and transactions. Furthermore, this move will tend to minimize the downshifting of cheaper brands, thus reducing the consumption of tobacco products and alcoholic beverages more effectively.

Although the bicameral version of the sin tax bill does not allow for the automatic indexation of the excise tax rates to inflation, it does allow for a 4 percent increase in the excise tax rates yearly from 2018 onwards. This change will not only yield additional revenues in the near term but will also prevent the erosion of excise tax revenues in real terms over the long term. Moreover, as indicated earlier, a yearly adjustment in the excise tax rate is preferable over an adjustment that occurs every other year as proposed under the House version because the latter tends to give manufacturers the opportunity to avoid

Table 2.2. Proposed excise tax rates on cigarettes and fermented liquor under the bicameral version (pesos)

	2013	2014	2015	2016	2017
Cigarettes					
NRP is below PHP 11.50 per pack	12	17	21	25	30
NRP is PHP 11.50 or more per pack	25	27	28	29	30
Fermented liquor					
NRP is below PHP 50.60 per liter	15	17	19	21	23.5
NRP is PHP 50.60 or more per liter	20	21	22	23	23.5

taxes by reporting higher-than-normal volume of removals in the year prior to the mandated increase in specific rates.

Also, by removing the freeze on price classification of excisable products, the bicameral version of the sin tax bill eliminates the preferential tax treatment given to existing brands over new entrants and imports. Such a move tends to level the playing field among the various industry players and enables the country to comply with WTO requirements. Furthermore, the provision with regards to local content of tobacco products in the Senate version is muted somewhat in the bicameral version which states that "Of the total volume of cigarettes sold in the country, any manufacturer and or seller of tobacco products must source at least 15% of its tobacco leaf raw materials supply locally, subject to adjustment based on international treaty commitments."

While the bicameral version removed the very detailed earmarking provisions found in the Senate version of the sin tax bill, earmarking of the incremental revenues resulting from the proposed amendment to the excise tax law continues to be one of its major features. The arguments against earmarking in the public finance literature are well known. Earmarking is said to lead "to inefficient budgeting, essentially because it creates rigidities in the expenditure allocation process and prevents authorities from smoothly reallocating funds when spending priorities change" (Bird and Jun 2005). Also, when earmarked funds are off-budget, some loss in budgetary accountability may result because "off-budget often means out of sight and out of mind" (Bird and Jun 2005). However, earmarking may be justified if there is a close link between the payment of earmarked taxes and the benefits accruing to the taxpayer from the favored expenditures as this is consistent with the benefit principle of taxation. But the IMF points out that "it is difficult to isolate health expenditure on smoking-related diseases and finance them by tobacco duties" (Nakamaya et al. 2011) or taxes.

Policy Updates on Agriculture

The country's development strategy for agriculture as indicated in the Philippine Development Plan (PDP) involves three goals: (1) Food security improved, farm household incomes increased; (2) Sector resilience to climate change risk increased; (3) Policy environment and governance enhanced.

Under Goal 1, the major strategies include the implementation of the Food Staples Self-Sufficiency Program; increasing investments and employment across the value chain; and transforming agrarian reform beneficiaries into viable entrepreneurs. Recent initiatives underscore the foremost priority of the administration, which is to achieve rice self-sufficiency by 2013. In pursuit of this, almost 70 percent of the agricultural development budget for 2013 is effectively allocated to support production targets for rice (Table 2.3).

Rice self-sufficiency is also promoted through market support. The Philippines maintains a 50 percent tariff on rice outside the minimum access volume of 350,000 tons (t) (within-quota, a 40% tariff is levied). For ASEAN countries (the main source of rice imports), tariffs are 40 percent, reducible to 35 percent by 2015. The bigger impact comes from the quantitative restriction (QR) on rice imports, imposed by the exclusive import privilege of the National Food

Table 2.3. Agriculture budget for 2013

Description	2013 Budget (in PHP billion)
Agricultural Development Program*	56.3
Irrigation	27.3
National Rice Program	7.4
National Food Authority	4.3

^{*}For 2013, the year of self-sufficiency, the target is 20 million tons of palay.

Authority or NFA (which may be assigned to the private sector). In 2011, imports were kept to 0.70 million t, compared to 2.4 million t in 2010; in 2012 the import quota was just 0.5 million t. Under the existing WTO commitments of the Philippines, such QRs are to be phased out by June 2012; however, the country continues to impose the QR (by virtue of the Presidential Decree creating the NFA, upheld by the Agricultural Tariffication Act), and has requested extension of the special treatment for another five years (up to 2017).

Policy implications

The policy of import reduction is an essential corrective measure to address the excess importation of the previous administration. However, the zero-import objective swings to the other extreme. First, the production target appears infeasible. Output in 2011 was 16.7 million t, growing by 6.6 percent to an estimated 17.8 million t (latest Bureau of Agricultural Statistics forecast) in 2012. The 2013 target, however, represents a 12.4 percent increase over the 2012 forecast. Second, zero importation raises the price of rice relative to its cost in the world market; in 2011, the domestic price was about 40-45 percent above the world price. While the price policy benefits rice farmers, it undermines food affordability for most Filipinos (who are net rice buyers) and endangers food security at the household level.

Budgetary priorities should refocus on the broader set of goals and targets of the PDP, rather than fixating over a narrow objective of self-sufficiency. Budgetary reform under Goal 3 should be pursued, which calls for, among others, phasing-out of commodity programs and functional allocation of public funds to support agriculture. Investments should be allocated toward assets with adequate economic internal rate of return (currently this is imposed only for foreign-assisted projects; for irrigation, GPH support for foreign-assisted projects accounts for just 15% of the proposed budget). Lastly, the country should adhere to its tariffication commitment, combining support for rice competitiveness with a realistic self-sufficiency policy.

Policy Updates on Mining

On July 6, 2012, President Benigno Aquino III signed EO 79, which was intended to institutionalize and implement reforms in the Philippine mining sector. EO 79 was generally welcomed by the mining industry. The Chamber of Mines of the Philippines (COMP), in particular, hailed it as "a signal to all investors of the government's desire to establish a consistent and stable business environment founded on a level playing field" (GR 2012). However, civil society groups and other stakeholders have strongly opposed this EO for various reasons.

On September 10, 2012, the government released DENR DAO 2012-07, which provided the implementing rules and regulations (IRR) of EO 79. Interestingly, while COMP praised the EO when it was released, it questioned the legality of some provisions in the IRR and threatened to challenge them in court. COMP raised the following issues in the IRR of EO 79 (GN 2012; MBI 2012): (a) Section 3 does not include a definition of "Expired Mining Tenements", which renders them ambiguous; (b) Section 7 declares that no new mineral agreements will be granted until a new law rationalizing revenuesharing schemes has been approved. This means that since a new law may only be considered after the 2013 elections, the country will forego billions of potential new investments under the Aquino administration; and (c) Section 9 stipulates that mining companies will have to renegotiate the terms of the mining permit extension and the opening of new areas for mining through competitive bidding. The renegotiation, in particular, is considered as violating Section 32 of the Mining Act of 1995, which provides for permit extension for another 25 years under the "same terms and conditions thereof", without prejudice to changes mutually agreed upon by the parties. COMP has considered Section 9, in particular, to be patently illegal and, as earlier mentioned, has threatened to go to court.

In addition, those opposed to EO 79 have argued that it has failed to address substantial issues on the following: a) shifting policy from "earning profits from mining" to a "rational management of our

mineral resources"; b) ensuring that mining complies with sustainable development, human rights, poverty eradication, and the achievement of full human potential; and c) giving a reprieve to communities and the natural resources they live off from the real threats of destructive mining (ATM 2012).

Bag-ao (2012) further raised the following issues against EO 79: a) it is defective as it is based on the Philippine Mining Act of 1995 (RA 7942) which is itself defective; (b) its language is not about environment but revenues and sharing which frames attention on these, virtually depriving the communities and stakeholders from participating in the process; (c) it ignores the rights of indigenous peoples (IPs); and (d) it takes on a "business-as-usual" attitude without realizing that part of the problem is the Department of Environment and Natural Resources (DENR) which itself needs serious reforms.

In specific terms, Bag-ao enumerated the important issues against EO 79 as follows:

- The list of the "No-Go Mining Zones" in EO 79 does not include Key Biodiversity Areas and Critical Watersheds. These should have been included regardless of whether or not the same has been legislated/proclaimed by the president;
- The EO allows existing mining contracts within the "No-Go Mining Zones" to continue to be valid and in effect. This indicates tolerance of continued exploitation as most of those areas included in the "No-Go Mining Zones" have several existing mining operations;
- While the EO includes Prime Agricultural Lands as part of the banned areas for mining, it does not include areas that are critical to or surrounding them. This indicates that the EO does not protect these lands and marine sanctuaries from the hazards of mining in surrounding areas;
- While the EO provides for moratorium of mining applications, it does not include the grant of Exploration Permits for mining companies and small-scale operations. The latter, especially, remains unregulated by the DENR for many years;

- The EO directs local government units (LGUs) to exercise their powers consistent with the policies and decisions undertaken by the national government. This clearly indicates that the national government is imposing its general supervision over LGUs which are autonomous, thereby potentially disturbing the principle of devolution of powers to the local governments;
- With the existing framework being followed by the EO of identifying and enumerating the areas closed to mining, the implication is that all the rest not enumerated are open to mining. This poses serious threats to ancestral domains since not all of the IP territories are inside the areas identified as closed to mining; and
- The EO has nothing new on regulations, rules, and standards related to environmental enforcement. Enforcement mechanism should not be limited solely to the DENR and (Mines and Geosciences Bureau) but should expand and include independent groups and personalities.

Partly in response to these oppositions from the mining industry, the government released DENR DAO 2012-07A on October 8, 2012, which provided amendments to the IRR. The Mining Industry Coordinating Council, which is the interagency body tasked to implement EO 79, revised the IRR particularly Sections 3, 7, and 9. Section 1 of the new IRR, which amended Section 3 of the original IRR, now includes a definition of "expired mining tenements", referring to mining contracts/agreements whose 25- or 50-year term has lapsed (BM 2012). The section also stated that "in case of the initial 25-year term, the mining contract/agreement shall be considered expired if the parties concerned fail to agree on the terms of the renewal pursuant to Sections 32 and 38 of RA 7942, the Philippine Mining Act of 1995." Section 2, which amended Section 7, allowed the grant of new mineral agreements in case of an imminent threat of economic disruption, such as a shortage of critical commodities and raw materials that could adversely affect priority government projects or activities as determined by the Economic Development Cabinet

Cluster. Section 9 was revised to state that "mining contracts/agreements that may be renewed shall be subject to existing laws, rules and regulations at the time of renewal."

Policy implications

While the amended IRR of EO 79 may have addressed the concerns of the mining industry related to Sections 3, 7, and 9 of the original IRR, it has continued to bypass the issues raised by civil society groups and other stakeholders. The general and specific concerns cited earlier against the EO are socially and environmentally related and must be seriously considered if government efforts in mining are viewed as having real social relevance. On another note, the government should be lauded for its strong efforts, started in EO 79, to try to optimize public returns from mining. If and when a new law is passed for the purpose, the mining industry can finally be seen as a significant public revenue provider and meaningful partner in meeting not only the economic growth objectives in the sector but also the greater social and environmental goals of society.

Policy Updates on Infrastructure

The plans and programs of the Department of Transportation and Communication (DOTC), Department of Public Works and Highways (DPWH), Metro Manila Development Authority (MMDA), and Bases Conversion and Development Authority (BCDA) were presented to the NEDA Board Committee on Infrastructure (INFRACOM) on September 26, 2012 and October 30, 2012. The INFRACOM discussed the spatial dimension of transportation plans, i.e., roads, seaports, airports, and railways, and how these plans could be coordinated with other sectoral plans such as those of trade and industry, tourism, and agriculture for consistent and rational infrastructure investments. The Revised IRR on the BOT Law was published on October 7, 2012 and became effective on October 22, 2012. This is posted at the National Economic and Development Authority (NEDA) website. The Revised Joint Venture Guidelines is ready for approval by the government.

In the **transport sector**, the following projects were approved by the NEDA Board:

- 1. Line 1 South Extension Project / DOTC (March 22, 2012)
- 2. Ninoy Aquino International Airport (NAIA) Expressway, Phase 2 Project / DPWH (May 30, 2012)
- 3. Bridge Construction Project for Expanded Agrarian Reform Communities Development (Umiray Bridge) / Department of Agrarian Reform (March 22, 2012)
- Bridge Construction Acceleration Project for Calamity-Stricken Areas, Phase 2 / DPWH (September 4, 2012)
- National Roads Bridge Replacement Project / DPWH (September 4, 2012)
- 6. LRT Line 2 East Extension / DOTC (September 4, 2012)
- 7. Mass Rail Transit (MRT) 3 Capacity Extension Project / DOTC (September 4, 2012)
- 8. Bicol International Airport / DOTC (September 4, 2012)
- 9. New Bohol (Panglao) Airport Construction Project, Phase 1 / DOTC (September 4, 2012)

For **social infrastructure**, the Department of Education is proposing a second phase of the school-building projects through public-private partnership (PPP). Phase I is ongoing already.

In the water sector, NEDA Board approved on August 23, 2012 the Flood Management Master Plan for Metro Manila and surrounding areas submitted by DPWH. The master plan establishes the roadmap and vision for sustainable and effective flood management in Metro Manila and its surrounding areas. The government allocated PHP 5 billion for the short-listed, high-impact flood control interventions indicated in the master plan.

Meanwhile, the development of sewerage and septage has lagged behind other infrastructure deemed critical to inclusive growth, e.g., roads, airports. Proper sewerage and septage are critical for improving water quality and public health. As a response, the DPWH prepared the National Sewerage and Septage Management Program in coordination with other

water-related agencies. The NEDA Board confirmed it on May 30, 2012. The goal is to improve water quality and public health in urban areas by 2020. Under this program, all LGUs are envisaged to have septage management projects serving their urban barangays. For sewerage, the program targets 17 highly urbanized cities outside Metro Manila to develop their sewerage systems by the year 2020.

To strengthen institutions in the water sector, an implementation and operational plan for the National Water Resources Management Office and its draft EO have been submitted to the Office of the Executive Secretary for approval by the president.

NEDA, with support from the United Nations Economic and Social Commission for Asia and the Pacific, has drafted a Strategic Eco-Efficient Water Infrastructure (EEWIN) Roadmap to provide guidance and direction in mainstreaming the EEWIN concept in the development planning and operational processes in the water sector. This roadmap was presented to stakeholders in a National Advocacy Workshop on November 20, 2012, and thereafter to the NEDA INFRACOM.

The Metropolitan Waterworks and Sewerage System, with support from World Bank and Australian Agency for International Development, has recently completed its final report on the Metro Manila Water Security Study last July 2012.

Policy implications

The government has long recognized the constraints that inadequate infrastructure imposes on the achievement of inclusive growth. However, previous administrations have not been effective in addressing identified constraints. They have been criticized for their lack of transparency, inefficiency, and alleged irregularities in procurement in the provision of infrastructure, whether directly by government or through PPP. The present administration has, thus, pursued a program of transparency and good governance in infrastructure provision.

Key to this strategy is the strengthening of internal rules, review and approval processes, and institutions (or the government agencies or units involved in improving and modernizing infrastructure). The presentations of plans and programs by DOTC, DPWH, MMDA, and BCDA to the NEDA Board are in line with this premise. While this has been a time-consuming and extremely necessary exercise, it has been at the cost of slowing down the implementation of infrastructure projects. Nevertheless, with improved processes, rules, and institutions and better coordination among agencies in place, it is expected that the speed of project implementation will eventually pick up in the coming years.

Policy Updates on Housing

In line with the current administration's urban development and the climate change agenda, President Aquino has directed the immediate implementation of a National Slum Improvement Action Plan for 2011–2016.

The current Slum Upgrading Plan intends to formulate inclusive housing solutions through in-city relocation. In particular, Metro Manila is accorded top priority in this reform agenda due to its urban primacy and the presence of large slum settlements in the metropolitan area. Starting 2011, the government has committed PHP 10 billion annually for its slum shelter program. This program targets an annual supply of 20,000 medium-rise housing units to provide in-city relocation for informal settler families (ISFs) in danger zones of Metro Manila until 2016. However, the lack of available affordable land within Metro Manila and the significant affordability gap (between the cost-recovery level mortgage payment and the ability to pay by the ISFs) have delayed the first phase of implementation of the ISF program. This situation once more highlighted the deficiencies in the country's social housing policy and in the implementation of the Urban Development and Housing Act (UDHA).

There are currently three major legislative acts that intend to address these deficiencies: (1) Creation of a Department of Housing and Urban Development (DHUD); (2) Strengthening of

the Balanced Housing Act; and (3) Creation of the Social Housing Development and Finance Corporation (SHDFC).

The DHUD bill (Senate Bill 3199) is a priority bill of the current administration that aims to consolidate the functions of the Housing and Urban Development Coordinating Council (HUDCC) and the Housing and Land Use Regulatory Board to create a national government agency for housing and urban development. DHUD will include the National Housing Authority (NHA), Home Development Mutual Fund (HDMF), Home Guaranty Corporation (HGC), and National Home Mortgage Finance Corporation (NHMFC) among its attached agencies. This move gives the housing and urban development sector better representation in the economic cluster and allows HUDCC to function effectively in its authority to integrate, advocate, coordinate, and monitor housing policies and programs.

House Bill 5446, which seeks to strengthen the balanced housing act, holds promise in terms of addressing the land constraints for affordable housing especially in highly urbanized areas. The bill is a proposed amendment to Section 18 of the UDHA, which requires subdivision developers of nonsocialized housing to allocate 20 percent of the total project or the total project area for socialized housing. The current law is limited only to subdivision developments and does not include high-density developments. The proposed amendment provides for the expansion of the balanced housing development program to include condominium projects.

Senate Bill 3104 is another relevant housing policy to effectively implement a National Slum Upgrading Plan. It provides for the creation of the SHDFC. The SHDFC is envisioned as the lead agency for the development and implementation of the social housing programs of government. The SHDFC basically expands the mandate of the existing Socialized Housing Finance Corporation (SHFC), a subsidiary of NHMFC that implements the Community Mortgage Program (CMP).

Policy implications

Slum improvement has been one of the government's key programs for housing in the last decades. Past efforts have failed mainly because solutions have focused on off-city resettlements that had hardly created a dent in solving the problem. The impetus for reform is highly visible with the increasing magnitude and proliferation of slum settlements in several cities. To realize inclusive urban development, two constraints should be addressed: (1) the lack of access to urban land of the low-income sector; and (2) the lack of supply of affordable/socialized housing in urban areas.

A closer look at the proposed DHUD reveals some critical issues that may impinge on its capacity to effectively carry out its mandate. First, housing and urban development in the country operates within the context of local decentralization. The local government code has vested upon the LGUs the management and administration of local development plans and land use plans. The UDHA has also tasked the LGUs as the lead actor in local shelter planning. This means that local governments have to be provided with the appropriate tools, funding, and incentives to implement an effective shelter program. So far, there is no provision under DHUD that addresses the LGU shelter policy and incentives.

Second, the proposed DHUD has weak control over program funds and housing finance because these are vested upon several housing corporations—NHA, HDMF, SHFC, NHMFC, HGC—which have their own respective mandates and charters that provide them independence from the operations or influence of the department. The DHUD may simply improve monitoring and policy coordination but would have minimal impact on policy changes, LGU shelter, and land planning and overall urban governance.

Meanwhile, House Bill 5446 is essentially a form of inclusionary zoning which is the key strategy adopted in the United States and European countries for inclusive and sustainable urban development. This bill is critical to address the need for affordable housing in metropolitan areas and to provide access to decent shelter in cities especially for those in low levels

of employment. It will provide local governments a mechanism to generate funds or land for development of affordable housing in the cities either through ownership or rental. This move also supports and can possibly fast-track PPP arrangements for social housing. However, it can increase the cost of housing if problems on the high transaction costs in land development are not addressed.

On the other hand, among national housing programs, the CMP's community-based approach has responded well to the needs and housing demand of the low-income sector. However, the current SHFC Charter has limited the agency to scale up CMP and does not empower the corporation to create and develop new and innovative socialized housing programs responsive to the needs of its target sector and to expand private sector participation in the delivery of socialized housing programs. The expansion and independence of the SHFC through the creation of the SHDFC is thus necessary to expand CMP's impact. Despite its current limitation, the CMP has shown much potential in addressing the housing needs of the poor. Its bottom-up approach also serves as an important pillar to social sustainability. The program has enhanced relationship not only within the community but also between the national and local governments since LGUs are co-partners in the program. Senate Bill 3104 thus will bring these strategies to the next level of housing improvement for the low-income sector and of the demand-side accountability. However, the creation of the SHFDC may find no need for a DHUD because the proposed bill may already improve LGUs' engagement of civil society in shelter planning. This will also provide an opportunity to revisit the role of the NHA in the provision of social housing. NHA has basically adopted a top-bottom approach in housing resettlement. Years of experience have shown the need to rethink this strategy in the light of decentralization, open governance, and community-led approaches.

Policy Updates on Energy

In the energy sector, policy responses that have far-reaching implications remained an unfinished business as 2012 ended: (a) the regulator decided the feed-in tariff rates for selected renewable energy technologies but some quarters were unsatisfied; (b) the energy department issued a circular rationalizing electric power in Mindanao but this had not been enough to alleviate the power supply shortage; and (c) the regulator also issued rules for open access and retail competition but for a transitional stage only. These policies are described below.

The feed-in tariff (FIT) system in the Philippine context allows eligible renewable energy (RE) developers guaranteed payments of a technology-specific and fixed rate per kilowatt-hour (kWh). The scheme includes a tariff "degression" or a tariff reduction over time to encourage efficiency and technological improvements. The cost of guaranteed payments will then be borne by electricity consumers through a uniform charge called the FIT allowance that will be decided and adjusted annually by the Energy Regulatory Commission (ERC). In its Resolution No. 10 issued on July 27, 2012, the ERC approved FITs and degression rates for four RE technologies (Table 2.4).

The decision on the FIT for ocean thermal technology was deferred pending further studies. The

Table 2.4. FITs and degression rates for renewable energy technologies

	Feed-in Tariff (PHP/kWh)	Degression Rate
Wind	8.53	0.5 percent after year 2 from effectivity of FIT
Biomass	6.63	0.5 percent after year 2 from effectivity of FIT
Solar	9.68	6 percent after year 1 from effectivity of FIT
Run-of-river hydro	5.90	0.5 percent after year 2 from effectivity of FIT

FIT allowance to be imposed on the consumers has not yet been decided and the ERC said that such shall be determined at a later date after due proceedings.

To rationalize generation capacity in Mindanao, the Department of Energy (DOE) issued Circular No. DC 2012-03-0004 on March 19, 2012. Entitled "Directing Compliance with the Electric Power Industry Reform Act of 2001 to Address the Power Supply Situation Including the Rationalization of the Available Capacities in the Mindanao Grid," the circular was meant to address the electric power crisis in Mindanao. During the summer of 2012 when the crisis was at its worst, rotating brownouts of about one to eight hours daily were experienced in the region due to shortfalls in generation capacity.

The circular directs the government instrumentalities (i.e., Power Sector Assets and Liabilities Management Corp., National Power and National Electrification Corporation, Administration), the private grid operator (i.e., National Grid Corporation of the Philippines or NGCP), and all other electric power industry participants to perform their current obligations. What is markedly firm in the circular is the mechanism for the orderly rationing of electric power in the face of shortages when peak load (or demand) shoots up. Given that several load-serving entities (i.e., electric cooperatives and private and LGUowned distribution utilities) were not complying with what is called load-to-maintain matrix and they withdraw from the grid over and above their load-tomaintain levels, compliant customers in the grid were disadvantaged and the overall security of the grid was threatened. Thus, the circular authorizes the NGCP, upon the DOE's directive, to disconnect customers that are not complying with their load-to-maintain levels and schedules.

Open access and retail competition (OARC) transitional guidelines were issued by the ERC in late 2012. The OARC in the Philippine electricity market means electricity end-users with an average monthly peak demand of one MW can choose their retail electricity suppliers. Retail

electricity suppliers, in turn, can have open access to the transmission and distribution networks subject to the payment of wheeling rates. The retail market is deemed to be a contestable market where entry and exit are relatively easy. After a two-year commercial operation, the contestable customers will include those with 750-kW demand. The contestable customers include entities engaged in manufacturing, real estate, mall operations, shipbuilding, and rail and toll road operations, as well as hospitals, buildings, universities, and other commercial establishments.

The ERC released a resolution that transitory rules for the initial implementation of OARC are to be adopted beginning December 26, 2012. ERC Resolution No. 16 series of 2012 provides that the transition period for OARC will run for six months, from December 26, 2012 to June 25, 2013.

Based on the OARC guidelines, the ERC will issue Certificates of Contestability to companies that can participate in the scheme and the Philippine Electricity Market Corporation (PEMC), the operator of the wholesale electricity spot market, will serve as the program's central registration body. The PEMC will develop and manage the required systems, processes, and software for the trading, customer switching, information exchange, and settlement of transactions.

Policy implications

Though the approved FITs are substantially lower than the originally proposed levels (i.e., PHP 10.37/kWh for wind, PHP 7.00/kWh for biomass, PHP 17.95/kWh for solar, and PHP 6.15/kWh for run-of-river hydro), there are remaining issues to be resolved. The most contentious of these are the rationale for having a FIT policy at all, the lock-in period for the guaranteed payments, and the installation targets.

On the issue of having a FIT policy per se, it really depends on the appreciation of the goals that the policy is trying to achieve. The primary goal of a FIT policy is to develop the RE market and contribute to providing incentives to reduce the cost of RE development while minimizing the price burden

on consumers. Having a FIT policy will allegedly result in unjustified increases in electricity prices for consumers. It is considered unjustified because it is more prudent to wait for advances in technology until a cost parity with conventional sources is achieved; moreover, there is still much room for augmenting old renewable energy (i.e., hydro and geothermal) generating capacity (FEF 2011). The achievement of a relatively lower electricity price is an expected long-term consequence and not the immediate policy goal. Needless to say, there is deep economic rationale for developing the RE market when intergenerational transfers of benefits (e.g., the present generation bearing a higher cost for the future generation's enjoyment of greater benefits) and the monetization of the negative externalities of fossil fuel-based sources are considered.

On the guarantee period, the debate is actually rooted in a shortcoming in the law. The law stated the minimum period but not the maximum period. Such shortcoming invites misinterpretations by bureaucrats and political maneuvers by those seeking economic rents. The National Renewable Energy Board proposes that the FITs to be paid to RE developers be guaranteed for a period of 20 years, while the 2008 law (i.e., RA 9513) that enacted the FIT policy mandates a minimum of a 12-year guarantee period. Nevertheless, the law does not constrain policymakers to put a reasonable limit on the guarantee period. Policymakers should then consider that a 20-year guarantee period fully passes on the risk of technological obsolescence to the public for a very long time and, at the same time, makes harnessing potentially large windfall profits by RE developers very easy when technological improvements reduce cost.

On the installation targets, increasing the targets for solar and wind could add to rather than minimize the burden to consumers. Even though the initial level of FIT allowance would not change, the increase would result in wider latitude for future FIT allowance adjustments given that these are to be made annually, necessitate a greater requirement for reserve capacity which could be costly, and encourage

inefficient investments in solar and wind RE. It is indeed more efficient to bid out the installation targets rather than encourage excess investments in technologies that are not cost effective. On the concern that the market is yet to be developed and is not ready for a competitive auction, we cannot see if there will be a failure of competition if we will not test it.

Although the FIT policy is now in place and it seems more sensible to move forward rather than withdraw the policy, amendments to the policy should still be in order to ensure that the implementation is fair and efficient and adequately considers consumer welfare. Should the implementation of the FIT policy result in an RE market that is too burdensome to consumers, the alternative could be a gradual attenuation of the policy, if not ultimate withdrawal, in the future and a greater reliance on more directed subsidies to achieve the same policy goal of developing the RE market.

On the policy for rationing supply in Mindanao, the reality is that Mindanao has inadequate baseload generating capacity and the timing of capacity additions might prolong the electric power problem in the region. A close monitoring of the supply and demand situation in the Mindanao grid is needed. The current situation is depicted in Table 2.5 and Figure 2.2.

Supply projection is dynamic and depends on the political economy in the region because the probability of the investments taking place and the projected timing of investment decisions are continually changing based on the pace of negotiations and regulatory approvals. Note from Table 2.5 and Figure 2.2 that despite optimistic estimation of available capacities, there will still be a supply deficit. It is important to bear in mind that the Mindanao electricity problem is already at a critical point and although there are additional capacities firmly committed to be online in 2013 and 2015, these cannot adequately fill the estimated supply gap.

In the short term, while the firmly committed capacities are not yet online and additional capacities are not yet committed, the following demand

Table 2.5. Supply profile, 2012-2015 (in MW)

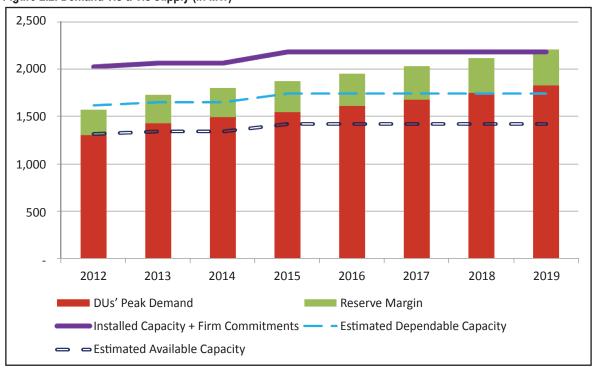
	2012 (Actual)	2013	2014	2015
Installed capacity	2,022			
Firmly committed capacity ¹		38	0	120
Projected installed capacity		2,060	2,060	2,180
Estimated dependable capacity ²		1,648	1,648	1,744
Assumed available capacity ³		1,339	1,339	1,417

Notes:

- "Firm commitment" is defined here as applying to those power purchase agreements that are already approved by the Energy Regulatory Commission (ERC) as of December 19, 2012.
- ² Historically, dependable capacity is around 80 percent of installed capacity.
- In the past year and during 2012, available capacity varies between 46 percent and 65 percent. We use the optimistic level.

Sources: Department of Energy (DOE) for the installed capacity; ERC for the firmly committed capacities

Figure 2.2. Demand vis-à-vis supply (in MW)



Note: The required reserve margin is estimated at 21 percent of peak demand.

Sources: Distribution Development Plan 2010-2019 for the peak demand forecast; DOE and ERC for the installed and committed capacities

management strategies can be implemented: (i) promoting and applying more widely the ERC's interruptible load program (i.e., rather than withdrawing power from the grid, large power users will use their own generating sets and be compensated for the extra costs); (ii) accelerating the implementation of the Interim Electricity Market for Mindanao (which, according to the DOE, will use the interruptible

load program scheme but with a trading platform); (iii) assessing whether the Mindanao players and the regulator can implement a contractually committed demand response program (i.e., large power users will reduce their consumption for specific peak demand events and will be compensated for doing so) and, if possible, implementing this soon; and (iv) allowing a reasonable level of embedded generation by the

electric cooperatives and distribution utilities so that withdrawals from the grid can be reduced. All of these strategies, however, should be treated as a balancing act and strictly short-term strategies because compensation schemes can be costly and capacity addition through embedded generation can be highly expensive.

On OARC, it appears that the transition period does not substantially differ from the time when the electricity industry is waiting for it to begin. Many of the elements of OARC are still missing. The ERC resolution provides that during the transition period, the PEMC together with industry stakeholders shall develop and finalize the market manuals, business process, and information technology design of business-to-business setup, as well as the initial preparation and population of the registration database. During this transition period, the distribution utilities shall continue to serve the contestable customers, which are then expected to contract with a retail electricity supplier starting on June 26, 2013.

The OARC setup is a big challenge for the Philippine electricity industry and the accompanying institutional capacity building must be viewed and implemented with a sense of urgency. For example, the ERC's ability to resolve disputes quickly must be strengthened given that the freedom of choice that OARC espouses will rely heavily on minimal to zero switching costs by the contestable customers. The continuity and reliability of service to customers should not be affected by its choice of supplier if retail competition is expected to generate a Bertrand-like competition where firms compete on price (firms are, in turn, driven by their cost minimization objective with respect to hedging for electricity sources and incurring operational costs such as billing, marketing, and information systems). Thus, a regulator that is well-equipped to handle consumer complaints and could act on disputes quickly should be present.

Policy Updates on Education¹⁵

There were 39 bills filed in the House of Representatives in 2012 proposing to modify several aspects of financial assistance for poor students in tertiary education. More than a dozen more bills were proposed to expand student loans. As a recognized means of improving access to tertiary education, reforming the student financial assistance system becomes even more important given the failure of state universities and colleges (SUCs) and public technical and vocational institutions to increase the access of the poor to tertiary education (e.g., Paqueo et al. 2012; Tan 2012).

There is evidence that the performance of the current student financial assistance programs (StuFAPs) in tertiary education is unsatisfactory and bordering on tokenism. Several weaknesses are apparent. First, the StuFAPs cover a very small proportion of students. As data for 2011 from the Commission on Higher Education (CHED) show, only 60,885 (or 2%) of the student population of 2.7 million were benefited by the programs. This is small relative to the 8 percent or about 216,000 students currently enrolled that come from the bottom 20 percent of households classified by income decile based on the 2011 Annual Poverty Indicators Survey (APIS). Second, the value of the financial assistance is too small to sufficiently provide for schooling needs. For instance, the highest grant or 'full-merit' only provides PHP 15,000 per semester or PHP 30,000 per year. The other grants, which cover the majority of the grantees, provide an even lower amount, such as PHP 2,500 per semester for the CHED Special Study Grant Program for Senate and Congressional District. The full-merit is only half of the PHP 60,00016 per year given to grantees of the new Students' Grants-in-

Largely drawn from a report of the PIDS StuFAP reseach team consisting of Dr. Aniceto Orbeta, Dr. Vicente Paqueo, Ruzzel Brian Mallari, Katrina Gonzales, Michael Ralph Abrigo, and Jill Adona—all from PIDS—and research consultants Vicky Catibog, Riza Halili, Gerille Hope Patagan, and Remrick Patagan. The team worked closely with CHED Commissioner Dr. Cynthia Bautista, Deputy Executive Director Napoleon Imperial, and the CHED Office of Student Services staffled by Director Isabel Inlayo.

PHP 20,000 tuition (PHP 10,000 per semester); PHP 35,000 (PHP 3,500 per month) living allowance; PHP 5,000 (PHP 2,500 per semester) for books.

Aid Program for Poverty Alleviation, which provides for tuition, living allowance, and other incidental expenses. With inadequate support, only the richer households can effectively avail of the assistance because they are the ones that can augment the shortfall. Loans remain virtually unpaid; hence, the program is also unsustainable. Only 2 percent of the loans released under the Study Now Pay Later Plan have been repaid (Kitaev et al. 2003).

A substitute bill to 53 house bills¹⁷ is being considered in the Committee on Tertiary Education to address these issues. The bill is to be known as the Unified Student Financial Assistance System for Higher Education and Technical Education (UniFAST). Its key provisions include: (a) creation of the UniFAST Board that will be responsible for policymaking, coordination, and oversight of all national government student assistance programs for tertiary education; (b) decentralized implementation of specific student financial assistance program; (c) freedom of informed choice by students as to tertiary education institution (TEI) and program of study to enroll in, provided the TEI and program of study meet the Board's standards of quality (Registry); (d) amount of assistance for grantees of grants-in-aid and scholarships to be fixed at a level that would allow them to afford high-quality TEIs (covers tuition and other fees and living allowance); (e) authority of the Board to provide incentives, if needed, to encourage students to enroll in priority programs; (f) policy statement giving priority to graduate studies; (g) adoption by the Board of a UniFAST Qualifying Examination System to determine eligibility and ranking of applicants with differentiated eligibility cut-offs by type of financial assistance; (h) adoption by the Board of an objective targeting system for identifying poor and marginalized students, to be developed by NEDA from the National Household Targeting System for Poverty Reduction (NHTS-PR) and other databases; (i) creation of two

UniFAST Trust Funds; (j) adoption of mechanisms for performance and financial accountability; (k) board authority to develop long-term savings deposit for tertiary education; (l) development of a more efficient and better-funded self-sustaining system of student loans; (m) regular monitoring and impact assessment of programs; and (n) funds for UniFAST to grow at the rate of GDP growth (at least) and share of grants-in-aid (GIA), scholarships, and student loans to rise to 50 percent of total subsidy for tertiary education.

Policy implications

The features of the substitute bill address specific issues that encumber the effectiveness of the current StuFAPs:

The creation of a policy coordinating board solves the lack of coherence among the current StuFAPs. Different student financial assistance programs address different needs and objectives: GIAs are primarily intended to enable poor but capable students to enroll in tertiary schools and improve their equity; scholarship grants are in recognition of and reward for academic excellence and talent regardless of economic status; and student loans address liquidity problems in education that are not currently addressed by normal financing systems. Despite these distinct emphasis areas, virtually all of the publicly funded StuFAPs target the children of poor families. This creates confusion as to the real objectives of the different types of financial assistance programs and results in misallocation of resources away from their intended beneficiaries. Priority setting is critical. If the primary objective is to enable more children of poor families to enroll in tertiary education, then the GIAs should be expanded. Calling all financial assistance programs "scholarships" is not correct. Moreover, student loans that target

House Bill Nos. 26, 405, 667, 965, 1097, 1246, 1852, 2021, 2108, 2243, 2333, 2527, 2791, 2793, 2829, 3433, 3589, 3702, 3739, 3837, 4218, 4254, 4394, 4439, 5136, 6227, 3908, 4725, 6201, 1341, 3133, 4591, 4597, 4833, 5134, 5136, 6020, 6122, 6571, 6598, 43, 153, 242, 365, 499, 670, 1247, 1331, 1610, 1820, 2097, 3719, and 6121

- the poor do have an implication on repayment performance and, therefore, on the program's overall sustainability. All these resource allocation issues between types of StuFAPs may be better handled by a unified board.
- The freedom of informed choice in UniFAST recognizes that students and their families are better informed on their own capabilities, and which study programs to pursue in relation to work opportunities and training suppliers. Current StuFAPs are usually tenable only to SUCs and prespecified courses. This is unduly restrictive to students (and parents), and assumes that SUCs are the best providers of the specific fields students want to pursue.
- It is desirable to set financing at a level that would allow student beneficiaries to afford high-quality TEIs covering tuition, other fees, and living allowance. This would enable poor but capable students to enroll in programs with a higher probability of employment after graduation. Giving a pittance effectively screens out the poorer but able students because they are less likely to augment the shortfall needed for their education.
- An examination-based system for identifying grantees for the different types of financial assistance ensures that only capable students are provided assistance. Only the cut-off mark needs to differ between those that are applying for scholarships and those that are applying for GIAs and loans. The bottom line is that those that are given assistance should be those that are capable of finishing their chosen program of study. Loan beneficiaries should also be capable of repayment to make the scheme sustainable, and this can be facilitated if the students are able to gain employment after studying.
- The creation of UniFAST trust funds addresses the issue of the lack of synchronization of the school year and the fiscal year. It opens up the opportunity for receiving private donations intended for StuFAPs, and serves as vehicle for

- innovative financing schemes such as long-term savings for tertiary education.
- The regular monitoring and impact evaluation of StuFAPs will subject programs to rigorous tests for effectiveness and sustainability. Systematic monitoring and rigorous evaluation allow evidence-based decisions on whether programs should be expanded or terminated.
- The currently well-known very low loan repayments reveal problems on either beneficiary selection or collection mechanisms or both. These need to be sorted out before the system embarks on another loan program.
- A well-tested and empirically verified and integrated StuFAP can target the poor but capable students, and encourage both public and private schools to compete for better students by offering improved training programs. Expanding the program from its current level of tokenism to a level such as 50 percent of tertiary education funding is also a move in the right direction.

Conclusion

The way to move forward for the Philippines is getting clearer with opportunities to harness greater benefits from international economic cooperation, and relevant domestic policy reforms.

The developments with RCEP and TPP, and the passing of the amendments on the Sin Tax Law manifest a shifting tide toward more coherent economic partnerships and less protectionist stance. The ability of the current administration to pursue relevant legislation, like the sin tax bill (considered before as untouchable with the huge amount of lobby money going around) reflects well on the incumbents and the state of the government in general.

Policy reforms and pronouncements in the sectors of agriculture, mining, infrastructure, energy, and education have had immediate and varied responses from their respective stakeholders. Although criticisms and dissenting opinions abound, the good intentions behind the policy pronouncements are laudable: rice self-sufficiency

in agriculture; stable business environment and sustainability in the mining sector; transparency and good governance in infrastructure provision; slum improvement and inclusive urban development; innovation and production and market augmentation in the energy sector; and coherent student financial assistance programs for tertiary education.

Ultimately, the desire and momentum for relevant change should be sustained, while staying true to the country's development agenda, and keeping a close watch on global and regional economy.

As in the previous publications, this EPM aims to document and analyze relevant policy pronouncements and developments, thereby contributing toward productive review, policy adjustments, and scholarly discourse.

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3 Regional Economic Integration and Inclusive Growth: The Role of the Manufacturing Sector in the Philippines

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CONOMIC DEVELOPMENT IN East Asia benefited much from closer integration among the economies of the region. Regional economic integration is a subset of global integration. The Asian Development Bank (ADB) formally defined it as a "process that leads to greater interdependence within a region, whether market driven or policy led, or a combination of both" (ADB 2008).

The degree of regional integration can be measured by several indicators. An ADB report (2012a) succinctly describes the current state of economic integration among developing member countries in Asia. It describes Southeast Asia and what it calls "East Asia" as having the highest intraregional trade. These two regions also have the highest intraregional output correlations.

The same ADB report outlines the benefits of closer economic integration, which include:

- Expanding markets and sources of inputs, more efficient allocation of resources across the region, and higher output growth;
- Reducing income inequality between countries; and
- Fostering risk sharing.

Southeast Asia is composed of the ten ASEAN member nations. Meanwhile, East Asia comprises China, Japan, Korea, Mongolia, Hong Kong, Taiwan, and China. In this study, East Asia refers to ASEAN plus China, Japan, Korea, Hong Kong, and Taiwan.

Empirical evidence suggests that regional economic integration has contributed significantly to economic growth in East Asia. For example, Ezaki and Nguyen (2008) reported beneficial impacts such as economic growth, poverty alleviation, and income distribution—all deemed viable in the long run because of the gains from a freer regional trade and a more competitive regional economy. If elastic capital mobility is assumed, the results show positive impacts in terms of an increase in real GDP as well as an elevated rate in private consumption for East Asian economies.

Meanwhile, a study of the approaching ASEAN Economic Community (AEC) has shown that for individual ASEAN economies, the tradecreating effects of being part of a single market and production base, as well as the increased competitiveness associated with economies of scale and productivity spillover effects of trade, are large. For the Philippines, a computable general equilibrium (CGE) study has conservatively estimated that the liberalization of tariff and nontariff barriers (NTBs) aspect of AEC alone will increase the country's exports and imports by 45.5 percent and 34 percent, respectively, increase manufacturing output, and increase the country's GDP by 3.2 percent (Rashid et al. 2009).

In addition to the trade-creating effects, there are other attendant and second-order effects of AEC's free flow of goods. For one, the general public is expected to benefit from lower prices, as firms can

also purchase from the least-cost supplier. Imports have an effect of providing greater competition to domestic producers resulting in lower price cost mark-ups. With increased competition, firms and sectors are expected to reorganize and become more efficient and competitive, in addition to allocating higher budgets for research and development (R&D) expenditures and engaging in more innovation overall.

An important indicator of greater economic integration is the increase in exports of goods and services. Table 3.1 shows that for almost all economies in East Asia, exports at least tripled between 1995 and 2011. The most notable performer is Viet Nam, which saw its exports jump from a mere USD 5.6 billion to USD 87.9 billion during the same period.

Regional Production Networks

East Asia as a whole has been the major source of economic growth and dynamism in the past 30 years. The phenomenon has been well-documented (e.g., World Bank 1993). Arguably, regional integration was largely driven by regional production networks (Fujita et al. 2011). Trade and investment flows that intensified over the years were compelled mostly by the international production system that emerged. Regional production networks are a subset of global value chains, which can be defined as

"the internationalization of a manufacturing process in which several countries participate in different stages of the

Table 3.1. Export of goods and services (in USD million, calendar year)

	1995	2000	2005	2010	2011
Japan	443,536	478,542	595,138	771,720	824,525
Korea	131,360	172,692	285,484	471,071	563,571
Indonesia	45,479	62,139	85,660	157,791	203,501
Taipei, China	113,342	151,950	198,432	274,601	308,257
Philippines	17,388	38,229	41,224	51,643	60,021
Malaysia	73,728	98,155	140,980	198,945	257,238
Thailand	60,201	68,964	110,160	195,360	226,380
China	148,965	249,223	762,648	1,580,400	1,901,480
Hong Kong	173,556	202,508	289,628	390,348	429,190
Viet Nam	5,621	14,483	32,447	69,820	87,936

Source: ADB Key Indicators for Asia and the Pacific 2012

manufacture of a specific good. The process is of considerable economic importance since it allows stages of production to be located where they can be undertaken most efficiently and at the lowest cost. Furthermore, "if production sharing is increasing in relative importance this implies that countries are becoming more interdependent on each other" (Yeats 1998, p.1)."

Trade data affirm the role of regional production networks. For example, Thorbecke (2011) reports the value of intermediate goods imports of selected East Asian countries and regions (Table 3.2). Intermediate goods comprise mainly parts and components that are the lifeblood of regional production networks. Imports of intermediate goods surged between 1990 and 2010. The biggest transformation was experienced by China which imported only USD 5.6 billion worth of intermediate goods in 1990. By 2010, China was importing USD 161.9 billion. A study by Yamashita and Kohpaiboon (2011) shows that the share of

Philippine trade of parts and components—whether in exports or imports—is higher than the average of the six ASEAN member countries with the highest per capita incomes.

Intraregional trade and regional production networks flourished in the late 1980s when Japanese firms began to locate and set up factories in neighboring Asian countries due to cost advantages. The appreciation of the Japanese yen and the rise in real wages made manufacturing in Japan costly and uncompetitive. This made it profitable for laborintensive firms to relocate initially in the newly industrialized economies and the more developed ASEAN countries and later to China. These investments created positive externalities in terms of technology transfer and knowledge spillovers aside from absorbing excess labor in host countries (Rugraff and Hansen 2011).

Regional production networks were established mainly through foreign direct investment (FDI). Data in Table 3.3 show the increase of FDI stock in selected East Asian economies. While the Philippines has

Table 3.2. Value of intermediate goods imports of individual East Asian countries and regions from East Asia as a whole (USD billion)

Region	1990	1995	2000	2005	2008	2009	2010
Japan	5.2	13.6	22.0	34.3	45.0	37.1	47.9
China	5.6	19.2	28.9	85.2	118.6	115.7	161.9
ASEAN 4	15.8	47.5	54.6	67.9	82.7	69.6	95.9
S. Korea+Taipei, China	13.2	31.8	41.7	59.2	74.0	64.2	86.1

Note: ASEAN 4 comprises Singapore, Malaysia, Thailand, and the Philippines Source: Thorbecke (2011)

Table 3.3. FDI inward stock (USD million), ASEAN and China

		FDI Inward Stock (USD million)								
	1990	2000	2009	2010	2011					
Indonesia	8,732	25,060	108,795	154,158	173,064					
Malaysia	10,318	52,747	78,995	101,510	114,555					
Philippines	4,528	18,156	22,931	26,319	27,581					
Singapore	30,468	110,570	393,876	461,417	518,625					
Thailand	8,242	29,915	106,154	137,191	139,735					
Viet Nam	1,650	20,596	57,348	65,348	72,778					
China	20,691	193,348	473,083	587,817	711,802					

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics), accessed on 20 September 2012

benefited from the inflow of FDI, it has lagged behind other countries. China was the premiere destination of FDI between 1990 and 2011.

Regional Production Networks and the Manufacturing Sector

The primary beneficiary of the expansion of regional production networks has been the domestic manufacturing sector. With a modest start in the electronics and clothing industries, multinational production networks have gradually evolved and spread into many industries such as sports footwear, automobiles, televisions and radio receivers, sewing machines, office equipment, power and machine tools, cameras and watches, and printing and publishing (Athukorala 2010). Historically, economic transformation has been driven by the manufacturing sector. Hence, the surge of FDI flows in the region and the establishment of regional production networks have accelerated the development of the recipient economies.

The economic transformation can be observed from the increase in the share of value added from the manufacturing sector to total GDP for Indonesia, Malaysia, and Thailand between 1993 and 2009 (Table 3.4). If 1980 is used as a base year for comparison, the transformation becomes more remarkable for Indonesia. In 1980, the share of value added in manufacturing for Indonesia was only 13 percent. At that time, the Philippines already achieved a share of 27 percent.

The share of manufactured exports to total exports varies for the different economies. It declines for Indonesia and Thailand but increases sharply in the case of the Philippines. What is more important, however, is the increase in the share of mediumto-high technology exports in total manufacturing exports. This has increased for Indonesia, Malaysia, the Philippines, and Thailand, reflecting their participation in regional production networks.

The data clearly show that the Philippines represents an enigma in terms of benefiting from these regional production networks. Between 1993 and 2009, the Philippines experienced the highest increase in terms of the share of manufactured exports to total

exports. Meanwhile, in 2009, the share of medium-to-high technology exports in total manufacturing exports was highest among the countries listed in Table 3.4, which includes Japan and Korea. This is consistent with the increase in trade in intermediate products (Table 3.2) and the higher share of parts and components in Philippine trade compared with other major ASEAN countries. Nevertheless, the manufacturing sector in the Philippines has stagnated based on its share to total GDP. This reflects a dichotomy between the export sector and domestic manufacturing sector. Moreover, the Philippines lags behind the major countries of East Asia in terms of total exports (Table 3.1).

For a detailed explanation of the stagnation of the Philippine manufacturing sector, the reader can refer to other studies on this subject (Balisacan and Hill 2003; Yap 2009). However, the major factors are given as follows:

- As shown in Table 3.3, the Philippines has lagged behind other Southeast Asian countries in terms of attracting FDI;
- The investment rate in the Philippines has historically been lower than that of major East Asian economies;
- The low investment rate is partly due to low public infrastructure expenditure. For example, between 2000 and 2010, public spending of Thailand and Malaysia on infrastructure averaged 8–10 percent while this was only 2–4 percent in the case of the Philippines (IMF 2010); and
- The peso appreciated in real terms between 1987 and 1997 while the currencies of Indonesia, Malaysia, and Thailand depreciated. This was at the time when Japanese FDI to Southeast Asia surged.

Regional Economic Integration and Inclusive Growth

The economic integration that proceeded from the cooperative arrangements among firms proved to be beneficial for East Asian countries that adopted more liberal trade and investment policies. East

Table 3.4. Indicators of industrial performance (1993, 2005, 2009)

Economy	Share of MVA in GDP		Exports in Total High		Share of Medium- and High-tech Value Added in Total Manufacturing		Share of Medium- and High-tech Exports in Manufactured Exports (Percentage)			Exports on USD) ^{1/}	Expor	ts to-GDP	Ratio 2/				
	1993	2005	2009	1993	2005	2009	1993	2005	2009	1993	2005	2009	2005	2009	1993	2005	2009
China	31.8	34.1	35.7	90.2	95.0	96.3	37.2	41.6	40.7	28.5	57.7	59.8	762,648	1,203,420	19.6	37.1	26.7
Hong Kong	7.9	3.2	2.3	98.4	96.4	93.2	32.3	30.2	28.8	43.6	65.4	70.4	289,628	318,751	135.3	198.7	195.1
India	14.7	14.1	13.7	85.5	87.8	88.2	41.8	39.1	34.1	16.7	22.6	28.9	98,212	165,186	9.7	19.3	20.1
Indonesia	22.6	28.1	27.1	66.7	64.4	61.9	25.0	33.0	32.7	14.9	33.2	30.6	85,660	116,510	26.8	34.1	24.2
Japan	23.2	22.1	20.7	98.6	98.2	96.7	52.5	53.9	54.6	84.6	82.3	78.7	595,138	581,579	9.1	14.3	12.7
Korea	23.7	28.9	29.4	98.4	97.7	96.8	46.7	54.3	55.1	54.8	75.3	75.8	285,484	373,207	26.5	39.3	49.7
Malaysia	25.5	32.4	27.9	85.0	86.4	85.1	51.6	47.4	46.1	62.9	72.3	64.5	140,980	157,337	78.9	117.5	96.4
Philippines	22.4	22.1	21.1	61.3	95.6	93.0	30.7	38.9	45.3	39.4	81.5	79.6	41,224	39,530	31.4	46.1	32.2
Singapore	22.5	26.0	23.8	96.0	97.5	96.7	67.0	77.0	75.0	70.5	72.8	69.3	229,708	270,998	162.0	229.7	224.8
Thailand	29.0	35.9	37.4	91.3	88.3	83.7	21.4	42.0	46.2	38.1	61.9	59.6	110,160	151,896	38.0	73.6	68.4

Source: UNIDO: Industrial Development Report 2011

ADB Key Indicators for Asia and the Pacific 2012

Vorld Bank's World Development Indicators, accessed on 21 September 2012

Asia posted an average annual economic growth rate of 8 percent for the past two decades (World Bank 2009). The combination of higher economic growth rates and lower population growth resulted in the significant reduction in poverty incidence for most of the countries. Indonesia, for instance, reduced its poverty incidence by 30 percent in urban areas and 50 percent in rural areas between 2006 and 2011 based on the USD 1.25-a-day poverty line data from the World Bank. The experience of Viet Nam has also been remarkable as its poverty rate declined by 40 percent from 2004 to 2008 (World Bank 2012). The Philippines, however, has a relatively high poverty incidence, implying that economic growth has not been inclusive compared with other countries (Table 3.5).

East Asia's emergence from a group of mostly low-income countries to a global factory has been highly regarded (Kawai and Wignaraja 2011). However, the experience of Japan, Korea, Taiwan, and Hong Kong—which is that of growth with equity—could not be replicated by other countries. This is largely because economic growth in these economies was not heavily dependent on FDI.

After the 1980s, economic growth has been uneven and development has not been widespread. Economic and productive forces that coalesce in areas where foreign firms decide to locate have skewed income distribution and caused some peripheral areas to be neglected. In other words, because of

agglomeration economies, there exist in each country some small areas of intense economic concentration driving national economic growth, which has caused income gaps to widen (Hamaguchi 2009).

Among the countries in the region, 'withincountry inequality' is highest in China and Thailand. In China, the disparity between the coastal areas and the interior has widened, while in Thailand the development of the core and noncore regions has diverged. Inequality in the Philippines may not be as high, but its Gini score did not improve much over time and has been historically high. With a Gini score of 0 implying complete equality, the country's Gini coefficient dropped slightly from 43.8 in 1991 to 43.0 in 2009, which is still within the 'high inequality' threshold. The same is true for most of the countries in the region (ADB 2012b). In effect, "although the income disparity between regionally integrated countries is shrinking, the income disparity within each country is rising" (Hamaguchi 2009).

The inequality in opportunities is by no means an accident, just as it is not a coincidence that production concentrates in big cities and opulent countries (Hamaguchi 2009). The infrastructure and amenities in these areas like roads, telecommunications, and access to skilled labor attract trade and investments from abroad. One stylized fact about globalized trade is that it puts premium on skilled workers (Intal et al. 2010).

Table 3.5. Poverty and inequality in East Asia

	Population in Poverty (in percent) 1/				
China	4.2 (2008)	15.9 (2005)	0.415 (2005)		
Indonesia	14.2 (2009)	18.7 (2009)	0.368 (2009)		
Malaysia	3.6 (2007)	2.0 (2009) 3/	0.462 (2009)		
Philippines	26.5 (2009) 4/	22.6 (2006)	0.448 (2009) 4/		
Thailand	8.5 (2008)	10.8 (2009)	0.536 (2009)		
Viet Nam	13.5 (2008)	13.1 (2008)	0.376 (2008)		

Sources/Notes:

- 1/ http://www.adb.org/documents/books/key_indicators/2009/xls/MDG-1-01A.xls
- 2/ WB World Development Indicators
- ³/ less than 2.0 percent; from ADB Basic Statistics 2011
- 4/ Based on National Statistical Coordination Board of Philippines (NSCB) data

This is true especially in the case of the Philippines where the majority of foreign trade and investments are centered on manufacturing electronic products and providing business process outsourcing services, which require special skills and technical expertise. Hence, these sectors offer few opportunities for the many low- and semi-skilled workers. Since the requirement is high, the remunerative wage offered by these industries is also very competitive, creating a huge wedge between skilled and unskilled workers.

Regional Economic Integration and Inclusive Growth in the Philippines

Subsectors affected by the regional economic integration

The Philippines participates in regional production networks primarily through exports of manufactured automotive and electronics parts and components. These manufactured exports, however, are considered as those belonging to the low valueadded segments of the manufacturing sector, are labor intensive, and highly import dependent. In addition, the country has been operating in a narrow range in these industries' value-added chains. Thus, backward linkages to these local industries have remained limited (Aldaba and Aldaba 2010). On the other hand, other manufacturing subsectors such as textile, wood, rubber, and basic metal have stagnated or declined (Intal and See 2006). As a result, there has been low growth in the manufacturing sector as a whole in terms of output and employment due to some constraints, indicating that the country has not been able to take advantage of the regional production networks as much as the other countries did.

Meanwhile, there was significant growth in some manufacturing subsectors that are net exporters, more capital intensive, and technology intensive such as electronics, machineries and automotive parts, and chemicals, among others.

particularly the Electronics, semiconductor assembly, packaging, and testing, largely comprised the total exports (around 65%) in manufacturing for the past decade (Aldaba and Aldaba 2010). The automotive parts, particularly wiring harnesses and transmissions, have also been one of the major exports of the Philippines. There had also been significant expansion in electrical machinery, appliances, and supplies during the past two decades (Intal et al. 2010). However, as mentioned earlier, these subsectors have higher educational requirements resulting in limited participation of the less educated (World Bank 2010).

Meanwhile, the manufacturing subsectors that could potentially employ more of the labor services offered by the poor did not grow as much. A number of so-called low-skilled, labor-intensive manufacturing subsectors, specifically processed food products and ready-made garments, seemed to benefit from the tariff reductions provided for in the Philippines-Japan Economic Partnership Agreement. From 2008 to 2009, export volumes of the following products increased by at least 20 percent: women's skirts, cotton-made (72%); coconuts, prepared (36%); women's coats, cotton (35%); mackerel, prepared (35%); and bananas and mangoes, prepared with sugar (20%), among others (Medalla and Ledda 2013). However, these manufacturing subsectors are not major export players. As a result, absorption of low-skilled labor that can be drawn from a large pool of less-educated (who are essentially the poor) labor force has not significantly increased.2

Moreover, there are also some agricultural products that have gained from tariff reductions through increased export volumes. These include coconut oil, fresh bananas, pineapple and pineapple products, tuna, seaweeds, shrimps, and prawns, among others (SEPO 2012; Medalla and Ledda 2013). These subsectors absorb a significant number of less-educated workers.

Proportion of less-educated workers in the following manufacturing subsectors are as follows: food products and beverages (28.4% in 2004 to 22.7% in 2010); textiles (40.1% in 2004 to 38.4% in 2010); and wearing apparel (24% in 2004 to 22.3% in 2010).

Absorption of less-educated³ workers in selected subsectors

During the period 2010–2011, agriculture/hunting/forestry and wholesale/retail trade sectors had been the two largest sources of employment in the country, accounting for 28.7 percent and 19.7 percent, respectively, of the total employment (Figures 3.1a and 3.1b). The manufacturing sector ranked third in terms of employment share, with 8.3 percent in both periods.

Agriculture-related workers are predominantly rural dwellers. The small share of agricultural employment in urban areas might be explained by the presence of a few agricultural workers in barangays that are classified as urban. The majority of workers in the manufacturing sector, however, are found in urban areas because many of the manufacturing firms are also operating in urban areas (Figure 3.2). For instance,

hundreds of electronics companies that are operating in the country are located in special economic zones, which are mostly in urban areas.

A significant number of workers are less educated. Around 70 percent of the estimated 11.9 million less-educated workers are absorbed by the top three employers, namely: agriculture/hunting/forestry, wholesale and retail trade, and manufacturing. Among these, however, the agriculture/hunting/forestry sector has the highest share of less-educated workers. In the manufacturing sector, around 0.7 million or 22 percent of the total workforce is less educated (Figure 3.3). It is clear in Figures 3.4a to 3.4d that as the level of education goes up, workers also tend to shift away from the agriculture/hunting/forestry sector toward those that require a higher level of education.

Among the subsectors⁴ that have benefited from regional economic integration and have posted

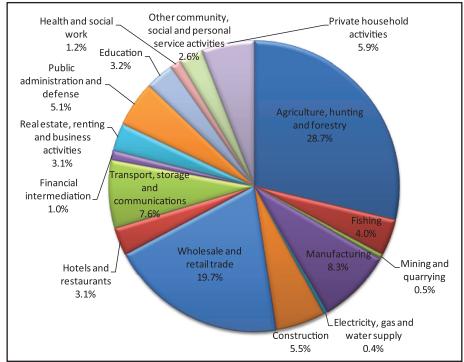


Figure 3.1a. Percentage share of each sector to total employment, 2010

Source of basic data: Labor Force Survey (LFS) [January 2010], NSO

³ For this study, less educated refers to having a highest educational attainment that is equivalent to elementary graduate or below (including no formal education). This definition was also adopted in the Philippines Skills Report prepared by the World Bank in 2010. Findings barely changed when those who spent one or two years in high school were included in the 'less-educated' group.

⁴ The LFS January 2010 data set was utilized since it has more disaggregated subsectors (4-digit Philippine Standard Industrial Classification (PSIC) codes or classes), compared to the LFS July 2011 data set (with only 2-digit PSIC codes or divisions).

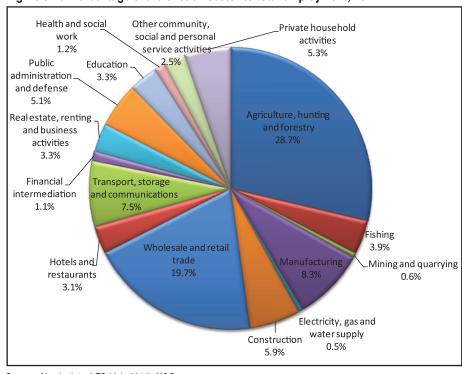


Figure 3.1b. Percentage share of each sector to total employment, 2011

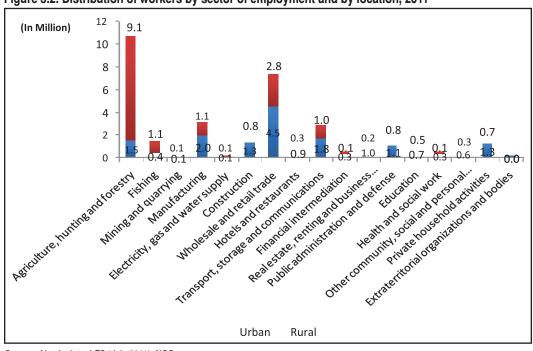


Figure 3.2. Distribution of workers by sector of employment and by location, 2011

Source of basic data: LFS (July 2011), NSO

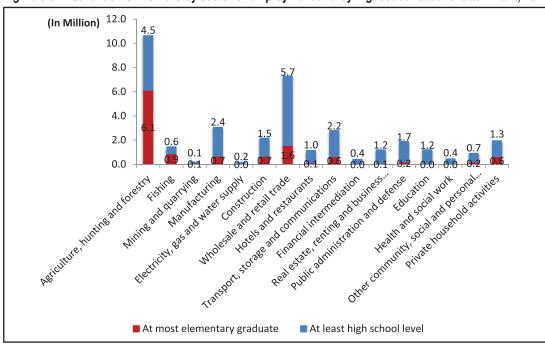


Figure 3.3. Distribution of workers by sector of employment and by highest educational attainment, 2011

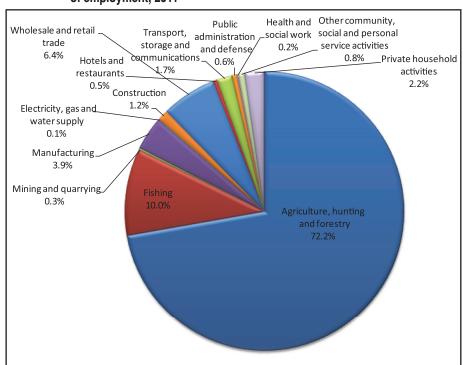


Figure 3.4a. Distribution of workers who have no formal education by sector of employment, 2011

Source of basic data: Labor Force Survey (LFS) [January 2010], NSO

Education Health and Other community, Public Private household social and personal administration and 0.1% social activities service activities defense work Real estate, renting 5.5% 1.7% 1.7% and business activities 0.1% 0.5% Financial intermediation 0.0% Transport, storage and communications 5.5% $Hotels\, and\,$ Agriculture, hunting restaurants Wholesale and retail and forestry 1.1% trade 50.5% 13.5% Construction 5.9% Manufacturin Electricity, gas and watersupply 0.1% Mining and quarrying 0.8%

Figure 3.4b. Distribution of workers who have elementary education by sector of employment, 2011

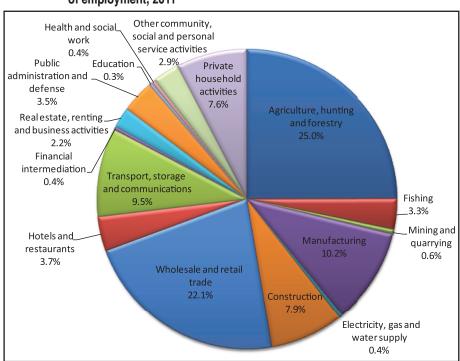


Figure 3.4c. Distribution of workers who have secondary education by sector of employment, 2011

Source of basic data: LFS (July 2011), NSO

Private household Other community, activities social and personal 2.0% service activities Fishing 2.9% 1.0% Agriculture, Mining and quarrying Health and social hunting and 0.3% work forestry Electricity, gas 3.6% 8.1% and water supply Education Manufacturing 1.0% 10.7% Construction 3.3% **Public** administration and defense 11.3% Wholesale and retail trade Real estate, renting 23.8% nd business activities 8.0% Financial intermediation Transport, storage 3.4% Hotels and and communications restaurants 7.3% 4.8%

Figure 3.4d. Distribution of workers who have college education by sector of employment, 2011

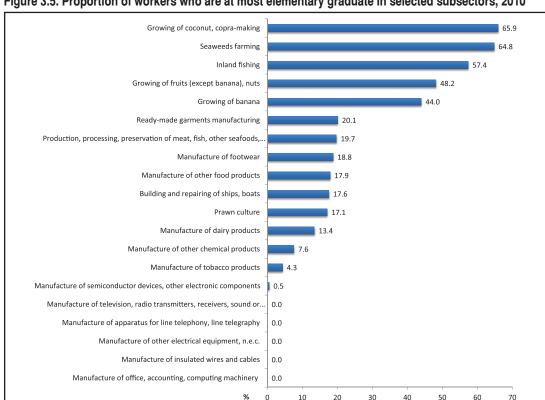


Figure 3.5. Proportion of workers who are at most elementary graduate in selected subsectors, 2010

Source of basic data: LFS (January 2010), NSO

high exports in recent years, the agriculture- and fishery-related sectors absorbed the most number of less-educated workers (i.e., 44–66% of their total workforce) (Figure 3.5). Low-skilled, labor-intensive manufacturing subsectors such as processed food, garments, and footwear also employed more less-educated workers, comprising around one-fifth of their total workforce. Except for tobacco products, some skilled labor-intensive and more capital-/technology-intensive manufacturing subsectors like semiconductors and chemical products, however, absorbed only few less-educated workers (less than 10% of their workforce).

In general, less-educated workers receive relatively lower wage than those with higher educational attainment. The 2010 Philippines Skills Report (World Bank 2010) and other studies on human capital noted that additional investment in formal education increases potential earnings. In particular, the estimated returns to schooling are significantly higher for higher levels of education, i.e., high school graduate and higher. Using Mincerian

wage analysis, World Bank (2010) estimated the annual wage returns to completion of different levels of formal education as follows: 6–8 percent for elementary; 5–10 percent for high school; 9–12 percent for some college; and 16–18 percent for college degree or postgraduate studies.

The wages received by less-educated workers in rural areas are even lower. Urban-rural wage gap is more evident in the manufacturing sector than in agriculture (Figure 3.6). Less-educated urban workers in many manufacturing subsectors receive relatively higher wages than their rural counterparts, especially in dairy products, tobacco products, television/radio transmitters/etc., semiconductors, and other electrical equipment (Figure 3.7).

Labor supply from the poor

That educational attainment tends to increase with income is apparent in statistics from the National Statistics Office (NSO). As can be gleaned from Figure 3.8, the educational attainment of the poorest quartile is lowest among the four income groups. The

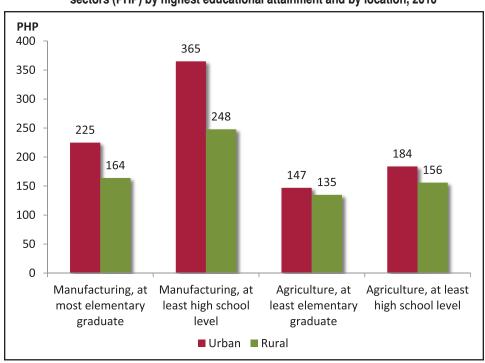


Figure 3.6. Average daily wage of wage/salary workers in agriculture and manufacturing sectors (PHP) by highest educational attainment and by location, 2010

Source of basic data: LFS (January 2010), NSO

Manufacture of other chemical products Manufacture of dairy products Manufacture of apparatus for line telephony and line telegraphy Manufacture of other electrical equipment, n.e.c. Manufacture of televesion and radio transmitters, receivers, sound and video recording Manufacture of insulated wires and cables Manufacture of tobacco products Manufacture of semiconductor devices and other electronic Manufacture of office, accounting and computing machinery Manufacture of other food products Building and repairing of ships and boats Production, processing, preservation of meat, fish, other seafoods, fruit, vegetables, oils, fats Ready-made garments manufacturing Manufacture of footwear ■ Rural ■ Urban 700 PHP 100 200 300 400 500 600

Figure 3.7. Average daily wage of less-educated wage/salary workers in manufacturing subsectors (PHP) by location, 2010

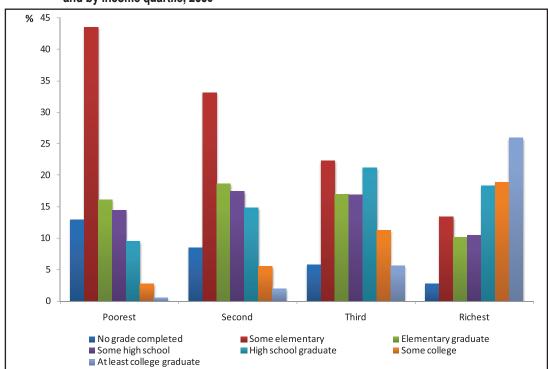


Figure 3.8. Percentage distribution of workers (aged 25 and over) by highest educational attainment and by income quartile, 2009

Source of basic data: Matched files of Family Income and Expenditure Survey [FIES] (2003, 2006, and 2009) and LFS (January 2004, 2007, and 2010), NSO

poorest quartile has the lowest proportion of workers that are at least high school graduates. Meanwhile, the richest quartile has the highest proportion of workers that are college undergraduates or have a college degree. This pattern is evident in the shifting of the distribution of educational attainment toward the right as income increases. Table 3.6 shows that this positive relationship between the educational attainment and per capita income is observed over time, from 2003 to 2009.

Because the majority of the poor, particularly the chronic poor (Figure 3.9), are less educated, the employment opportunities for this segment of the population are greater in subsectors such as crop growing, fishing, as well as manufacturing of garments, footwear, and food products—areas which require lower skills. In fact, the majority of the chronic poor workers who are less educated are found in agriculture/hunting/forestry and fishery sectors (Figure 3.10). There are also some who are absorbed in sectors such as wholesale/retail trade, manufacturing, construction, and private household

activities. Similar pattern is observed in rural areas since the chronic poor workers are predominantly rural dwellers (Figure 3.11).

Meanwhile, only a few subsectors that grew or have the potential to grow as a result of increasing regional economic integration—coconut growing, banana growing, seaweeds farming, and inland fishing sectors in particular—were able to absorb chronic poor workers, majority of whom are less educated (Figure 3.12). Unfortunately, wages in these subsectors are among the lowest, ranging from PHP 105 to PHP 228 per day (Figure 3.13).

It is thus important that these less-educated chronic poor workers get the highest possible pay for their level of education in order to reduce poverty. Some of the manufacturing subsectors, particularly those that are linked to regional production networks, offer relatively higher wages to their less-educated workforce. For instance, a few ones who are employed in the skilled labor-intensive and more capital-intensive manufacturing of semiconductor devices receive a very high wage

Table 3.6. Percentage distribution of workers (aged 25 and over) by income quartile and by highest educational attainment (2003, 2006, 2009)

Income Quartile	No Grade Completed	Some Elementary	Elementary Graduate	Some High School	High School Graduate	Some College	At least College Graduate	All
2003								
Poorest	15.4	43.1	16.1	13.7	8.5	2.6	0.4	100.0
Second	11.2	34.2	17.6	16.6	13.5	5.6	1.4	100.0
Third	6.5	24.2	17.1	17.6	18.4	11.1	5.1	100.0
Richest	4.6	15.1	10.3	12.5	18.3	17.8	21.5	100.0
Total	8.6	27.1	14.9	15.1	15.5	10.4	8.6	100.0
2006								
Poorest	14.6	44.1	16.3	14.1	7.4	3.0	0.5	100.0
Second	8.9	32.7	19.0	18.0	14.6	5.2	1.6	100.0
Third	6.1	24.0	16.5	15.7	21.2	11.4	5.2	100.0
Richest	3.9	14.6	9.6	10.6	19.5	17.6	24.2	100.0
Total	7.6	26.7	14.9	14.3	16.6	10.4	9.5	100.0
2009								
Poorest	13.0	43.6	16.2	14.5	9.5	2.8	0.6	100.0
Second	8.5	33.1	18.7	17.4	14.9	5.5	1.9	100.0
Third	5.7	22.3	17.0	16.9	21.2	11.3	5.6	100.0
Richest	2.8	13.4	10.1	10.5	18.4	18.9	25.9	100.0
Total	6.8	25.9	15.1	14.6	16.7	10.7	10.2	100.0

Source of basic data: Matched files of FIES (2003, 2006, and 2009) and LFS (January 2004, 2007, and 2010), NSO

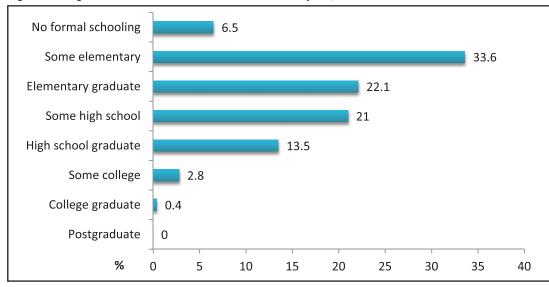


Figure 3.9. Highest educational attainment of the chronic poor, 2009

Source of basic data: Matched files of FIES (2003, 2006, and 2009) and LFS (January 2004, 2007, and 2010), NSO

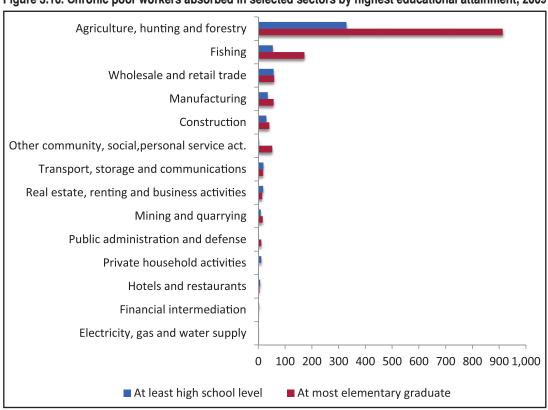


Figure 3.10. Chronic poor workers absorbed in selected sectors by highest educational attainment, 2009

Source of basic data: Matched files of FIES (2003, 2006, and 2009) and LFS (January 2004, 2007, and 2010), NSO

of PHP 345 per day (Figure 3.13). There are also less-educated workers in other manufacturing subsectors such as dairy products, chemicals/chemical products, and meat/fish production/

processing/preservation, who receive above PHP 200 per day as their basic pay. However, workers with similar educational attainment in some low-skilled, labor-intensive manufacturing subsectors

% 100 90 80 70 60 50 40 30 20 10 Rural

Urban

Figure 3.11. Location of the chronic poor workers, 2009

Source of basic data: Matched files of FIES (2003, 2006, and 2009) and LFS (January 2004, 2007, and 2010), NSO

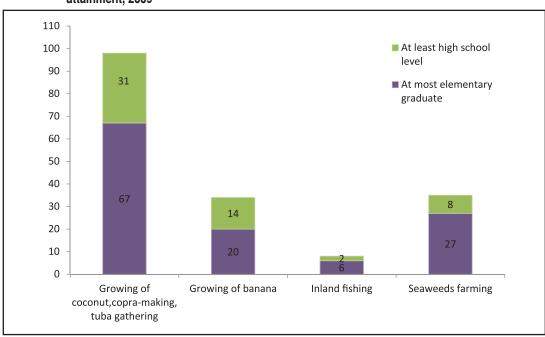


Figure 3.12. Chronic poor workers absorbed in certain subsectors by highest educational attainment, 2009

Source of basic data: Matched files of FIES (2003, 2006, and 2009) and LFS (January 2004, 2007, and 2010), NSO

such as garments, apparel, and other food products receive an average daily wage ranging only from PHP 100 to PHP 200, which are comparable with wages in agriculture-related subsectors, particularly crop growing.

Role of the Manufacturing Sector in Inclusive Growth: A Summary

This section explains how the stagnation in the manufacturing sector of the Philippines has contributed to a higher poverty incidence compared with its neigh-

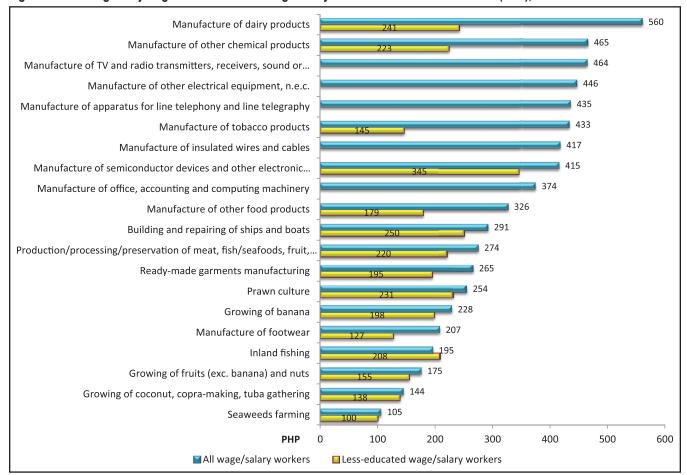


Figure 3.13. Average daily wage of less-educated wage/salary workers in selected subsectors (PHP), 2010

Source of basic data: LFS (January 2010), NSO

boring countries (Table 3.5). This would also explain why regional economic integration did not foster inclusiveness in the Philippines.

First, the effect of education on poverty is clear. Data from the Family Income and Expenditure Survey (FIES) show that families whose household head has a lower educational attainment have a higher incidence of poverty (Table 3.7). For example, in 2009, the poverty incidence of families whose household head only completed an elementary education is 34.1 percent. For families whose household head completed high school, the poverty incidence falls to 16.6 percent. Meanwhile, the poverty incidence for those who completed college is only 1.7 percent.

Second, there is a large discrepancy between the level of education of the workforce in the service sector and that of the manufacturing sector. As can be observed in Figures 3.14 and 3.15, which show the frequency distribution of workers in both sectors by highest educational attainment, in 2001 and 2010, respectively, the workforce in the manufacturing sector has a relatively lower educational attainment. The service sector employs more college graduates while the manufacturing sector employs more high school graduates. Data for 2001 and 2010 are presented to address the possibility that the service sector relied more on college graduates because of the surge in opportunities from the BPO sector.

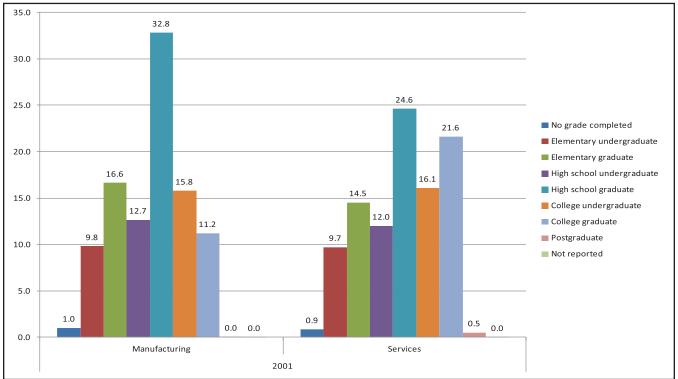
The third point, which is an important strand to the previous argument, is that because the manufacturing sector has a higher labor productivity, there would be more high-paying jobs in this sector. In other words, with the same

Table 3.7. Poverty incidence of families by highest educational attainment of the household head, 2003–2009

Household Head Educational	Poverty Incidence			
Attainment	2003	2006	2009	
Poverty incidence	20.0	26.4	26.5	
No grade completed	44.4	56.1	62.4	
Elementary undergraduate	36.8	44.6	46.6	
Elementary graduate	25.4	36.0	34.1	
High school undergraduate	20.7	28.3	30.3	
High school graduate	11.1	16.5	16.6	
College undergraduate	4.5	6.9	7.5	
At least college graduate	1.0	1.2	1.7	
Postgraduate	0.8	0.0	0.0	

Sources of basic data: FIES (2003, 2006, and 2009), NSO

Figure 3.14. Frequency distribution of workforce in manufacturing and services by highest educational attainment, 2001



Sources: LFS (January 2001), NSO

educational attainment, a typical worker would find a higher-paying job in the manufacturing sector than in either the agriculture sector or the service sector. Data show that the manufacturing sector, on average, has five times labor productivity than the agriculture sector and 2.5 times the labor productivity of the service sector (Table 3.8). This is supplemented by data showing that on average, the manufacturing sector pays out higher wages (Table 3.9). For example, the average wage rate in 2009 for high school graduates and those with a high school education is PHP 264.60. For the same levels of education, the average wage rate is PHP 209.40 in the service sector. However, this opportunity in the manufacturing sector is not enjoyed by its workers because most of them are less educated. A higher

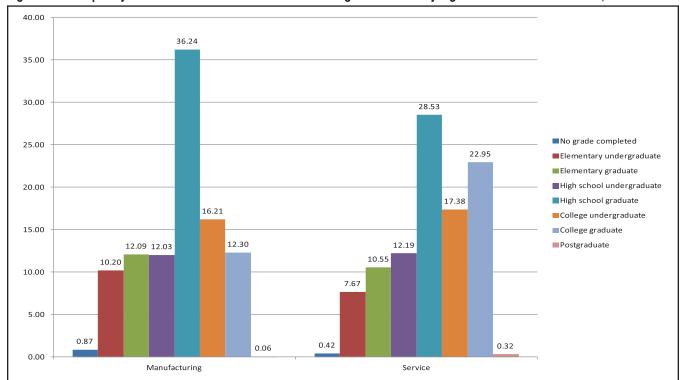


Figure 3.15. Frequency distribution of workforce in manufacturing and services by highest educational attainment, 2010

Sources: LFS (January 2010), NSO

Table 3.8. real value added per worker (PHP)^a

					Ratio			
	Agriculture	Industry	Services	Manufacturing	Industry to Agriculture	Industry to Services	Manufacturing to Agriculture	Manufacturing to Services
1995	15,621	70,931	33,474	77,473	4.5	2.1	5.0	2.3
2000	18,385	74,788	33,701	84,291	4.1	2.2	4.6	2.5
2005	19,033	81,434	36,765	95,964	4.3	2.2	5.0	2.6
2009	21,473	93,050	39,723	112,594	4.3	2.3	5.2	2.8

Source of basic data: National Statistical Coordination Board of Philippines (NSBC). National Accounts of Philippines; National Statistics Office Index of Labor Force Statistics Note: a/ - Defined as value added divided by total employment in the sector. Each entry is a three-year average of the year indicated, the previous year, and the succeeding year, using 1985 prices.

Table 3.9. Average daily basic pay of wage workers (PHP), 2010

	Manufacturing Sector	Services Sector
Elementary graduates,		
elementary education	198	164.7
High school graduates,		
high school education	264.6	209.4

Source of basic data: LFS (January 2010), NSO

educational attainment and thus higher level of skills typically lead to a higher paying job which could facilitate poverty reduction. Moreover, a more dynamic manufacturing sector would have provided more higher-paying jobs to the less-educated workforce, thereby making poverty reduction faster. This report also considers, however, the fact that non-inclusive growth and poverty are multidimensional issues that are influenced by other factors (e.g., poor physical infrastructure, inequitable access to health and education, lagging performance of small and medium enterprises, weak institutions).

The Philippines presents a case where the adjustment process that comes with increased economic integration and globalization has also induced socially undesirable outcomes (Intal et al. 2010). While the Philippines may have been successful in significantly changing its trade structure and latching on to regional production networks—being the region's major supplier of technology-intensive semiconductors—the country's manufacturing sector stagnated and failed to generate needed growth and employment for the economy. The malaise in the manufacturing sector meant less high-productivity employment opportunities and lower wages for workers without tertiary education. This could partly explain why the Philippines has lagged behind many East Asian countries in terms of poverty reduction.

Latest statistics show that the population poverty incidence in the Philippines increased from 26.4 percent in 2006 to 26.5 percent in 2009. This means an estimated 970,000 people were added to the 22.2 million poor Filipinos in 2006. The incidence of poverty is likewise highest in the peripheral regions of Caraga and Autonomous Region in Muslim Mindanao (ARMM) and lowest in the NCR and its neighboring regions, where most export processing zones are located. This lends empirical support to the view that activities related to trade and FDI tend to concentrate in national capitals and their neighboring areas. As a result, some areas are unable to take advantage of the economic and productive opportunities in the country.

Strategies for Inclusive Growth

Inclusive growth, as defined in the literature, means broad-based growth with encompassing benefits that can reach the marginalized and the disadvantaged such as the poor in developing countries who are mainly engaged in agriculture and are rural dwellers. It can thus be equated to growth that is pro-poor, pro-employment, pro-agriculture, and pro-rural development. In addition, the World Bank noted that productive employment—one that provides increased income for the poor—is assumed to be the main instrument for a sustainable and inclusive growth.

The poor can benefit more from regional economic integration by increasing the demand for less-educated labor in higher-paying sectors like manufacturing so that more of them can earn higher wages. It follows then that a good strategy to promote inclusive growth is to revive and develop the manufacturing sector so that it can participate in and benefit more fully from regional production networks, thereby leading to greater labor demand. However, it should also be recognized that the manufacturing sector absorbs only 8.3 percent of the total number of workers of which 23 percent are less educated. Assuming an annual growth rate of 5 percent or higher, the manufacturing sector can only absorb a small proportion of the less-educated workers. Apparently, there are many more poor workers who are looking for higher-paying jobs. If the government aims to reduce poverty more quickly, it is also a good strategy to increase productivity in the agriculture, fisheries, and forestry sector, where 74 percent of the chronic poor workers are currently employed.

Moreover, it is also important that the quality of labor being supplied by the poor be enhanced so that more employment opportunities would be opened to them. At the same time, improving labor quality would have long-term positive impact on technical, skill-intensive manufacturing firms that participate in regional production networks, such as electronics, machineries, chemicals, and high-technology agro-industry (World Bank 2010). In fact, the 2010 Philippines Skills Report noted that manufacturing firms with higher proportion of skilled workers, or those with at least some high school,⁵ tend to be more competitive. Hence,

⁵ World Bank (2010) considered education as an indirect measure of intermediate and advanced skills, i.e., academic, generic and technical, and defined skilled workers as those with at least some high school.

programs aimed at improving human capital such as the 4Ps is very timely and relevant.

Way Forward: Reviving the Manufacturing Sector

To revive the manufacturing sector, the government needs a strong, diversified, inclusive, and sustained growth model where the industrial sector plays a key role in generating investment, employment, and innovation. In laying the foundations that would allow manufacturing to become a major growth driver, it must be transformed and upgraded. To jumpstart the upgrading process, a comprehensive industrial strategy must be crafted that focuses on measures to enhance firm productivity, link domestic firms with multinational companies, and aggressively entice more investments. Measures to deepen linkages with multinational firms' international production networks and policies to provide export assistance, boost the survival of new entrants, and help small and medium enterprises to grow and develop are also important. Improving technological capabilities and strengthening supply chains are necessary to enable firms to move up the technology scale.

Making domestic firms internationally competitive is a major challenge that would require government support and close coordination among local and national government agencies and the private sector. It is important to identify the different industrial activities where the Philippines may have potential opportunities for sustained growth and employment generation and to focus improvements in infrastructure on areas that will encourage these activities. The most binding constraints affecting the growth and development of these activities must be identified. To address these, formulating horizontal and vertical measures will be necessary. A coordination mechanism must also be designed to allow more interaction with industries in identifying obstacles and determining the most appropriate interventions.

Horizontal measures are broad-based interventions, which include protection of property rights, improvement of overall business and investment environment, and R&D strategies.

Vertical interventions are "targeted" ones and focus on specific firms, industries, and sectors. They include selected provision of subsidized loans, subsidies, tax incentives and infrastructure provision, and human capital development for specific industries. Lin (2011) notes that through vertical measures like time-limited tax incentives, co-financing investments, or access to raw materials, the government can compensate the externalities created by first movers (Box 3.1). These measures can also serve as incentives for encouraging firms to form clusters. Lin emphasizes that the incentives provided by the government could and should be limited both in time and in financial cost, and should not be in the form of monopoly rent, high tariffs, or other distortions so as to avoid rent seeking and political capture.

Coordination mechanisms such as industry councils should also be designed to allow more interaction with industries in identifying obstacles and determining the most appropriate interventions. These could also help in sharing information on investment ideas, achieving coordination, and facilitating changes in legislation and regulation to support private investments. It is important to note that sufficient caution must be exercised to avoid unintended rent transfers to well-connected entrepreneurs and selfinterested government officials. Thus, strong political leadership at the top is critical as well as competent and honest bureaucrats, along with the incorporation of check-and-balance mechanisms in public support programs. Usui (2011) identified certain principles in designing public support measures: clear objectives and targets, monitoring and evaluation mechanisms with performance indicators and benchmarks, sunset clauses and exit strategies, simple and flexible interventions, cost recovery schemes, and participatory and transparent public-private dialogue.

Nomura Research (2010) indicated that the Philippines has comparative advantage in subsectors like printers, multifunction peripheral, projectors, scanners, digital cameras, and shipbuilding and repair. Nomura identified missing linkages in the electronics supply chain such as photovoltaic cell, LEDs, rechargeable batteries for hybrid electric vehicles and

Box 3.1. Addressing externalities through government's facilitative role

Market and coordination failures are inherent to the process of industrial upgrading and must be addressed through government's facilitative role. For instance, starting a new industry may be difficult because of the lack of complementary inputs or adequate infrastructure for the new industry even if the targeted industry is consistent with the economy's comparative advantage determined by its factor endowments. Private firms will not be able to internalize the investments of those intermediate inputs or infrastructure in their upgrading or diversification decisions. Hence, the government has a crucial role to play in providing or coordinating investments in necessary infrastructure and complementary inputs.

Another market failure is caused by important information externalities. Economic innovations (whether successful or not) yield information about profitable and unprofitable market opportunities. But because much of this information is available not only to the innovators themselves but also to competitors and potential imitators, who do not bear any of the costs of the innovation, it will tend to be undersupplied by the market. Government subsidies are one possible mechanism for encouraging innovation and offsetting this first-mover disadvantage.

Source: Lin (2011)

mobile digital devices, and next-generation energy infrastructure as possible areas for investment in the country. Nomura (2012) also indicated potentials in shipbuilding and repair especially in view of plans by Korea and Japan to expand their overseas market.

Given its popularity and high trust rating, the Aquino government is expected to continue implementing solid reforms and actions to overcome the difficult challenges in realizing the country's potentials. The Philippines is well positioned to attract new investments that would catalyze growth and development of the manufacturing industry through the strong collaboration among national agencies, local government units, and the private sector to improve the country's infrastructure and investment climate. This outlook appears to be realistic considering as well the country's strengths that include low and stable wages; its abundant supply of young, skilled, and English-speaking workers; and a roadmap that provides the strategy and direction for the upgrading, diversification, and transformation of the manufacturing industry.

By creating the proper environment and ensuring that domestic industries are not disadvantaged by international competitors, the government can promote the success of local firms both in the domestic and international markets that will lead to economic transformation. Only with the right environment can manufacturing unleash its full potential to become an engine for sustained and inclusive growth and job creation.

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4 Promoting Inclusive Growth through the 4Ps

Celia M. Reyes, Aubrey D. Tabuga, Christian D. Mina, and Ronina D. Asis

HE PREVIOUS CHAPTER has shown that the participation of the poor in the economic growth has been constrained for two reasons. First, their low level of education has limited their participation in the fast-growing sectors. Second, the limited growth in the sectors in which they are employed did not allow all of the poor to be engaged productively. This chapter aims to show how a conditional cash transfer (CCT) program can promote inclusive growth by increasing the employment opportunities for the poor. In particular, this chapter looks at the Philippine version of the conditional cash transfer program, the 4Ps.

Year 2013 marks the fifth year of the 4Ps' implementation since its inception in 2008. The first batch of beneficiaries will be graduating in several months' time. Meanwhile, the government continues to expand the implementation, devising several variants that it deems necessary to address the many facets of poverty. As program graduation nears, many questions arise as to what to expect of this most expensive social protection program of the Philippine government. It is rather fitting at this point to draw together assessments of the program that have been conducted so far and to look into some issues that it has encountered.

By framing the issues, we can achieve two objectives. First, we would know what things to look out for in fine-tuning this program if necessary. Second, we can come up with concrete bases and useful insights that can be utilized to modify or enhance existing programs to function in complement to the 4Ps or to create new ones, if necessary, to serve the same purpose. This chapter proceeds by providing a comprehensive review of the literature on the Philippines' 4Ps experience followed by a listing of outstanding issues not only in terms of the design and implementation of the program but, most importantly, on the aspects that have a bearing on its ability to help the poorest of the poor with respect to enhancing human capital.

The chapter starts with a brief description of the 4Ps. A review of the assessments that have been conducted so far in terms of impact on school enrollment, targeting, and poverty follows. The next section discusses the design and implementation issues. The insights partly revolve

around the experience of Latin American countries from where the 4Ps is supposed to be modelled. The paper also looks at the situation of Filipino children in terms of school participation, the salient features of the program design, and how best the 4Ps could be fine-tuned for it to achieve greater impact. After this, an assessment of the characteristics of 4Ps beneficiaries based on the 2011 APIS is presented. This is followed by an analysis of school attendance of children in matched 4Ps and non-4Ps families. The chapter concludes with some recommendations.

Features of the 4Ps (the Philippine CCT)

The 4Ps is a social program that entails monetary and nonmonetary transfers to the poor or poorest families who have school-aged children on the condition that they meet the program's terms that are aimed at improving their capacities (Cecchini and Madariaga 2011). Brazil and Mexico were the first countries that implemented the 4Ps program. The main objective was to provide cash to families who are in extreme poverty in exchange for some education and health care commitments. Since then, many countries, including the Philippines, have attempted to replicate their examples.

The 4Ps is the Philippines' version of the CCT. Based on the Department of Social Welfare and Development (DSWD) primer, the 4Ps is a poverty reduction and social development strategy of the national government. It provides cash transfers to extremely poor households to help improve their health, nutrition, and education. The program specifically targeted poor families with children aged 0-14. The two main objectives of the program are social assistance and social development. The former aims to alleviate the poor's immediate needs, hence it can be termed as a short-term poverty alleviation measure. The latter, however, aims to break the intergenerational poverty cycle by investing in human capital. Meanwhile, the 4Ps helps in fulfilling the country's commitment in the Millennium Development Goals particularly in: (1) eradicating extreme poverty and hunger; (2) achieving universal primary education; (3) promoting gender equality;

(4) reducing child mortality; and (5) improving maternal health.

The 4Ps has two components, namely: health and education. Under the health component, the program provides PHP 6,000 annually (PHP 500 per month) to each family-beneficiary for their health and nutrition expenses. Under the education component, it provides PHP 3,000 per child for one school year (i.e., 10 months) for meeting educational expenses. Each family-beneficiary shall receive for up to a maximum of three children under the educational grant.

In return, the family-beneficiaries have to commit themselves to the following conditionalities: (1) pregnant women must avail of the pre- and postnatal care and be attended to during childbirth by a trained medical professional; (2) parents must attend family development seminars; (3) children aged 0–5 must undergo regular preventive health checks and receive vaccines; (4) children aged 3–5 must attend day care or preschool classes at least 85 percent of the time; (5) children aged 6–14 must enroll in elementary or high school and attend at least 85 percent of the time; and (6) children aged 6–14 must receive de-worming pills twice a year. The family-beneficiaries will receive the grant for at most five years, provided that they comply with the conditionalities.

The eligible beneficiaries of the 4Ps are families who meet the following criteria: (1) from the poorest municipalities; (2) whose condition is equal to or below the provincial poverty threshold; (3) with children aged 0–14 and/or a pregnant woman at the time of assessment; and (4) can agree to meet the program's conditionalities. The DSWD has chosen the poorest municipalities based on the results of the 2003 Small Area Estimates (SAE) generated by the NSCB. For municipalities with poverty incidence higher than 50 percent, all barangays are assessed. But for those with poverty rate lower than 50 percent, the criteria for selecting barangays are the "pockets of poverty" based on the available socioeconomic profile of the municipality.

To identify the poorest households within the selected municipalities, the DSWD uses the NHTS-

PR. The system employs a proxy means test (PMT) model to identify the poor families. The PMT model was estimated using data from the 2006 FIES and the 2006 LFS. The assessment is conducted by using certain proxy variables to predict income, such as ownership of assets, type of housing, education and employment of household head, and access to water and sanitation facilities. To verify compliance, the DSWD coordinates with the program's multisectoral Advisory Committee to conduct monthly verification through the Compliance Verification System developed for the program.

As of September 2012, the DSWD reported a total of 3,038,420 families that were reached and assisted by the 4Ps (Figure 4.1). From merely 340,391 beneficiaries in 2008, the number of beneficiaries increased by a rate of 54 percent per year, on the average.

Review of Assessments Conducted

This section focuses on assessments that have been done on the implementation and impact of 4Ps. The study closest to a rigorous assessment was recorded to have been conducted only this

year, 2012, which is four years after the rapid expansion of the 4Ps has taken place. The following assessments conducted so far, which have empirical data support, pertain only to 4Ps' impact on school attendance rate. The outcome of the targeting scheme was also discussed including the challenges met by program implementers. An ex-ante analysis of the effects of 4Ps on poverty is briefly presented to provide a picture of the expectations before the implementation of the program.

School enrollment

The most recent study done in the Philippines is that by Chaudhury and Okamura (2012). The study documented the causal effect of the 4Ps' program on school participation. It used a small selective sample survey to determine the impact of 4Ps on the objective of increasing school participation. Covering 900 households, with children aged 9–17, in nine municipalities in all three major island groups, the sample was split evenly between beneficiary (treatment) households and nonbeneficiary (control) households. The information on this came from their program status according to the 4Ps'

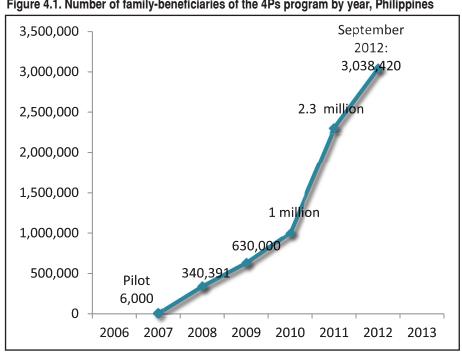


Figure 4.1. Number of family-beneficiaries of the 4Ps program by year, Philippines

Source: Department of Social Welfare and Development (DSWD)

central database. Households were surveyed in 2008 through the Household Assessment Form survey under the NHTS-PR for PMT purposes while the post-intervention data came from their 2011 assessment survey (follow-up).

To determine the effect of the 4Ps on school participation, the authors used difference-indifference method. The net impact of the program is the difference between the enrollment of 4Ps children and non-4Ps children, before and after program implementation. The paper also used Regression Discontinuity methodology. The paper shows that results are not significant for the overall sample of children aged 9-17. There was positive impact on school enrollment among children in the younger cohort aged 9-12 as of 2011. These are the children who received educational grants under the 4Ps program throughout the period. Overall, the estimated program effect for the younger cohort ranges between 6 and 17 percent. 4Ps beneficiary households are more likely to send their younger children to school compared to non-4Ps households.

However, the program was found to have no impact on increasing enrollment among the older cohort of children aged 13–17. The majority of children aged 15–17 were not receiving 4Ps grants as of 2011 since the age limit for coverage is 14 years old. The authors attribute this to larger cost associated with sending older children to school and the higher opportunity cost because they can get employed instead. To address this issue, many 4Ps programs (i.e., those in Bangladesh, Brazil, Mexico, Honduras, and Turkey) provide larger cash transfers to older children in order to compensate for the higher implicit/explicit cost associated with schooling.

Younger children who came from households with relatively smaller number of school-aged children seem to be benefiting more from the program, compared to those who came from larger households. No significant impact was found among children coming from households with more than three schoolaged children.

Targeting

One of the most controversial aspects of the program involves targeting. Fernandez and Olfindo (2011) noted that this program was rolled out to the poorest households. In particular, the DSWD and partner agencies had implemented the pilot program and established the targeting system necessary for expansion. The authors also marked that the targeting system based on the PMT model has produced good results since about 90 percent of the beneficiaries belong to the bottom 40 percent of the population while 72 percent belong to the poorest 20 percent based on the 2009 FIES. They also presented anecdotal evidence that the net education enrollment rates of children in the targeted households have increased while the number of children who have availed of the health services has also increased.

Poverty

An ex-ante analysis¹ of the ADB on the 4Ps education grants noted that if accurately targeted to children in all poor households nationwide, the education component alone could lift 31.1 percent of poor households out of poverty and could decrease the national poverty gap measure by 52.5 percent (ADB n.d.). The document further claims that since the 4Ps has targeted the poor areas, then the impact would be much larger. The estimated increase in the total incomes of the poor and eligible households in the targeted areas, according to World Bank, is 23 percent, where the poverty rate is expected to fall by 6.1 percentage points. To date, no study has been conducted yet that analyzes the actual impact of the 4Ps on the poverty level.

Implementation

Fernandez and Olfindo (2011) noted key challenges in the implementation of the 4Ps. Due to the complexity of the administrative processes involved in implementing such a program, the DSWD faced challenges in terms of availability of resources such as personnel, equipment, and budget. These challenges

An ADB project document obtained online from: http://www.adb.org/Documents/RRPs/PHI/43407/43407-01-phi-ea.pdf

were exacerbated by the rapid scaling up of the program which happened when the systems were still being developed. The study likewise noted that the "rigid institutional structure and weak procurement system" were constraints in the expansion of the program's human and capital resources. For instance, the staffing for the national Project Management Office (PMO) was only 69 percent of the positions needed by the end of 2010 and that for the regional PMO, only 74 percent of the approved positions. Delays in implementation were also caused by weak procurement system of the DSWD which hampered the necessary information technology systems in the regions. Moreover, key challenges involved the supply-side preparedness of the target areas. Because the program has been scaled up in a rapid pace, some municipalities with a high concentration of the poor with inadequate education and health facilities have been included in the program. Spot-check surveys conducted by the AusAID and the World Bank found the poor state of day care centers and school infrastructure as well as the lack of teachers in schools where children of family-beneficiaries attend. This lack of facilities has a major implication on beneficiaries' compliance with conditionalities.

Design and Implementation Issues

Much of the controversies about the 4Ps program stems from the design and implementation aspects. In this section, several questions are posted with the objective of determining whether or not there is a need to rethink the design and implementation should the program be extended or expanded in the future. More importantly, the analysis seeks to contribute to the debate on how programs of a huge scale such as the 4Ps should be designed to deliver the intended objectives.

The section dwells on the program intricacies as compared to known approaches and designs of 4Ps programs popularized by other countries particularly the model cases of *Oportunidades* of Mexico and *Bolsa Familia of Brazil*. At the same time, looking deeper into the challenges in the Philippines, in terms of human capital, is a critical aspect to determining whether the program was designed to address the current issues or

not and what should be done to ensure optimal results from such a heavily funded program.

What are the salient features of Latin American programs that are worth revisiting? Why are these necessary in ensuring that the program brings about optimal results in pursuing the objectives of the 4Ps program? Perhaps the key element in the design of the Oportunidades, on the educational component of the program in particular, is that it was designed to solve the important issues in school attendance rates. In particular, its design took into account the deficiencies such as the low attendance rates among older children. One of the most important aspects is the attention they have put in addressing the gender gap. Girls typically have lower school participation than boys, hence the program provided higher amount of cash assistance to girls. More importantly, it was designed to achieve long-term educational objectives, rather than short-lived improvement of educational indicators, and that is to see the children finish through at least high school.

In the Philippine case, data show that the challenges we face as a country are similar to those of Mexico in some cases but different in others. Older Filipino children also have lower attendance rates than younger ones, which is an understandable empirical fact. However, the 4Ps focuses on the younger age range, thus limiting the intervention to poor families with children 14 years old and below. This is despite the fact that school participation is higher among elementary school children than older ones.

The school attendance rate of elementary children (aged 6–11) was 94.42 percent in 2007 based on the APIS. In 2011, the estimate increased to 97.13 percent. At this high rate, it is plausible to expect that the impact of the 4Ps on school attendance could not go that large as the maximum of 100 is just around the corner. While we would certainly like to achieve universal access to basic education, the problem of non-attendance is more severe among older children. The attendance rate of children aged 15–18, for instance, was only 62.85 percent in 2007 and 65.47 percent in 2011, based on the APIS. If such group would have been targeted by

the program, the chances of making a great difference would have been simply larger.

This section proceeds by going through each issue while providing examples and lessons learned from the cases of other 4Ps-implementing countries.

Design of the 4Ps program in Latin American countries

The country can learn from the experience of other countries in terms of designing the 4Ps program. Table 4.1 shows the basic design of Mexico's *Oportunidades*, Brazil's *Bolsa Familia*, and Colombia's *Familias en Acción* in terms of the education component. These programs have several salient features to consider: (1) they targeted children aged up to 17 or senior year; (2) they provided differentiated amount of subsidy, with older children getting more than younger ones; and (3) gender disparity was taken into account, particularly by the *Oportunidades*, wherein the program provided more incentive for girls who have had lower tendencies to go to school than boys.

The special attention provided by these programs to older children, at least in terms of subsidy amount, draws from the fact that there is a greater opportunity cost for older children to go to school. In Mexico, the data for 2000 show that children start to drop out when they reach middle school (CWDA 2010). The rate goes lower as children get older. Hence, the *Oportunidades* provides assistance from

the third grade in elementary up to senior year. The assistance therefore covers 10 years of schooling at the maximum.

Both *Bolsa Familia* (Mourão and de Jesus 2012) and *Familias en Acción* target children aged up to 17 for the education component of the program. In 2001, enrollment rate of children aged 8–11 in Brazil was 97 percent while that of 15-year-olds was only 87 percent. Hence, the *Bolsa Escola* program, renamed *Bolsa Familia* in 2003, was launched in 2001 to address this (Glewwe and Kassouf 2010).

Aside from these, Latin American 4Ps programs have other design features that are worth considering. For instance, pilot programs of several variation of 4Ps have been successful in Bogota, Colombia, where the approach of postponing a lump-sum payment to ensure enrollment in a higher level did not affect attendance rates. In addition to the standard 4Ps program, they implemented a savings 4Ps and a graduation 4Ps. Mexico also provided incentive for finishing high school before the age of 22.

This perspective in targeting not only young but also older children has a bearing on what impacts to expect—that is, the program will likely lead to greater impact in terms of point percentages on school participation of children in the older age range. True enough, studies show that 4Ps programs have greater impact on older than younger children. A study on the Colombian case shows that the 4Ps increased school

Table 4.1. Selected characteristics of other 4Ps programs in terms of the education component

Program/Country	Age Range/Level	Amount of Assistance (per month)
Oportunidades (formerly Progresa), Mexico	Up to 22 years old/between 3rd grade to senior year in high school (prior to 2001, the coverage was 3rd grade to 9th grade)	60 to 225 Mexican pesos depending on the educational level, with those in higher levels (and women) getting more; Economic incentive for students who finish high school before the age of 22
Bolsa Familia, Bolsa Familia, Brazil	Up to 17 years old	Cash transfers to cover school supply R\$32 per child aged 15 and below; R\$38 per adolescent 16 to 17 years old
Familias en Acción, Colombia	Up to 17 years old	(youth benefit) Subsidy amount for secondary school children is twice that of primary school children

Sources: Fernald et al. (2008); Soares (2012); and Attanasio et al. (2005)

participation of 14- to 17-year-old children quite substantially, by 5–7 percentage points. On the other hand, the program had lower effect on the enrollment rate of younger children, only about 1–3 percentage points (Attanasio et al. 2010).

A study on Brazil's case also showed greater impact on enrollment of older children (i.e., those in Grades 5–8) than in younger children (i.e., Grades 1–4) (Glewwe and Kassouf 2010). In Mexico, an International Food Policy Research Institute study showed that the largest impacts were reported on children going to secondary school. An increase of over 20 percent in enrollment of girls and 10 percent for boys was observed.

An important element of these 4Ps programs is their targeting design. These programs target the extremely poor (Table 4.2). The Bolsa Familia of Brazil targets extremely poor households (i.e., those earning less than BRL 60 or USD 34 per capita monthly) regardless of the household composition; there is no conditionality for the childless extremely poor households. This is in addition to the conditional monthly transfer that the program provides to poor families (i.e., those earning less than BRL 120 or USD 68 per capita) with children aged 0-17 and/ or a pregnant woman with up to a maximum of three children (Soares et al. 2010). The Oportunidades (formerly known as *Progresa*) started in rural communities, targeting extremely poor households. It later expanded to cover the extremely poor in urban areas. Colombia also targeted extremely poor households in selected communities.

Moreover, the duration of the program varies (Table 4.3). In Mexico, there is a recertification every three years. If the beneficiary remains eligible, they continue with the program for four (for urban areas) or six (rural or semirural) more years. After this period, they are transferred to the Differentiated Support Scheme for three years subject to compliance to program conditionalities. In Brazil, the recertification is carried out every two years. As long as the beneficiaries meet the eligibility criteria, they are entitled to the grants provided by the *Bolsa Familia*.

Design issues of the 4Ps

Target children beneficiaries

The situation of school participation in the Philippines is not very different from the Latin American case. Based on the APIS, school attendance is more a problem of older children than younger ones. Attendance rate starts to slide at age 13–14. At 15, only around 82 percent are in school based on the APIS 2007. Less than half, 44 percent, of 18-year-olds go to school. As shown in Figure 4.2, this predicament being an issue has not changed or improved through time. The pattern in 2007 (pre-CCT period) and 2011 remains the same, which indicates that programs have not been effective in improving the school participation of older children.

It helps to understand the issue within the poverty reduction context. Therefore the school attendance rates of children by income group based

Table 4.2. Target beneficiaries of other 4Ps programs

Program	Target Population	Coverage
Oportunidades/ Progresa	Extremely poor households with children	Rural communities with less than 2,500 inhabitants; later expanded to urban areas
Bolsa Familia, Brazil	All extremely poor with per capita income below USD 30; all poor households with per capita income below USD 60 and children aged up to 17 or pregnant woman	all municipalities
Familias, Colombia	Extremely poor households with children up to 17 years of age	Selected municipalities with less than 100,000 inhabitants and with adequate infrastructure

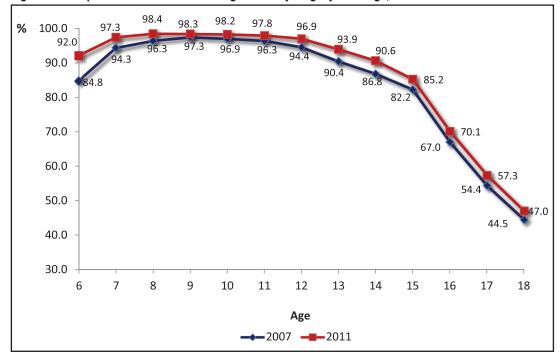
Source: Bastagli (2007)

Table 4.3. Maximum duration of other 4Ps programs

Country	CCT	Exit from CCT
Brazil	Bolsa Familia	As long as eligibility criteria persist, beneficiaries are entitled to the Bolsa Familia. Beneficiary recertification is carried out every two years to determine whether eligibility persists.
Chile	Chile Solidario – Programa Puente	Has a clearly regulated maximum duration and exit strategy. Transfer "bono de proteccion" payments are paid in decreasing amounts for 24 months; after that a graduation bonus is paid for three years. Families graduate from program after five years. They automatically access the SUF and have preferential access to all social assistance programs.
Colombia	Familias en Accion (FA)	Beneficiary households are automatically graduated out of the FA after five years. They also exit the FA if they no longer satisfy the demographic eligibility requirements: i.e., if they only have one minor member that turns 18 years old.
Honduras Mexico	Programa de Asignacion Familiar (PRAF) Progresa-Oportunidades	Program financing availability determines duration. Beneficiary recertification takes place for families after three years of benefit receipt. If eligibility criteria persist, they continue on the program until completing four years in urban areas and six years for rural or semi-urban locations. After this period, they are transferred to the Differentiated Support Scheme for three years (if they continue to comply with the conditionalities).
Nicaragua	Red de Proteccion Social (RPS)	Cash transfers are paid to beneficiary households for three years. After this period, they can continue to receive services for an additional two years.

Source: Bastagli (2007)

Figure 4.2. Proportion of children attending school by single year of age, 2007 and 2011



on the APIS are shown through Figures 4.3–4.5. Roughly 90.3 percent of children aged 6–11 in the poorest three groups were already attending school in 2007 while only half of those aged 15–18 were. The

gap between the richest households and the poorest ones was much wider for the older children (42.6 percentage points in 2007) than for the younger ones (12.6 points in 2007).

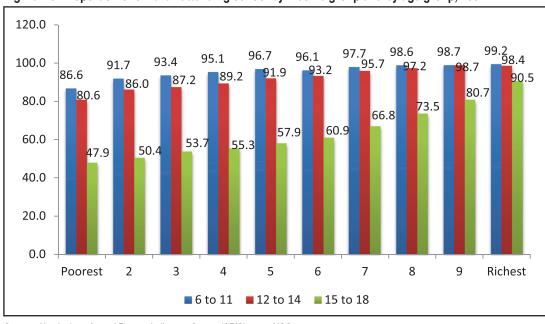


Figure 4.3. Proportion of children attending school by income group and by age group, 2007

Source of basic data: Annual Poverty Indicators Survey (APIS) 2007, NSO

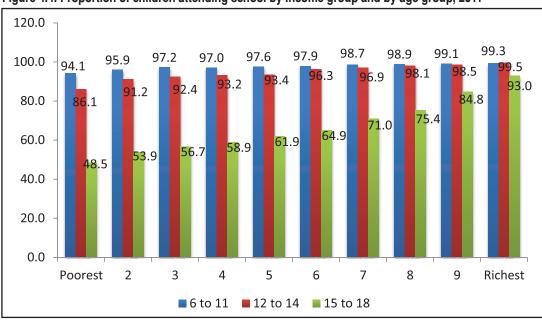


Figure 4.4. Proportion of children attending school by income group and by age group, 2011

Source of basic data: APIS 2011, NSO

Moreover, the gap among 15- to 18-year-olds has in fact widened from 2007 (42.6 points) to 2011 (44.5 points) as can be gleaned from Figures 4.3 and 4.4.

To illustrate this case further, the school attendance of children by single age in families

belonging to the bottom 30 percent income is compared to that of the rest, categorized as top 70 percent, and that of the total population. The difference in the school attendance rates among children aged 7–12 in the three groups is quite small. But the gap widens steadily such that the

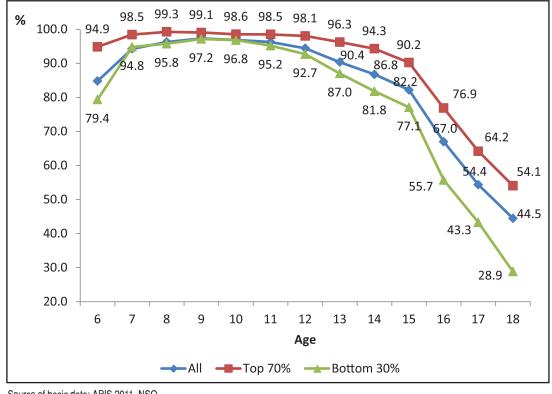


Figure 4.5. Proportion of children attending school by income group and by single year of age

school attendance rate of 18-year-olds belonging to the bottom 30 percent is only 29 percent, compared to the 44 percent of the total population and 54 percent for the top 70. This clearly demonstrates the need to target older children in government social development programs.

Meanwhile, contrary to Latin American experience where girls are less likely to go to school than boys, a lower percentage of boys in the Philippines attend school compared to girls. This is true for children aged 13 and above as shown by Figure 4.6. In 2007, 94 out of 100 girls aged 13 are attending school while only 87 boys are. Among 15-year-olds, roughly 87 percent go to school while only 77 percent of boys do. If government programs like the 4Ps address such a gap, it is sensible to provide larger sums to boys than girls given the same level of schooling.

educational The support structure of Oportunidades took into account the gender disparities in school attendance. Because girls have

lower attendance rate than boys, the amount of grant or cash support is higher for girls beyond elementary level given the same level of schooling. For instance, a male beneficiary in the third year of middle school got \$37.67 while a girl received \$43.22. This aspect was necessary as the program has included older children where disparity is wide. In the Philippine case, it is safe to assume that gender was not incorporated in the 4Ps design because the program limited the assistance to children up to age 14 only where gender gap is not as evident as that for older children.

Why did the 4Ps target households with children aged 14 and below? The DSWD noted that their aim is for young children to finish at least elementary education. We posit that such target may not be able to bring about significant change in two ways: (1) the 4Ps is targeting young children but the attendance rate of young children is already high; and (2) if the objective is improving their future income-earning capacities, interventions should therefore ensure that children can go as high as possible up the education

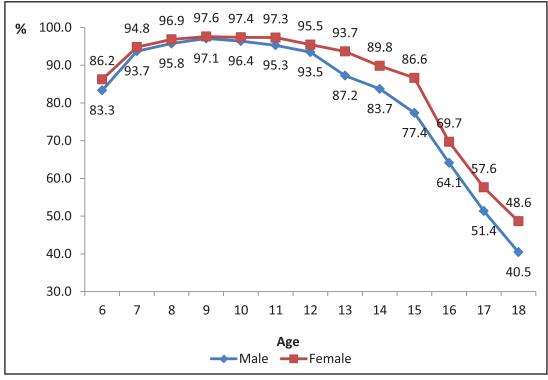


Figure 4.6. Proportion of children attending school by gender and by single year of age, 2007

ladder. At the very minimum, children should be given the opportunity to finish at least high school.

In addition to the fact that school participation is more a predicament among older children than younger ones, finishing mere elementary level does not suffice to improve the earning capacities of children. Figure 4.7 shows the average daily wage earned by wage earners, sorted by their educational attainment. The difference in terms of wage income between having finished several years in elementary and being an elementary graduate is not that significant. The average daily wage earned by a worker who has only some years in elementary school is around PHP 165, while for one who finished elementary is about PHP 177—or a difference of only PHP 12.

However, graduating from high school has a huge leap from merely having an elementary education. If poor children are given adequate support for them to finish at least high school, the mean wage that they can potentially earn would be higher by over 40 percent than that if they only have some years of elementary education.

Indeed, the ideal intervention is to prepare the children to go to higher learning because the expected wage income for those who have college education is way higher than just finishing high school. In the meantime, as the latter may be something not feasible at this time, at least not in a large scale, ensuring that many of the poor can at least finish high school is very important.

Length of exposure in the program

The *Oportunidades* aimed to see children go through and finish high school. Hence, its scholarship covered children on the third grade until the last year of high school. This constituted 10 years of schooling. In addition, as an incentive, it provided savings account for students who finish high school provided they finish it before the age of 22 and they open up their own bank accounts.

The length of exposure to the program is also essential to make sure it can yield a significant outcome. With the current design of the 4Ps where the education subsidy targets only poor households with

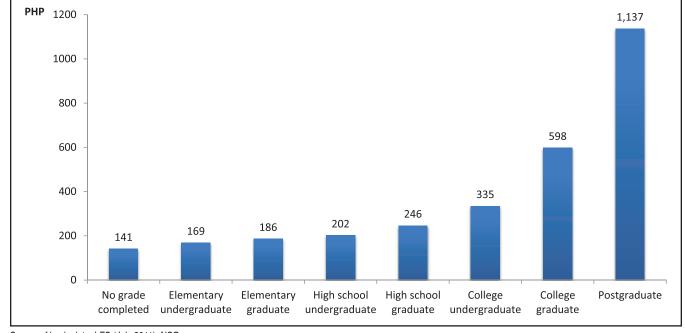


Figure 4.7. Average daily wage of wage/salary workers by educational attainment, 2011

Source of basic data: LFS (July 2011), NSO

children aged 6–14, many of them do not actually stay in the program long enough to benefit from it. For example, children aged 14 who are selected through their families this year will cease to receive benefits once they reach the age of 15. In this case, the children's exposure is only a year.

Had the program been designed to complete the five-year exposure of all children covered in the initial year of selection, it may have a better chance of yielding significant outcomes. Assisting a 14-year-old now for a period of five years will help him or her finish high school. With the current design, however, it is unavoidable that the children may drop out of school once they exit from the program. If there is a seamless way to integrate these children in other complementary programs of the government, the 4Ps may prove to be more effective in enhancing human capital.

Implementation issues

Targeting and collection of data for NHTS
The DSWD has assessed 10.9 million households during the period 2008–2010. Using the PMT

model, it has identified 5.2 million poor households, or 5.7 million poor families, from the list of assessed households. There is an apparent overestimation in the number of poor families listed in the 4Ps. The 4Ps draws its list of poor households from the NHTS-PR designed by the DSWD. The NHTS-PR shows that there were 5.2 million poor households and 5.7 million families in 2009. However, these numbers largely differ from the NSCB's official poverty estimate in 2009 of 3.9 million poor families based on the refined methodology. The PMT model of the NHTS-PR thus appears to be overestimating the number of poor families.

Also, this is rather different from the experience of Latin American countries from which the Philippine program is said to have been modeled. Mexico's *Oportunidades* and Colombia's *Familias* are targeted for extremely poor families. Brazil's *Bolsa Familia*, though intended for poor households, target extremely poor families regardless of their composition.

Already, this can be seen from the leakages shown by the number of families delisted. This may likewise be inferred from a study done by Fernandez and Olfindo (2011) using the 2009 FIES which reveals that only 72 percent of the 4Ps beneficiaries in 2009 come from the bottom 20 percent of the families. Similarly, when one looks at the official estimate of poverty incidence for the same year at 20.9 percent, this translates to about 73 percent of the beneficiaries who can be classified as poor while 27 percent are nonpoor. Such extent of leakages suggests that there is a need to fine-tune the program's targeting scheme prior to the program's proposed further expansion.

The 4Ps did not seem to have fully considered the fact that the poor are not a homogeneous group. Studies (e.g., Reyes et al. 2011) show that the poor

consist of the chronically or persistently poor and the transient poor or those who become poor because of certain shocks. In fact, among those households classified as poor in 2009, more than half of them (52.6%) were transient poor who were moving in and out of poverty, and only 47.4 percent of poor households were considered to have been consistently or chronically poor since 2003.

Costs of the program

Since the 4Ps program has been piloted in 2007, a total of PHP 75.993 billion has already been allocated for its implementation. By the end of 2013, this would roughly total to PHP 120 billion.

PHP 50,000 44,250 45,000 39,450 40,000 35,000 30,000 25,000 21.194 20,000 15,000 10,000 10,000 5,000 5,000 299 0 2007 2008 2009 2010 2011 2012 2013

Figure 4.8. 4Ps' budget allocation in PHP million, 2007–2013

Source of basic data: DSWD

Table 4.4. Annual budget of the Philippine 4Ps in PHP million, 2011–2012

Budget Category	2011	2012
Total	21,194	39,450
Cash transfer/grant to beneficiaries	17,138	35,453
Implementation support	4,056	3,997
Trainings	1,625	703
Salaries and allowances for 1,800 new personnel	716	1,877
Bank service fee	171	346
Information, education, and advocacy materials;		
printing of manuals and booklets	649	252
Capital outlay	218	133
Monitoring, evaluation, and administration support	677	686
Share of cash transfer to total budget	80.86%	89.87%

Source: DSWD, available online http://pantawid.dswd.gov.ph/index.php/pantawid-pamilya-financials

Budget data from the DSWD indicate a significant cost of administering the program. In 2011, the administration cost was 19 percent of the total program cost. It is estimated to go down to 10 percent in 2012. The PHP 4-billion cost of running the program is equivalent to supporting 266,667 million families with three eligible children for one year.

Assessment of the 4Ps: Results from 2011 APIS

Characteristics of 4Ps beneficiaries

Out of the 42,063 families included in the 2011 APIS, about 3,066 are 4Ps beneficiaries, or 7.29 percent of the total. Employing the weights that the NSO uses, we arrived at about 1.2 million 4Ps families or about 27 percent of the total poor. Eight of 10 4Ps beneficiaries are from the rural areas.

To create a profile of 4Ps beneficiaries, available information from the APIS 2011 were tabulated. The data allowed us to get a picture

of their characteristics as 4Ps beneficiaries but only for that particular period as the survey did not ask about the length of exposure they had on the program. This restricted us in determining causation or program impact because we dealt with cross-sectional data. Nonetheless, the data provided important information that can be used in fine-tuning the program for it to achieve its objectives.

Location

The 4Ps beneficiaries are distributed variably in all 17 regions of the country. Based on DSWD² data as of December 26, 2012, ARMM has the highest share of beneficiary families at 10.6 percent. Shares of Regions V (Bicol) and VI (Western Visayas) follow at 9.9 percent and 8.2, respectively. The shares of Cordillera Administrative Region (CAR) (1.8%), Region II (2.7%), and Region III (3.1%) are the lowest.

Figure 4.9 illustrates this regional allocation of 4Ps beneficiaries in comparison with the distribution of total poor families based on the latest

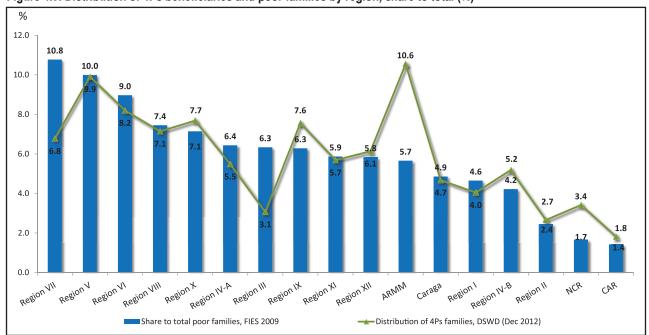


Figure 4.9. Distribution of 4Ps beneficiaries and poor families by region, share to total (%)

Sources of basic data: DSWD and FIES 2009, NSO

² Monitoring and Evaluation Unit (Planning, Monitoring, and Evaluation Division), Department of Social Welfare and Development (DSWD)

FIES (i.e., 2009 round). The chart gives a sense of the effectiveness of the targeting mechanism of the program. In 2009, the bulk of the poor families are in Region VII (10.8%), Region VI (9%), and Region V (10%). We would expect that the distribution of 4Ps beneficiaries would be similar to the distribution of poor families across regions.

Actual and official data from DSWD as of December 2012 show a distribution that is somewhat similar with that for the poor. Regions V and VI, two of the regions that have the highest share of poor families, also have the highest share of 4Ps beneficiaries. The distribution of 4Ps families at the lower end also matches the regional poverty trend.

The significant deviations concern Regions VII, III, and ARMM. Future program expansions or modifications have to take into account that Region VII has the highest share of poor families and Region III, given its large population, also has a huge number of poor people. On the other hand, ARMM and NCR have disproportionately higher share of 4Ps beneficiaries. Their shares of beneficiaries are double their share of the poor. The deviations between the actual distribution of the poor and the current distribution of 4Ps beneficiaties can serve as the basis for prioritizing underserved areas in the next phases of 4Ps.

Family composition

In terms of family composition, a significant proportion of the program recipients (23%) have a large family size (at least eight members). In contrast, about 9 percent of nonrecipients belong to this category. While 21 percent of 4Ps beneficiaries belong

to smaller families (that is, consisting of up to four members), majority of nonrecipients do.

On the average, 4Ps families have more members, roughly six, than non-4Ps families with only around four. The former also have higher dependency ratio. Roughly half of the total members in 4Ps families are less than 15 years old while only one out of four members in non-4Ps families belong to this age group.

Educational attainment and employment profile of members

Table 4.6 shows that on the average, there are relatively more members in 4Ps families who have lower educational attainment than in non-4Ps families. The difference is more evident among those who have some elementary education. Interestingly, this shows that 4Ps is already on its way to realizing one of its primary objectives, which is increasing access to basic education. However, the disparity between the two groups becomes smaller in the next two levels (elementary graduate and high school undergraduate) and the pattern eventually reverses starting with the proportion of, at most, high school graduates. As the table shows, very few members in 4Ps families have higher levels of education. Less than 10 percent finished high school, only around 2.6 percent were able to get some college education, while barely 1 percent managed to get a college degree. These findings tell us that there is really a need to improve the educational attainment of the poor. It is important that necessary improvements on programs such as the 4Ps be implemented to help the poor reach higher education or finish at least high school.

Table 4.5. Distribution of families by size and type, percent to total

Number of Members	4Ps	Non-4Ps
4 or less	20.7	55.0
5 to 7	55.9	36.1
8 to 10	20.1	7.9
More than 10	3.3	1.0
All	100.0	100.0

Source of basic data: APIS 2011, NSO

Table 4.6. Mean proportion of members in 4Ps and non-4Ps	families
by highest educational attainment and by mode of	of labor force
participation, 2011	

Group	4Ps	Non-4Ps
Highest educational attainment		
No grade completed	9.6	4.9
Elementary undergraduate	36.8	21.1
Elementary graduate	14.8	12.2
High school undergraduate	14.9	13.4
High school graduate	9.2	18.6
College undergraduate	2.6	12.0
College graduate	0.9	10.4
Postgraduate	0	0.1
Mode of labor force participation		
Employed	36.2	44.1
Underemployed*	12.4	8.5
Unemployed	1.0	2.9
Not in the labor force	15.6	25.8

^{*} Authors' estimates; defined as those who are either wanting more hours of work and/or looking for additional work.

Source of basic data: Matched files of APIS 2011 and LFS July 2011

Moreover, as shown in Table 4.6, non-4Ps families have relatively higher proportion of working members, specifically those who have full employment. 4Ps beneficiaries, on the other hand, have higher proportion of members who are considered as vulnerable workers. Around 44 percent of employed members in 4Ps families are self-employed while only 32 percent of non-4Ps members are self-employed (Table 4.7). Unpaid family workers comprised 15.1 percent of employed members in 4Ps families, which is more than twice of that in non-4Ps (6.7%). Meanwhile, 4Ps families also have relatively higher proportion of working members who have nonpermanent jobs.

It can also be observed from Table 4.7 that employed members in 4Ps families are more engaged in agriculture-related activities. The proportion of working members in 4Ps families whose sector of employment falls under agriculture/fishery/ forestry is more than twice of that in non-4Ps families. This finding is supported when we look at the disaggregation by type of occupation. While 34 percent of the employed 4Ps members are farmers/ forestry workers/fishermen, only 16 percent of the non-4Ps are. Aside from this, members who assumed jobs classified under laborers/unskilled workers are

higher in proportion among beneficiaries (42%) than in nonbeneficiaries (28%).

These findings on the employment profile of members of 4Ps families are not surprising since they have lower level of education. Very few of them finished at least high school, which is usually the level of education required by most of the higher-paying employers.

Income

In terms of income, 4Ps beneficiaries have an average per capita income of PHP 8,522 based on data for the first semester of 2011 (Table 4.8). The poorest 10 percent of 4Ps recipients have a per capita income of PHP 4,788 while the richest ones have PHP 75,897. Without the cash grant, each person from 4Ps families had about PHP 7,740 to cover his or her expenses for the entire six months. To compare, the poverty threshold for one semester in 2011 is roughly at PHP 9,300. The average amount of cash grant from the 4Ps in 2011 is PHP 780 per person for one semester. This is equivalent to 9 percent of the total per capita income of beneficiaries.

On the contrary, non-4Ps families have PHP 26,981 on the average, which is three times that for the 4Ps. However, it is interesting to find that per capita

Table 4.7. Mean proportion of employed members in 4Ps and non-4Ps families by type of occupation, sector of employment, class of worker, and nature of employment in primary occupation, 2011

Group	4Ps	Non-4Ps
Type of occupation		,
Officials/supervisors/managers	6.8	16.1
Professionals	0.6	4.9
Technicians/associate professionals	0.6	2.9
Clerks	1.0	5.7
Service workers/shop and market sales workers	4.6	10.2
Farmers/forestry workers/fishermen	34.4	15.8
Trades and related workers	6.2	8.5
Plant and machine operators and assemblers	3.9	6.9
Laborers and unskilled workers	41.6	28.5
Special occupations	0.3	0.5
Sector of employment		
Agriculture, forestry, and fishery	64.7	29.5
Industry	10.2	16.1
Services	25.1	54.4
Class of worker		
Wage workers	39.0	57.1
Private household workers	3.5	5.0
Private establishment workers	31.3	42.8
Government workers	4.2	9.1
Paid family workers	0.0	0.2
Own-account workers	46.0	36.2
Self-employed	43.9	32.1
Employers	2.1	4.0
Unpaid family workers	15.1	6.7
Nature of employment		
Permanent job	78.0	80.9
Short-term work	17.4	16.6
Different employers	4.6	2.5

Source of basic data: Matched files of APIS 2011 and LFS July 2011

Table 4.8. Per capita income by income decile (January–June 2011)

Decile	All	4P	- Non-4Ps		
	All	Income less Cash Grant	Cash Grant	Total	- 11011-475
1	4,793	4,141	647	4,788	4,794
2	7,345	6,484	766	7,249	7,366
3	9,467	8,576	853	9,427	9,473
4	11,780	10,728	941	11,669	11,788
5	14,576	13,425	887	14,316	14,587
6	18,132	16,507	1,204	17,712	18,141
7	22,998	21,677	908	22,584	23,001
8	30,584	29,040	754	29,794	30,589
9	44,506	44,327	708	45,035	44,504
10	103,405	73,339	2,558	75,897	103,447
Total	25,635	7,741	780	8,522	26,981

Source of basic data: APIS 2011, NSO Note: Cash grant data reported by respondents income levels of the two groups are fairly comparable up to even the 9th income decile. The large disparity can only be found at the richest group of families where the mean income of non-4Ps is PHP 103,447 while that for the beneficiaries is only PHP 75,897. In the first place, it is surprising to see some 4Ps families belonging to the richest income groups when all of

them are supposed to be poor, that is, they should belong to the poorest three groups (Figure 4.10).

Ownership of assets, access to basic amenities, and housing materials/tenure

Table 4.9 shows the proportion of families owning some types of assets. It is evident that more non-4Ps

% 40.0 35.7 35.0 30.0 25.7 25.0 20.0 17.4 15.0 10.1 10.0 5.0 2.7 1.2 0.7 0.2 0.0 2 3 7 8 **Poorest** Richest

Figure 4.10. Distribution of 4Ps beneficiaries by per capita income decile, share to total (%)

Source of basic data: DSWD

Table 4.9. Mean proportion of families who own various assets, have access to basic amenities, and live in makeshift housing or as informal settlers, by type, 2011

Variable	4Ps	Non-4Ps
Own:		
Television set	39.2	76.5
VTR/CD/DVD player	22.7	51.3
Refrigerator	6.5	40.5
Washing machine	3.8	31.6
Airconditioner	0.3	9.6
Car/motor vehicle	10.7	27.5
Telephone/cellular phone	50.0	76.0
Computer	1.0	17.3
Stove with oven/gas stove	2.0	24.2
Have access to:		
Electricity	63.1	88.8
Sanitary toilet facility	75.3	93.1
Safe water	69.5	84.1
Living in/as:		
Urban areas	17.5	52.1
Makeshift housing	3.3	1.5
Squatters/informal settlers	5.5	4.1

Source of basic data: Matched files of APIS 2011 and LFS July 2011

families have assets compared to 4Ps beneficiaries. For instance, while around 4 out of 10 beneficiary families have a TV set, 76 percent of non-4Ps have. The most common types of asset owned by 4Ps families are telephone/cellular phone, where 50 percent of families have it, and television set (39.2%).

Aside from asset ownership, non-4Ps are also better-off in terms of some access indicators. At least 80 percent of these families have access to electricity (89%), safe water (84%), and sanitary toilet facilities (93%). On the other hand, only around 63 percent of 4Ps families have access to electricity. The 4Ps families with access to safe water and sanitary toilet facilities are estimated at only 69.5 percent and 75 percent, respectively.

In terms of housing materials and tenure, the proportion of beneficiaries that are living in makeshift housing (3.3%) is relatively higher than that of non-4Ps (1.5%). On the other hand, the proportion of 4Ps beneficiaries who are living as informal settlers (5.5%) is slightly higher than that of non-4Ps (4.1%).

Access to social programs

The APIS is also an important source of data in terms of access to social programs like the PhilHealth. The 2011 APIS shows that 1.38 percent of all 4Ps families have access to PhilHealth while only 1.21 percent of the nonbeneficiaries do (Table 4.10). 4Ps beneficiaries have higher access to agrarian reform community development program and Technical Education and Skills Development Authority program than the non-4Ps.

School attendance

To determine the current status of the 4Ps program with respect to its objective in improving school participation, the school attendance of children beneficiaries as well as children in non-4Ps families were examined using the 2011 APIS. Table 4.11 shows that school attendance rates of children in 4Ps families are slightly higher in ages 6–11, slightly lower in ages 12–14, while largely lower between ages 15 and 18 (which is beyond the age group covered by the program). The school attendance rates among children aged 6-14 range from 90 to 99 percent, which means that only 10 percent, at most, of these children beneficiaries are not attending school. On the other hand, the proportions of children beyond 14 who are attending school are lower than 80 percent. In fact, the proportion goes down as the age of children goes up from 15 to 18.

Among the regions, we can observe that the best performers in terms of school participation rates of children beneficiaries (aged 6–14) are Ilocos Region, Northern Mindanao, Western Visayas, Central Visayas, and CAR; all with at least 97.5 percent. Both CAR and Ilocos Region performed best when we consider the youngest cohort since all of the 4Ps children aged 6–11 in these regions are attending school. On the other hand, ARMM has the lowest proportion of children aged 6–11 who are attending school, with only 86 percent, although this is true for both 4Ps and non-4Ps groups. Among 4Ps children aged 12–14, Northern Mindanao, Ilocos Region, and Western Visayas also have the highest school participation rates. On the

Table 4.10. Proportion of families with access to various programs by type

Program	4Ps	Non-4Ps
PhilHealth	1.38	1.21
Training for Work Scholarship Program (TESDA program)	0.09	0.02
Agrarian Reform Community Development Program	0.06	0
Disability benefit	0.04	0.12
Scholar benefits and students financial assistance (government)	0.98	1.23
Scholar benefits and students financial assistance (private)	1.11	0.88

Source of basic data: Matched files of APIS 2011

Table 4.11. Proportion of children in 4Ps and non-4Ps families who are attending school by single year of age, 2011

Age	4Ps	Non-4Ps
6	92.6	92.0
7	98.0	97.2
8	98.4	98.4
9	98.9	98.2
10	98.8	98.1
11	98.3	97.8
12	96.4	97.0
13	93.6	93.9
14	89.7	90.7
15	77.5	86.2
16	60.0	71.3
17	43.6	58.7
18	33.8	48.2

Table 4.12. Proportion of children in 4Ps and non-4Ps families who are attending school by age group and by region, 2011

	Age Group							
Region	6 to 14		6 to 11		12 to 14		15 to 18	
_	4Ps	Non-4Ps	4Ps	Non-4Ps	4Ps	Non-4Ps	4Ps	Non-4Ps
Philippines	96.1	95.9	97.6	97.1	93.3	93.8	56.4	66.5
National Capital Region	96.0	97.4	97.6	98.1	93.2	96.0	74.5	72.8
Cordillera Administrative Region	97.7	97.3	100.0	98.5	93.0	94.9	59.3	73.9
Region I - Ilocos Region	98.7	97.3	100.0	98.2	97.1	95.7	49.8	66.8
Region II - Cagayan Valley	93.9	96.1	96.8	97.9	88.9	92.8	56.1	65.5
Region III - Central Luzon	95.6	96.4	98.0	98.1	89.4	93.3	38.6	63.9
Region IVA - CALABARZON	95.8	96.7	97.0	97.4	93.5	95.4	47.2	67.6
Region IVB - MIMAROPA	96.2	96.0	98.1	97.3	92.8	93.6	56.3	65.3
Region V- Bicol	97.0	97.1	99.3	98.6	92.3	94.3	56.8	67.6
Region VI - Western Visayas	97.8	96.5	98.5	97.4	96.4	94.6	66.6	68.7
Region VII - Central Visayas	97.5	95.5	99.6	97.1	93.6	92.3	58.3	65.2
Region VIII - Eastern Visayas	96.3	95.4	97.7	97.4	93.9	91.0	51.6	63.9
Region IX - Zamboanga Peninsula	95.9	93.9	98.1	95.5	91.6	91.3	55.0	63.2
Region X - Northern Mindanao	98.0	96.3	98.1	98.5	97.9	92.0	52.7	64.9
Region XI - Davao	93.3	95.9	95.6	96.7	88.7	94.5	57.3	64.8
Region XII - SOCCSKSARGEN	96.0	95.1	97.2	95.9	93.4	93.5	50.7	60.2
Region XIII - Caraga	97.1	97.0	98.3	98.2	94.6	94.8	59.0	62.8
Autonomous Region in Muslim Mindanao	87.7	87.0	86.6	86.0	90.9	88.9	63.8	67.8

Source of basic data: APIS 2011, NSO

other hand, Davao Region, Cagayan Valley, and Central Luzon registered the lowest. In fact, school participation rates of 4Ps children aged 12–14 in these regions, together with CAR and Bicol Region, are around 7–8 percent lower than the rates of 4Ps children aged 6–11. Interestingly, ARMM is the only region with school participation rates higher

for 4Ps children aged 12-14 than for those aged 6-11.

Meanwhile, school participation rates of children in the oldest cohort are lower among 4Ps beneficiaries in all regions except in NCR. Central Luzon, Ilocos Region, CALABARZON (Cavite, Laguna, Batangas, Rizal, and Quezon), and Northern

Mindanao registered the largest difference (around 45–50%) between school attendance rates of children aged 12–14 and those of children aged 15–18. In NCR, however, school attendance rates of children aged 12–14 are only 19 percent higher than those of children aged 15–18; this is the lowest difference registered among the regions.

The school participation rates of children in 4Ps and non-4Ps families belonging to the bottom 40 percent were also compared. The results show that the proportion of children attending school is higher for 4Ps beneficiaries at all ages except for 15 and 16 years old. The differences are less than 2 percentage points for ages 7–12. Big differences are observed for ages 6 (5.5 percentage points), 13 (4.9 percentage points), and 14 (4.1 percentage points).

The number of children within a family may have a significant effect on the capability of the family to send their children to school. As shown in Table 4.14, the attendance rates of children in 4Ps families with fewer children are generally higher than those with more children. It is important to note that around 8–9 percent of the children beneficiaries aged 6 and 14 who belong to smaller 4Ps families are not attending school. Also, roughly 23 percent of 15-year-old children, around 40 percent of 16-year-olds, around 60 percent of 17-year-olds, and 7 out of every

10 18-year-old children in 4Ps families do not go to school. It can be observed that gaps are relatively wider in the older single-age cohorts. This supports our hypothesis that 4Ps families with more children tend to be more financially challenged and thus have lower propensity to invest in education. Albert et al. (2011) mentioned that the lack of school participation of children, especially among the secondary school-aged ones, can be attributed to poverty.

Table 4.15 shows the distribution of eligible 4Ps children who are not attending school by age and family size. It is shown that even with conditionalities, some children are still not attending school and these are largely comprised of 6-year-olds and those in their early teens (i.e., 13 and 14). In particular, roughly half (48.5%) of all children belonging to CCT families who are out of school consist of those aged 13 and 14. Even among smaller families, there are children who do not go to school and most of them are of the same ages 6, 13, and 14. What could be the barriers or reasons that these children face in their ability to go to school?

Reasons for not attending school

Looking at the results of APIS 2011, we found that the most commonly cited reason for not attending school among children in 4Ps families, regardless

Table 4.13. Proportion of children in 4Ps and non-4Ps families (belonging to the bottom 40%) who are attending school by single year of age, 2011

Age	4Ps	Non-4Ps
6	92.9	87.4
7	97.6	95.7
8	98.9	97.2
9	98.8	97.1
10	99.0	97.1
11	97.9	96.6
12	96.6	95.1
13	94.1	89.2
14	88.2	84.1
15	76.5	78.2
16	59.1	59.5
17	42.6	41.5
18	31.0	30.5

Source of basic data: APIS 2011, NSO

Table 4.14. Proportion of children in 4Ps families who are attending school by single year of age and by type of family, 2011

Age	Proportion of Children Aged 6-18 in 4Ps Families				
	3 or less	4 or more			
6	92.2	93.1			
7	98.6	97.0			
8	99.4	97.1			
9	98.9	98.8			
10	99.1	98.5			
11	98.2	98.3			
12	96.6	96.1			
13	93.7	93.5			
14	91.2	87.9			
15	77.8	77.2			
16	62.5	58.2			
17	43.9	43.4			
18	32.0	35.0			

Table 4.15. Distribution of children aged 6–14 not attending school in CCT families by family size, percent to total

	Share of Children in					
Age	Smaller Families (at most 3 Eligible Children)	Larger Families (4 or more Eligible Children)	All			
6	19.4	18.5	19.1			
7	6.8	3.9	5.8			
8	3.1	6.9	4.4			
9	3.0	3.2	3.1			
10	3.5	3.8	3.6			
11	5.6	5.0	5.4			
12	10.9	8.9	10.2			
13	21.2	17.8	20.0			
14	26.6	32.1	28.5			
All	100.0	100.0	100.0			

Source of basic data: APIS 2011, NSO

of whether they are working or not, is the lack of personal interest. In fact, the majority of APIS respondents (even the non-4Ps families) have been citing this reason since 2008. One possible explanation for this finding, as noted in Maligalig and Albert (2008), is that "lack of personal interest" can be considered as a catch-all reason that includes household's financial difficulties and can be affected by a number of factors such as the lack of parental support, necessity of working for the family, and other supply-side issues. This reason

is more common among the younger cohorts of children, especially those who are working.

Another cited reason for nonattendance in school is the high cost of education. Since 4Ps families are classified as poor, they are usually the ones with less capability of sending their children to school. The largest share of their household budget might be spent on food and other daily basic needs with a smaller share being left for education. This particular reason is more common among the secondary school-aged children, which implies that 4Ps families can send their children

Table 4.16. Reasons for not attending school among children in 4Ps families by age group, share to total (%)

Person	Not Working				Working			
Reason	6 to 14	6 to 11	12 to 14	15 to 18	6 to 14	6 to 11	12 to 14	15 to 18
Lack of personal interest	57.4	57.6	57.2	34.4	57.0	66.7	56.3	38.2
High cost of education	9.6	9.2	10.0	35.2	19.2	33.3	18.1	25.1
Illness/disability	14.4	12.6	16.5	5.5	0.0	0.0	0.0	0.4
Employment/looking for work	0.6	1.1	0.0	4.4	14.7	0.0	15.8	25.7
Housekeeping/taking care of siblings	1.6	0.0	3.4	7.6	1.6	0.0	1.7	0.9
School is very far	4.8	7.7	1.4	0.6	1.3	0.0	1.4	1.9
No school within the barangay	1.1	2.1	0.0	0.0	0.0	0.0	0.0	0.1
No regular transportation	0.0	0.0	0.0	1.1	1.6	0.0	1.7	0.8
Cannot cope with school works	4.6	4.0	5.3	1.2	2.9	0.0	3.1	1.9
Problem with school record	0.5	0.0	1.1	0.7	0.0	0.0	0.0	0.5
Problem with birth certificate	0.4	0.8	0.0	0.5	0.0	0.0	0.0	0.4
Too young to go to school	1.8	3.2	0.0	0.0	0.0	0.0	0.0	0.0
Marriage	0.5	0.0	1.1	7.7	0.0	0.0	0.0	1.6
Finished schooling	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
Others	2.7	1.6	4.0	0.5	1.7	0.0	1.8	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

to school but only up to the elementary level. However, we also found that around 33 percent of those in the youngest cohort (6-11) who are working mentioned high cost of education as the main reason. Also, since their families do not have sufficient income to support their daily basic needs, there might be a pressure on the part of the children to earn for their families at a young age.

Illness/disability also appeared as one of the reasons for not attending school among children aged 6–14 who are not working. On the other hand, children who are working, particularly those in the oldest cohort, reported employment as their primary reason for not attending school. There are also a few nonworking children who reported that they were not attending school because they were looking for work. Other reported reasons include housekeeping/taking care of siblings (which is more common in the oldest cohort), cannot cope with school works (which is more common among children aged 6–14), and supply-side factors like absence of school nearby or within the barangay (which is also more common in the youngest cohort).

When asked about the reasons for not attending school, the most common answer is, again, lack of

interest (Figure 4.11). More than half of children beneficiaries in both smaller and larger families are not attending school because of lack of interest. Among smaller families, about 13 percent of children noted illness or disability as a reason and roughly 10 percent cited high cost of education. Interestingly, the second most-cited reason for nonattendance among those who belong to larger 4Ps families is high cost of education (16.8%), followed by illness (12.6%).

Timing of schooling

We can likewise examine the characteristics of children beneficiaries in terms of grade level to determine whether they are delayed or not in their schooling. Figure 4.12a shows that 68.9 percent of 6-year-olds are attending first grade while about one-fourth are still in preschool. Meanwhile, over a third (37.5%) of all 4Ps-eligible children aged 11 who are supposedly fifth graders at the least, are still in Grade 4 level or below. On the other hand, among those who are older, roughly 23 percent of 14-year-olds are still in the elementary level when they are supposedly in high school already (Figure 4.12b). This goes to show that there are significantly high proportions of children in CCT families who are delayed in their schooling.

55.2 Lack of personal interest 61.28 **12.6** Illness/disability 9.8 High cost of education 16.8 5.6 Cannot cope with school work Employment/looking for work School is very far Others Housekeeping Too young to go to school No regular transportation 1.3 **1.3** No school within the barangay 0.6 Marriage 0.5 Problem with school record Problem with birth certificate 0.0 10.0 20.0 30.0 40.0 50.0 60.0 70.0 ■ Families with at most 3 eligible children ■ Families with 4 or more eligible children

Figure 4.11. Reasons for not going to school among children aged 6–14 in 4Ps families by family size, share to total (%)

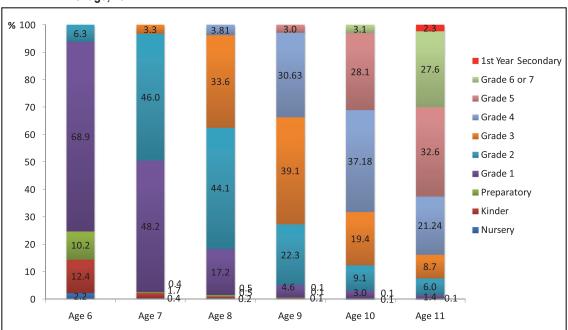


Figure 4.12a. Distribution of 4Ps eligible children aged 6–11 by current grade level and by single year of age, 2011

Source of basic data: APIS 2011, NSO

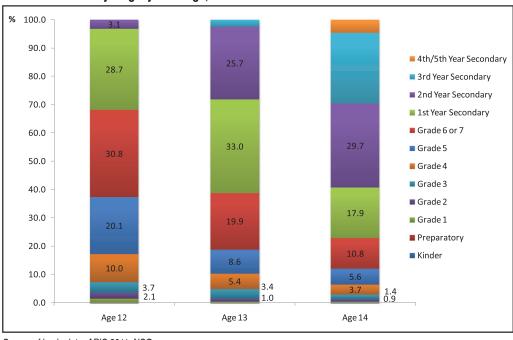


Figure 4.12b. Distribution of 4Ps eligible children aged 12–14 by current grade level and by single year of age, 2011

Impact of 4Ps on school attendance: based on comparison of matched samples from 4Ps and non-4Ps Families

To determine whether the differences between 4Ps (treated) and non-4Ps (comparison) families in terms of school attendance rates of children at various ages are statistically significant or not, non-4Ps matches for 4Ps families were found using Propensity Score Matching (PSM). To implement PSM, a PMT was estimated to compute for propensity scores. The propensity scores, together with the condition that the family has at least one child who is aged 0–18,³ were then used as a basis for matching 4Ps beneficiaries with non-4Ps families. Thus, the matched 4Ps and non-4Ps families are more comparable, or share similar household characteristics, after matching.

The set of covariates defined in the PMT model basically consists of household characteristics that are considered good correlates of poverty (Table 4.17). Essentially, the 4Ps mainly targets

poor households and the government employed a PMT model in selecting the 4Ps beneficiaries. As shown in the estimated model, households with dependency ratio or proportion of members who are below 15 years old appeared to be the most important factor in explaining household poverty status. Households with a higher number of dependents have a higher probability of being poor. On the other hand, other factors that have a large positive effect on poverty status are higher educational attainment of household head and ownership of computer. Households with heads that are at least college graduates and those owning a computer tend to have a higher probability of being nonpoor.

It is noted in the literature that the quality of matching significantly depends on the data structure (Zhao 2000). Thus, no matching method is best in all situations. In this study, different matching methods⁴ were explored to find the best set of

³ Since the program has been going on since 2008, this age group was used to be able to capture family-beneficiaries with children whose ages are between 11 and 14 in 2008 (for the educational component) as well as those children aged 0–5 in 2011 (for the health component).

i.e., nearest neighbor (without and with replacement), radius, kernel (normal/epanechnikov), local linear regression (normal/epanechnikov), and mahalanobis

Table 4.17. Estimated proxy means test (PMT) model

Dependent Variable: Poverty Status	Coefficient	Standard Error	P> z
Independent variables:			
HH head profile			
Age	-0.0020	0.0001	0.0000
Education*			
Elementary graduate	0.2575	0.0021	0.0000
Some high school	0.3461	0.0025	0.0000
High school graduate	0.6318	0.0024	0.0000
Some college	0.9336	0.0039	0.0000
At least college graduate	1.5542	0.0075	0.0000
Kind of business	0.4822	0.0018	0.0000
HH composition			
Family size	-0.8931	0.0015	0.0000
Squared of family size	0.0391	0.0001	0.0000
Dependency ratio**	-2.2665	0.0044	0.0000
Asset ownership			
Television set	0.5036	0.0022	0.0000
VTR/CD/DVD player	0.5165	0.0021	0.0000
Refrigerator	0.9717	0.0028	0.0000
Washing machine	1.1279	0.0035	0.0000
Airconditioner	0.9318	0.0106	0.0000
Car/motor vehicle	0.7842	0.0029	0.0000
Telephone/cellular phone	0.7478	0.0018	0.0000
Computer	1.6273	0.0131	0.0000
Microwave oven	1.2139	0.0177	0.0000
Access to electricity	0.2426	0.0023	0.0000
Type of toilet facility	0.0990	0.0006	0.0000
Location (urban/rural)	0.4951	0.0018	0.0000
Constant term	2.8442	0.0062	0.0000

^{*} base category: no formal education and some elementary

Notes: The 2009 FIES data were used to estimate the PMT model; all independent variables are highly significant at 5 percent level of significance.

estimates of treatment effects. The different matching methods resulted in substantial reduction in bias after matching, ranging from 82 to 93.5 percent. This means that after matching, the 4Ps samples are not significantly different from (or more comparable with) the non-4Ps samples, in terms of the covariates defined in the estimated PMT model. The nearest neighbor matching with replacement is among the matching methods that provided good set of results for all groups of samples.

We can see from the results that on the average, school attendance rates of children in matched 4Ps families are significantly higher than those in matched non-4Ps families when we look at ages 6–14. Table 4.18 shows that the mean difference

between the school attendance rates of children aged 6–11 in matched 4Ps and non-4Ps families is around 2.8 percent, while it is around 4.1 percent when we consider the age group 12–14. This gives us a mean difference of around 3.5 percent between school attendance rates of children aged 6–14 in matched 4Ps and non-4Ps families. At ages 6 and 14, we are getting around 8 percentage difference between the school attendance rates of matched 4Ps and non-4Ps children. For ages 7–13, we are getting around 2–4 percentage difference between the school attendance rates of matched 4Ps and non-4Ps children.

Meanwhile, Table 4.19 provides a finer result at each single year of age. It is clear that there are

^{**} proportion of members aged below 15

Table 4.18. Comparison of school attendance rates of children in matched 4Ps and non-4Ps families by age group, 2011

Age Group	4Ps	Non-4Ps	Difference	Significance (α=0.05)
Aged 6-14	96.3	92.8	3.5	significant
Aged 6-11	97.8	95.0	2.8	significant
Aged 12-14	93.1	89.0	4.1	significant
Aged 15-18	57.1	54.3	2.8	not significant

Notes: Figures are estimates from the nearest neighbor matching with replacement.⁵
Matched files of APIS 2011 and LFS July 2011 were used.

Table 4.19. Comparison of school attendance rates of children in matched 4Ps and non-4Ps families by single year of age, 2011

	. 3 - 7			
Sample	4Ps	Non-4Ps	Difference	Significance (α=0.05)
Aged 6	91.2	83.5	7.7	significant
Aged 7	98.2	95.5	2.7	significant
Aged 8	98.4	96.9	1.6	significant
Aged 9	98.7	96.0	2.7	significant
Aged 10	98.6	96.3	2.3	significant
Aged 11	98.1	95.8	2.3	significant
Aged 12	96.6	94.1	2.5	significant
Aged 13	93.3	89.3	4.0	significant
Aged 14	89.5	81.6	7.9	significant
Aged 15	76.9	76.7	0.3	not significant
Aged 16	59.7	56.5	3.2	not significant
Aged 17	44.2	43.8	0.4	not significant
Aged 18	34.0	32.0	2.0	not significant

Notes: Figures are estimates from the nearest neighbor matching with replacement. Matched files of APIS 2011 and LFS July 2011 were used.

significant differences between the attendance rates of 4Ps children and those that are not beneficiaries of the 4Ps particularly those aged 6 until 14. It is likewise interesting that the largest magnitudes in the differences concern those at the top and tail-end of the age category covered under the 4Ps, ages 6 and 14. Among the 6-year-olds, the proportion of 4Ps children attending school is 7.7 points higher than that of children who have comparable level of well-being but are not 4Ps beneficiaries. Among the 14-year-olds, the gap is slightly higher at 7.9 points.

These findings tell us that 4Ps seems to be generating a positive impact on school participation of children at the primary level. This is more evident among the youngest batch of children beneficiaries and among those who are in their last year of being in the program. On the other hand, school attendance rates of children who are beyond 14 years old in matched 4Ps and non-4Ps families have a smaller gap (i.e., 3% or less, on the average) and thus do not significantly differ.

Except for the nearest neighbor and mahalanobis matching, both with replacement, other matching methods revealed T-stat slightly above 1.96 for the age group 15–18, which implies significant difference between 4Ps and non-4Ps samples, although not "highly significant". One possible reason for this is that the set of matched samples varies with the age of children being considered. For instance, a 4Ps family with a 15-year-old child may be matched with a non-4Ps family having a 17-year-old child, provided that their PMT scores are closer than other non-4Ps families having 15-year-old children.

To better understand the condition of children among 4Ps and non-4Ps families, the proportions of those attending school and/or working are mapped out in Figures 4.13 and 4.14. To allow comparability of the data, only matched 4Ps and non-4Ps families were considered in this subsection.

The school participation rates of 4Ps children (aged 6–14) are relatively higher than those of their non-4Ps counterparts. When we go beyond age 14, we can see that school participation rates are higher among non-4Ps families. However, when we look at finer categories of whether the child is studying and/or working, it can be seen that the proportion of children who are both studying and working is higher among 4Ps families than among non-4Ps families for all age groups.

Among children in 4Ps families, those who are attending school started working at an early age of 6. The proportion of those who are both studying and working is higher among older children, with its peak at age 14. While this proportion declines after age 14, the proportion of those who are not attending school but are working takes off at age

15 (15%; from 5% at age 14). This implies that when children reach age 15, many of them started focusing on employment and dropping schooling from their list of activities. This pattern can also be observed among non-4Ps families but it is more evident among 4Ps families.

The majority of children in 4Ps families who are both attending school and working are helping out in their own family-operated farm/business without receiving any form of payment, as Figure 4.15 shows. There are a few young children who are working for private establishment but many from this group are at least 12 years old. On the other hand, children who are working but not attending school are aged 10 and above, although very few of them are less than 13 years old (Figure 4.16).

Interestingly, as age goes up, the number of unpaid family workers decreases while the number of paid workers (such as those working in private establishments and in private households as well as those who are self-employed) increases. This pattern is more evident among secondary schoolaged children.

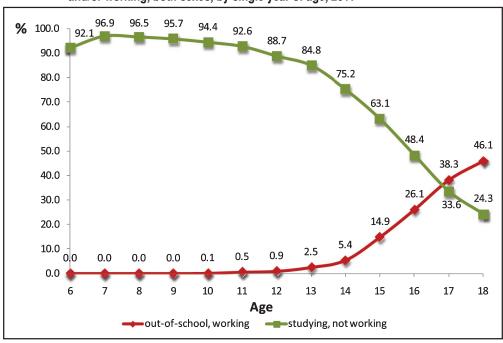


Figure 4.13. Proportion of children in matched 4Ps families who are attending school and/or working, both sexes, by single year of age, 2011

Source of basic data: Matched files of APIS 2011 and LFS July 2011

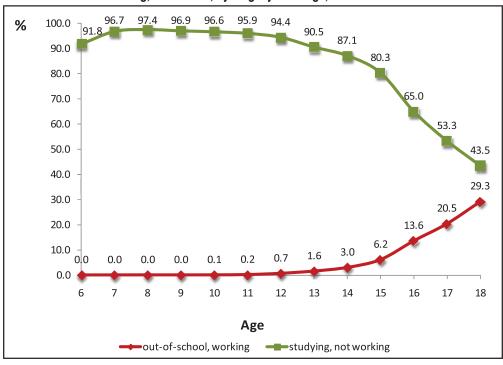


Figure 4.14. Proportion of children in matched non-4Ps families who are attending school and/or working, both sexes, by single year of age, 2011

Source of basic data: Matched files of APIS 2011 and LFS July 2011

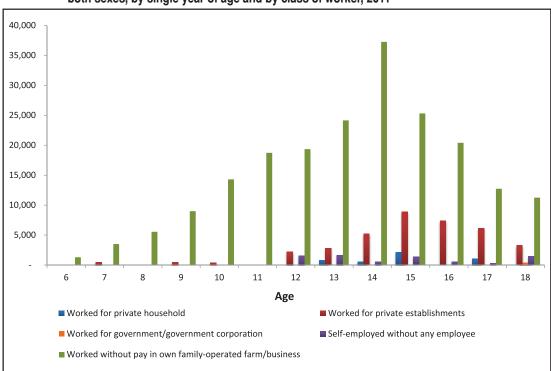


Figure 4.15. Distribution of children in matched 4Ps families who are both studying and working, both sexes, by single year of age and by class of worker, 2011

Source of basic data: Matched files of APIS 2011 and LFS July 2011

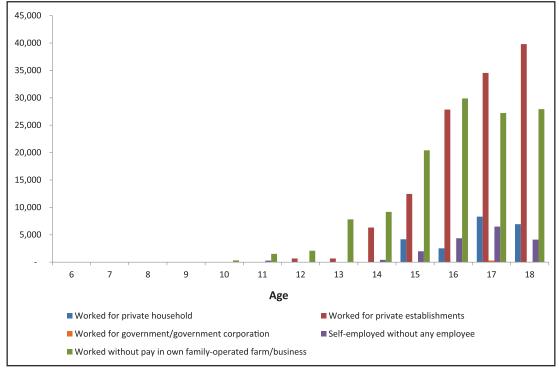


Figure 4.16. Distribution of children in matched 4Ps families who are not studying but working, both sexes, by single year of age and by class of worker, 2011

Source of basic data: Matched files of APIS 2011 and LFS July 2011

These findings tell us that 4Ps families whose children are working but are not attending school tend to have lesser capability of sending their children to high school than those families whose children are working but are still studying. We can then say that 4Ps is indeed an important intervention, particularly in addressing the lower school participation rate yet higher employment rate among the secondary schoolaged children.

In general, 4Ps families have lower proportion of children who are in school but higher proportion of children who are working than non-4Ps families do. As mentioned earlier, this pattern is more evident among the secondary school-aged children. When we disaggregate this by gender, we can observe that boys are more at a disadvantage than girls, regardless of whether they belong to 4Ps or non-4Ps families (Figure 4.17). Some boys in 4Ps families started working while attending school as early as 7 years old while some who are not attending school started working at age 11. The proportions go up as we go to older children. In fact, about half (49.4%) of the

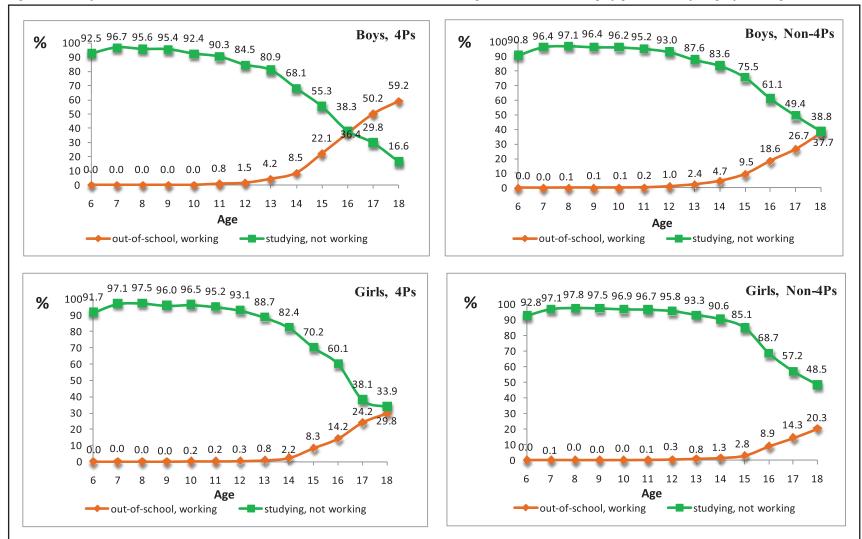
boys aged 16 are already working while only about a quarter (23.9%) of the girls are. Also, there are twice as many boys aged 14 who are working than there are girls (26.4% versus 13.8%). This scenario is not unique to children in 4Ps families.

This reflects the opportunity cost of going to school being higher for boys than girls. The variation in child labor between boys and girls has important policy and program implications. If the government chooses to intervene through the 4Ps program, a flat rate of transfer may not be the most effective approach. Holding other things equal, boys should therefore be provided greater amount of subsidy or scholarship money. This is the same strategy that the Mexican 4Ps program (Oportunidades) has employed but the only difference is that girls got a higher amount because fewer girls tend to go to school in Mexico.

Conclusions and Recommendations

This chapter looked into the assessments that have been conducted on the 4Ps and various issues

Figure 4.17. Proportion of children in matched 4Ps and non-4Ps families who are attending school and/or working by gender and by single year of age, 2011



Source of basic data: Matched files of APIS 2011 and LFS July 2011

surrounding its design and implementation. The program can play a very important role in upgrading the country's human capital. For this, there are modifications in the design and implementation of CCT that are suggested to facilitate inclusive growth and reduction of chronic poverty.

Summary and conclusions

- 1. The 4Ps program leads to an increase in the school participation rate by 3.5 percentage points among children aged 6–14 years old.
 - a. 96.31 percent of children of 4Ps families attend school, whereas 92.84 percent of children of non-4Ps families (using matched samples) do.
 - b. As of 2011, this translates to about 100,000 more children attending school as a result of the cash transfer and the improvement in the school facilities.
- 2. The 4Ps program does not influence the participation of children beyond the age coverage of the program. There is no significant difference between the school participation rate of 4Ps children aged 15–18 and non-4Ps children (using matched samples).
 - a. The same result is obtained by Chaudhury and Okamura (2012).
 - b. Available data suggest that older children do not go to school for several reasons. The top reasons include lack of personal interest and need to work. If the lack of personal interest can be addressed, this would take care of half of those who are not attending school. The need to work to augment family income can only be addressed if livelihood opportunities are made available to the family that will allow the older children to go to school.
- 3. The current coverage of 4Ps to 6- to 14-year-old children is intended to enable the child to finish elementary. However, the maximum support for five years may mean that a child who was 6 years old at the time that the family first received the benefit may only complete Grade 5 by the time

- the family exits from the program. For younger children, this means even lower grades. Thus, for the very poor who rely solely on the assistance from 4Ps to send their children to school, they may not finish elementary school.
- 4. School attendance rate is lower for older children than for younger ones. In 2007, the pre-CCT period, only around 82 percent of 15-year-olds are in school while less than half, 44 percent, of 18-year-olds go to school. In 2011, the rates slightly improved to 85 percent and 47 percent for 15-year-olds and 18-year-olds, respectively. The school participation rate is higher among girls than boys even among 4Ps children, with the gap more apparent from age 13 and above. ARMM has the lowest school participation rate among the regions.
- 5. 90.3 percent of children aged 6–11 in the three poorest groups of families were already attending school in 2007 while only half of those aged 15–18 are. The gap between the richest households and the poorest ones is much wider for the older children than for the younger ones. This gap has widened between 2007 and 2011.
- 6. The average daily wage of someone who has finished high school is 40 percent higher than the wage of someone who has reached some years in elementary. Meanwhile, the average wage rate of one who has some elementary education is 18 percent higher than that for one who did not complete any grade at all. Also, if the aim is just to finish elementary school, an average person will get a wage that is roughly 10 percent higher than what he/she would get had he/she been an elementary undergraduate only. This suggests that it makes sense from the poverty reduction point of view to make that additional investment on the education of the child to ensure that he/ she finishes high school. A high school graduate will have more employment opportunities and chances of receiving a higher pay.
- 7. Education builds up human capital gradually. Therefore, sustained investment is required to

realize significant results. It is important then to ensure proper targeting so that those who will be assisted for five years really deserve to be given support.

- a. The leakage rate in the 4Ps is estimated to be 29 percent (Fernandez and Olfindo 2011). This means that 29 out of every 100 beneficiaries are not poor and do not deserve to be in the program.
- b. Data that were used in targeting were as old as 2003. Given that there are considerable movements in and out of poverty, using old data will lead to identifying as poor even those who have moved out of poverty by the time the program started as well as excluding those who have moved into poverty since then.

Recommendations

Investments have to be made to increase the access of the poor to primary and secondary education so that they can take advantage of better employment opportunities which are not available to most of them. It is crucial for the DSWD to reexamine the design and implementation of the 4Ps at this time before the programmed expansion in 2013. It is recommended to redesign the 4Ps so that it can effectively increase the skills of the poor to enable them to find more job opportunities with higher wages. This can be done in the following ways:

a. Deepen the assistance rather than expand the coverage

Use the money allotted for expansion to provide longer assistance to current beneficiaries. Instead of increasing the number of beneficiary families, it is recommended that the assistance to current beneficiary families be extended to ensure that their children can finish high school. This would mean extending coverage to 16 or 18 (taking into account K+12) years old so that the CCT children can finish high school and increasing the number of coverage from 5 years to 10 years or even longer. Due to the financial burden of spending for education until the child finishes

high school, it is also worthwhile to consider starting the education support at a higher grade.

If implemented, this would likely increase the wages of these children by 40 percent more when they enter the labor market than if they only reached elementary. This would then increase their chances of breaking intergenerational poverty.

b. Improve the targeting system

This can reduce leakages to the nonpoor and exclusion of the very poor.

Update the PMT model

Improving the targeting system can be done by updating the PMT model to reflect more current weights for certain assets. For instance, owning certain household appliances may no longer be as significant as before in distinguishing between the poor and the nonpoor. The most recent FIES data and the revised estimates of the poverty thresholds should be used in estimating the PMT model. The 2012 FIES data for the first semester are now available. This would likely address the seemingly too large number of eligible beneficiaries being identified by the NHTS.

Move away from strategy of focusing on "pockets of poverty"

Review the strategy of covering selected barangays in some of the municipalities. Limiting coverage to "pockets of poverty" in areas where poverty incidence is high based on SAE may lead to significant exclusion. Data will show that there are poor even in areas which are not pockets of poverty. Moreover, relying on local social workers to identify pockets of poverty may be difficult, except for slum settlements in urban areas. Recognizing that the poor are not always clustered in certain areas suggests the need to do a census of the entire population if the aim is to identify and locate all the poor.

This would have implications on the data collection costs.

Meanwhile, conducting survey specifically to determine eligible beneficiaries may lead to response bias. Survey respondents are likely to respond in a manner that will allow them to enjoy benefits. This is particularly true when the population knows that it is a survey being conducted for a particular government agency in connection with a national government program. One way to reduce response bias is to obtain the information from a monitoring system that goes beyond collecting data for one program. The community-based monitoring system (CBMS) offers an alternative way of collecting data from the families and individuals on a regular basis. Partnering with LGUs in implementing the CBMS may be a more practical and cost-effective solution, and would facilitate convergence of national and local efforts to reduce poverty. The resources that would otherwise be used by the DSWD in collecting data can be used to strengthen the local monitoring system.

Under this arrangement, the program implementing agency, in this case, DSWD, would still be the one to determine the PMT model to be used and apply this same PMT model to the data that have been collected. The national government agency would retain control of the identification of eligible beneficiaries while using a shared database with the LGUs.

c. Targeting the chronic poor would provide the program a better focus

Reyes et al. (2011) have shown that those who are categorized as poor at a given point in time actually consist of chronic poor and transient poor. They showed that about half of the poor are chronically poor and the other half are transient poor. The chronic poor generally are not able to move out of poverty because they

have low levels of education which limit their opportunities for productive employment. Compared to the transient poor, the chronic poor would need more long-term assistance to allow them to move out of poverty. Thus, programs like the 4Ps would be better suited to them.

On the other hand, the transient poor, or those who were previously nonpoor but due to natural and manmade shocks have become poor, would need programs that tend to reduce their risks and vulnerability as well as mitigate the impacts of these risks. For instance, farmers who have been affected by floods and have lost their crop would benefit from a crop insurance system that would allow them to plant again the next season.

Targeting the chronic poor would give the program a better focus by directing it to those who need the assistance most. If implemented, the reduction in the coverage from all poor to just the chronic poor would give the fiscal space needed to extend the program coverage to enable the children to finish high school.

d. Improve program implementation

It is recommended that the cash grants be released regularly at monthly intervals. At present, cash grants are released every two or three months. Some are released through automated teller machines (ATMs) while others are still released in cash during an assembly of beneficiaries. For the very poor who rely on the cash grants for the food and transport allowance of their children in going to school, this can be problematic. For instance, it has led some to borrow using the future cash grants as "collateral".

Moreover, it is suggested that the ATM accounts be converted to regular savings accounts to encourage the 4Ps beneficiaries to save even a small amount. The beneficiaries often withdraw the full amount of the cash grant and tend to spend everything within a few days after receiving the grant.

e. Conduct impact assessment of Set 1 of the beneficiaries

The first batch of beneficiaries will be reaching its fifth year in 2012. It would therefore be timely to assess the impacts of the program by examining the situation of this group of families and whether the 4Ps has indeed improved the health, education, nutrition, and poverty outcomes of these families. This would also be an opportune time to see if the children would continue attending school or the families would continue seeking regular medical check-ups even after they exit from the program. The results of this assessment would be useful in fine-tuning the program.

f. Pilot-test innovations before scaling up

The results of the assessments being done by various groups are likely to point to some changes in the program. However, it is critical that the innovations or changes are pilot-tested first before they are scaled up. For instance, if the results will show that children of 4Ps families drop out of high school when they exit from the program, then it is important to pilot-test first in a small sample the changes in the program to know their likely effects under different variations. One variation could be extending the coverage for 10 years with the same amount of cash grant. Another could be extending the coverage with a higher amount of cash grant for children in high school compared to those in elementary.

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This third issue of the PIDS *Economic Policy Monitor* (EPM) focuses on regional economic integration and inclusive growth. With the approaching ASEAN Economic Community by 2015, it is but fitting to look at the effects of the rapid pace of regional economic integration on the achievement of sustained, inclusive growth in the Philippines. The papers in this issue show that regional economic integration can become a double-edged sword for the Philippines when its pursuit of full integration into the regional and global economy is not complemented by domestic policy reforms in key economic sectors, the strengthening of industrial policy, and deepening of poverty reduction efforts.

Consistent with past issues of the EPM, Chapter 1 looks at recent macroeconomic developments and provides an evaluation of the Philippines' economic performance. Chapter 2 highlights policy developments in important areas of the economy. Policy updates in international economic cooperation, fiscal policy, education, agriculture, mining, energy, infrastructure, and housing are presented. The remaining chapters are allotted to two special papers that mainly address the topic of this EPM. Chapter 3 highlights the stagnation of the manufacturing industry as the major reason why the Philippines has not been as successful as its East Asian neighbors in harnessing the gains from regional economic integration, particularly in reducing poverty incidence. The chapter recommends the revival of the manufacturing industry to achieve more inclusive economic growth. Chapter 4 examines the Pantawid Pamilyang Pilipino Program (4Ps), the national government's key strategy for poverty reduction and social development. The program's salient features were assessed with respect to its ability to upgrade the country's human capital.



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