PIDS 2011

ECONOMIC POLICY MONITOR

Education for Development

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Foreword

"Education is both a tool of social justice as well as a fundamental driver of economic development."

Kevin Rudd
Prime Minister of Australia
3 December 2007–24 June 2010

The Philippine economy faltered in 2011. Gross domestic product (GDP) growth was a mere 3.7 percent after posting 7.6 percent in 2010. There were four main factors that contributed to the deceleration in 2011: the blip caused by election spending in 2010; higher than expected international food and fuel prices; slower global output growth particularly in the United States and Japan; and underspending by the government. These are among the macroeconomic aspects that are discussed in Chapter 1 of this year's *Economic Policy Monitor* (EPM).

This second issue of the EPM also highlights policy developments in important areas of the economy. Chapter 2 is devoted to this purpose, which is one of the rationales of the EPM. As explained in last year's issue, the EPM will adopt two approaches. One, policy issues that must be addressed will be identified and in certain instances, specific policies will be recommended. And two, impact or potential impact of recent policy measures will be discussed and analyzed.

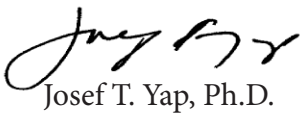
Some of the areas included in Chapter 2 are competition policy, environment and natural resources, and the ongoing conditional cash transfer (CCT) program. Among the environment issues discussed is the forthcoming Executive Order that aims to institute reforms in the mining industry. Meanwhile, there are proposals on how to improve the targeting of the CCT program.

Economic growth in the Philippines is also constrained by structural factors or what can be described as medium- to long-term issues. One important example is education. The theme of the 9th Development Policy Research Month (DPRM) in September 2011 was "Back to ABCs: Education for Development." The above quotation from former Australian Prime Minister Kevin Rudd succinctly captures the critical role of education in development.

Chapter 3 of the EPM consists of a research agenda for the education sector that was presented during one of the 9th DPRM seminars. As the authors explain, the main objective of the chapter is "to help the education stakeholders understand the context, direction, and implications of key education sector developments. The hope is for stakeholders to assess the sector's priorities and identify critical gaps in the education reform agenda to give the government suggestions on possible needed adjustments."

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 the co-authors of Chapter 3: Jose Ramon G. Albert and Aniceto C. Orbeta, Jr. The main author of this chapter is Vicente B. Paqueo, currently a Visiting Research Fellow at PIDS. Meanwhile, the main author of Chapter 1 is Adoracion M. Navarro, who is a Research Consultant at PIDS. Jennifer P.T. Liguton and Jane C. Alcantara ably edited the manuscript.

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



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

March 8, 2012

Executive Summary

This second issue of the *PIDS Economic Policy Monitor* (EPM) focuses on education. Recognizing the critical role of education in development, this year's EPM takes a special look at the sector's achievements, direction, priorities, and critical gaps in order to help the government and other education stakeholders craft the necessary education reform agenda that will further push the education sector's contribution for a sustained, inclusive, and rapid growth of the country's economy.

Following the format of the EPM, Chapter 1 begins with the macroeconomic trends that took place during the year.

The Philippine economy faltered in 2011, with the gross domestic product (GDP) growing by a mere 3.7 percent as compared with the 7.6 percent growth in 2010. The dip was brought about by the (a) lower than anticipated global output growth at 4.0 percent, instead of 4.4 percent, in 2011 from a 5.1 percent growth in 2010, thereupon leading to a lower demand for Philippine exports; (b) higher than anticipated food and fuel prices, with the average increase in global food prices in 2011 at 24.3 percent and the crude oil price averaging $110.9 per barrel. The higher food and fuel prices led to higher inflation for the Philippines at 4.5 percent in 2011, slightly higher than the 3.8 percent recorded in 2010, and definitely contributed to the disappointing GDP growth rate in 2011; and (c) government underspending, which was evident in the contraction in the country's public construction that declined by 29.4 percent in 2011. In addition, the election spending in 2010—and the absence thereof in 2011—was likewise a major factor.

Other macroeconomic developments in the Philippines and how global trends affected them are also discussed in this chapter. At the same time, an analysis of various events in the different economic sectors and how they affected economic growth is likewise presented.

Chapter 2 highlights policy developments in important areas of the economy. One of the objectives of the EPM is to look into the impact or potential impact of policy measures instituted in the year under study. Thus, for 2011, important policy decisions, both as responses to global and domestic developments and as part of the government's overall development thrust, are presented in the areas of trade and industry, competition policy, infrastructure, innovation strategy, environment and natural resources, and poverty-related issues, in particular, the ongoing conditional cash transfer (CCT) program.

Among the key environment issues tackled is the forthcoming executive order on mining which aims to institute reforms in the mining industry. In the area of competition policy, a brief analysis of the implications of the recent designation of the Department of Justice as the country's Competition Authority—through Executive Order 45—is also presented.

Meanwhile, recommendations on how to fine-tune the targeting scheme of the Philippines' CCT program as well as on how to further improve certain aspects of the program are also outlined.

The special theme of this EPM issue on education is presented in Chapter 3. It gives a critical look at the education sector—its achievements and challenges—and presents some reform ideas.

The chapter notes that after a decade of lackluster performance, the education sector has been seeing some progress in recent years. The progress, however, has been distressingly slow and inadequate. The good news, however, is that faster development is not only possible; it is also worth the cost. Investment in education rates of return remains high and the prospects of rapid and sustained demand for educated labor look good. To fully benefit from education, however, the country needs to effectively address a number of key issues. The government, for instance, needs to resolve the issue of education finance, which remains critical despite the recent surge in the Department of Education's (DepEd) budget. It also needs a smarter and steadier approach to reform and its implementation, including a culture of accountability and rewards for performance.

There have been many reforms in the past. A few of them were state-of-the-art interventions that had been shown to be effective, at least in a pilot or experimental setting. Unfortunately, they have not been successful on the whole for various reasons. In the recent past, it was hoped that the Basic Education Sector Reform Agenda (BESRA) would be different. It was expected to be more effective in scaling up and sustaining promising reform efforts, having been designed to be a comprehensive program that incorporates lessons learned from local and international experience and research. Sadly, though, despite its achievement in introducing school-based management and other innovative ideas, BESRA is falling short of expectations due to the poor quality of implementation.

The current government gives the education sector high priority as evidenced by its initial strategic and budget decisions. The DepEd has been given a remarkable boost in its budget; however, underfunding still remains a critical issue for the sector. DepEd is also accelerating the groundwork for the immediate implementation of the mother tongue-based multilingual education policy (MTBMLE), a highly promising reform if properly implemented. Concomitantly, the K-12 reform is being pursued vigorously while government continues to work on the BESRA reforms and to provide supply-side support for the expansion of the CCT program. For tertiary education, the Commission on Higher Education (CHED) is trying to put together a sensible reform policy and strategy.

Concerns, however, remain. One is the rush toward the implementation of the K-12 reform. Another is the plan to use tax money to finance the K-12's additional two years of secondary education. These are well-grounded fears. There are doubts about the public benefits of adding two extra years of high school, not the least of which is the perception that DepEd is trying to do too much at the same time under tight resource constraints and, therefore, risk similar reform failures as in the past. With regard to postbasic education, meanwhile, the Technical Education and Skills Development Authority (TESDA) continues to search for ways on how to resolve fundamental issues facing the technical and vocational education and training (TVET) subsector. Furthermore, while interesting strategic ideas are now being studied and put together by CHED, it remains to be seen how it will end up addressing the politically difficult higher education (HE) issues.

Acknowledgment

The 2011 *Economic Policy Monitor* (EPM) is the second issue of this particular publication series of the Philippine Institute for Development Studies (PIDS).

Chapter 1 was jointly written by Adoracion M. Navarro and Josef T. Yap. Chapter 2, meanwhile, consists of the policy updates in various areas as contributed by the following: (a) Erlinda M. Medalla for the policy responses to the global economic slowdown; (b) Roehlano M. Briones for the policy responses to the surge in food prices; (c) Celia M. Reyes and Aubrey D. Tabuga for the conditional cash transfer (CCT) program; (d) Gilberto M. Llanto and Adoracion M. Navarro for the infrastructure policy developments; (e) Rafaelita M. Aldaba for the Philippine Competition Office; (f) Jose Ramon G. Albert for the innovation clusters and policy actions; and (g) Danilo C. Israel for the policy initiatives in the environment and natural resources sector. For Chapter 3, the special chapter on education, the authors are Vicente B. Paqueo, Aniceto C. Orbeta, Jr., and Jose Ramon G. Albert.

The authors wish to acknowledge the excellent research assistance provided by Kris A. Francisco and Reinier T. de Guzman for Chapter 1; Ronina D. Asis and Ma. Blesila G. Datu for the section on the CCT program in Chapter 2; and Michael Ralph M. Abrigo for Chapter 3.

Special thanks also go to the Research Information Staff, in particular, Jennifer P.T. Liguton and Jane C. Alcantara for editing and overseeing the production of this volume, and Ma. Gizelle G. Manuel for designing the cover.

List of Acronyms

4Ps	–	Pantawid Pamilyang Pilipino Program
ADB	–	Asian Development Bank
ANAR	–	adjusted net attendance rate
AO	–	Administrative Order
APEC	–	Asia-Pacific Economic Cooperation
APIS	–	Annual Poverty Indicator Survey
ARMM	–	Autonomous Region in Muslim Mindanao
ASEAN	–	Association of Southeast Asian Nations
BAS	–	Bureau of Agricultural Statistics
BE	–	basic education
BEIS	–	Basic Education Information System
BESF	–	Budget of Expenditures and Sources of Financing
BESRA	–	Basic Education Sector Reform Agenda
BIR	–	Bureau of Internal Revenue
BOC	–	Bureau of Customs
BPAP	–	Business Processing Association of the Philippines
BSP	–	Bangko Sentral ng Pilipinas
CBMS	–	community-based monitoring system
CCT	–	conditional cash transfer
CHED	–	Commission on Higher Education
COA	–	Commission on Audit
COD	–	Center of Development
COE	–	Center of Excellence
CSI	–	CHED-supervised institution
CSO	–	civil society organization
CVS	–	Compliance Verification System
DA	–	Department of Agriculture
DBCC	–	Development and Budget Coordinating Committee
DCC	–	day care center
DBM	–	Department of Budget and Management
DENR	–	Department of Environment and Natural Resources
DepEd	–	Department of Education
DILG	–	Department of Interior and Local Government
DOF	–	Department of Finance
DOJ	–	Department of Justice
DOST	–	Department of Science and Technology
DSWD	–	Department of Social Welfare and Development

ECCD	–	Early Childhood Care for Development
ECE	–	early childhood education
ECED	–	early childhood education and development
EDCOM	–	Congressional Commission on Education
EFA	–	Education for All
ENR	–	environment and natural resources
EO	–	Executive Order
FAO	–	Fisheries Administrative Order
FAO	–	Food and Agriculture Organization
FGD	–	focus group discussion
FGMO	–	Fisheries General Memorandum Order
FIELDS	–	Fertilizers, Irrigation and other infrastructure, Extension and education, Loans, Dryers and other postharvest facilities, and Seeds Program
FIES	–	Family Income and Expenditure Survey
FIT	–	feed-in-tariff
FLEMMS	–	Functional Literacy, Education, and Mass Media Survey
GAA	–	General Appropriations Act
GASTPE	–	Government Assistance to Students and Teachers in Private Education
GDP	–	gross domestic product
GER	–	gross enrollment rate
GIR	–	gross international reserves
HE	–	higher education
HEI	–	higher education institution
HELMS	–	Higher Education Labor Market Study
ICT	–	information and communications technology
IECC	–	Interagency Energy Contingency Committee
IES	–	Impact Evaluation Study
IMF	–	International Monetary Fund
IPP	–	independent power producer
KALAHI-CIDSS	–	Kapit Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services
LET	–	Licensure Examination for Teachers
LGU	–	local government unit
LUCs	–	local universities and colleges
M&As	–	mergers and acquisitions
M&E	–	monitoring and evaluation
MDGs	–	Millennium Development Goals
MENA	–	Middle East and North Africa
MSMEs	–	micro, small, and medium enterprises
MTBMLE	–	mother tongue-based multilingual education policy
NAIA	–	Ninoy Aquino International Airport

NAT	–	National Achievement Test
NCR	–	National Capital Region
NER	–	net enrollment rate
NETRC	–	National Educational Testing and Research Center
NFA	–	National Food Authority
NG	–	national government
NGP	–	National Greening Program
NHTS-PR	–	National Household Targeting System for Poverty Reduction
NSCB	–	National Statistical Coordination Board
NSO	–	National Statistics Office
NTC	–	National Telecommunications Commission
NTESDP	–	National Technical Education and Skills Development Plan
OFC	–	Office for Competition
PBE	–	postbasic education
PBEs	–	professional board examinations
PESFA	–	Private Education Student Fund Assistance
PEZA	–	Philippine Economic Zone Authority
PIPLinks	–	Indigenous Peoples Links
PJEPA	–	Philippines-Japan Economic Partnership Agreement
PPP	–	public-private partnership
PRC	–	Professional Regulatory Commission
PSE	–	Philippine Stock Exchange
PSEi	–	Philippine Stock Exchange Composite Index
PTR	–	pupil-to-teacher ratio
R&D	–	research and development
RA	–	Republic Act
RP	–	repurchase
RRP	–	reverse repurchase
SAE	–	Small Area Estimates
SBM	–	school-based management
SD	–	standard deviation
SDA	–	special deposit account
SEA-K	–	Self-employment Assistance-Kaunlaran
SNPLP	–	Study Now Pay Later Plan
STFAP	–	Socialized Tuition Fee Assistance Program
STUFAP	–	Student Financial Assistance Program
SUCs	–	state universities and colleges
SY	–	school year
TEEP	–	Third Elementary Education Project
TESDA	–	Technical Education and Skills Development Authority
TIMMS	–	Trends in International Mathematics and Science Study
TR	–	Training Regulation
TVET	–	technical and vocational education and training

TVI	–	technical vocational institution
TWSP	–	Training for Work Scholarship Program
UN	–	United Nations
UNESCAP	–	United Nations Economic and Social Commission for Asia and the Pacific
UNICEF-CPC	–	United Nations Children's Fund Country Programme for Children
UPE	–	universal primary education
US	–	United States
WTO	–	World Trade Organization

1 Macroeconomic Trends in 2011

Adoracion M. Navarro and Josef T. Yap

Philippine gross domestic product (GDP) growth in 2011 fell sharply to 3.7 percent. This is below all—even the most pessimistic—forecasts made in late 2010 to early 2011. The economy struggled in the face of an unfavorable global economic environment highlighted by a surge in fuel prices, slow economic recovery in the United States (US), and the crisis in the euro zone. However, it was the contraction in the country's public construction, which declined by 29.4 percent in 2011, that became the major drag to the Philippine economy. Many government projects were delayed as efforts to review some "questionable" projects were put in place with the aim of weeding out systemic corruption.

The major role of government underspending can be gleaned from the higher economic growth rates achieved by the Philippines' neighbors in Southeast Asia, which also had to deal with the same global challenges in 2011 (Table 1.1). Only Thailand had a lower growth rate but this was largely due to the disruptions in regional production networks—of which Thailand is a major hub—caused by the earthquake-tsunami in northeastern Japan and heavy flooding in Bangkok and nearby areas.

It remains to be seen whether the government has an exit strategy in which the compliance with certain parameters will restore the delayed projects. On its own, public spending can provide a huge boost to the economy in 2012. Already the government has implemented a stimulus package although some of the elements (e.g., increase in the capitalization of the Bangko Sentral ng Pilipinas) will not increase economic activity. Moreover, the total amount is still modest compared with the underspending in 2011.

Table 1.1. GDP growth rates in selected Southeast Asian countries

	Indonesia	Malaysia	Philippines	Singapore	Thailand	Viet Nam
2010	6.1	7.2	7.6	14.5	7.8	6.8
2011	6.5	5.2[a]	3.7	4.8	3.1	5.9
2012	6.3	5.1	4.9	4.3	4.8	6.3

Sources: 2010 data – World Bank
2011 data: Indonesia – Central Bureau of Statistics of Indonesia
Philippines – National Statistical Coordination Board (NSCB)
Singapore – Ministry of Trade and Industry
Thailand – Bank of Thailand
Viet Nam – General Statistics Office of Viet Nam
2012 data: IMF World Economic Outlook (WEO) September 2011 projections; full data from the IMF WEO January 2012 projections are not yet available
Note: a – 2011 data for Malaysia are from IMF WEO September 2011 projection
As of 2011Q3, GDP growth of Malaysia is 5.8 percent (Malaysian Institute of Economic Research)

While the US economy seems to be on the mend, the euro zone crisis still has to be resolved. Tensions in the Middle East—particularly the rhetoric surrounding Iran—have pushed fuel prices even higher. Exports are not expected to contract in 2012. Growth, however, will only be modest.

Economic growth in 2012, therefore, hinges a great deal on the pace of government spending. It is unlikely that government can make up for the underspending in 2011 and at the same time embark on new projects. However, it is also likely that there will be a significant recovery in the level of spending, with public construction supporting a sharp rebound in total construction. How the private sector will respond is crucial to the sustainability of the higher output growth rate, not to mention the ability to attain growth rates of 8–10 percent.

The rest of this chapter discusses the recent macroeconomic developments in the Philippines and how global trends affected these developments. It also provides a sectoral accounting for growth and an analysis on how sectoral events affected economic growth. A special discussion on the relationship of infrastructure and short- and long-term economic growth is also included.

Global Trends

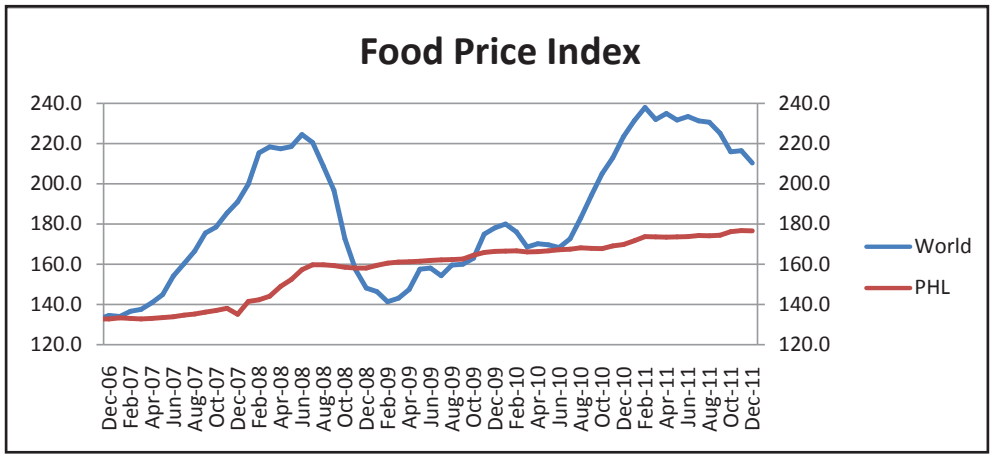
A major factor contributing to the disappointing economic performance in 2011 was the unfavorable global economic environment. The repercussions of the 2008 global financial and economic crisis continued to impair the economies of the United States and Europe. Japan's incipient recovery was snuffed by the earthquake and tsunami that occurred on March 11, 2011. Meanwhile, food and fuel prices spiked again beginning in mid-2010.

This section looks at the nature and impact of these factors.

Food and fuel crisis

Global food prices started climbing in September 2006 and initially peaked in June 2008 (Figure 1.1). This segment of the food crisis is attributed to the following structural and cyclical factors (Ortiz et al. 2011): "expansion of biofuel production (e.g., higher demand for corn and sugar), high oil prices, exogenous supply shocks (e.g., bad weather and droughts), government policies (e.g., export bans and prohibitive taxes), high transportation costs, increasing prices for agricultural inputs, exchange rate fluctuations, and the use of commodities by financial investors (the so-called 'financialization of commodities')."

Figure 1.1. Movement of the global and Philippine food price indexes



Sources of basic data: Food and Agriculture Organization (FAO) and National Statistics Office (NSO)

Thereafter, food prices declined and reverted to the April 2007 level in the first quarter of 2009. The respite, however, was short-lived and by January 2011, food prices surpassed the previous peak. The high level of food prices was sustained and a discernible drop was observed only in September 2011. The same structural and cyclical factors contributed to the renewed surge in food prices.

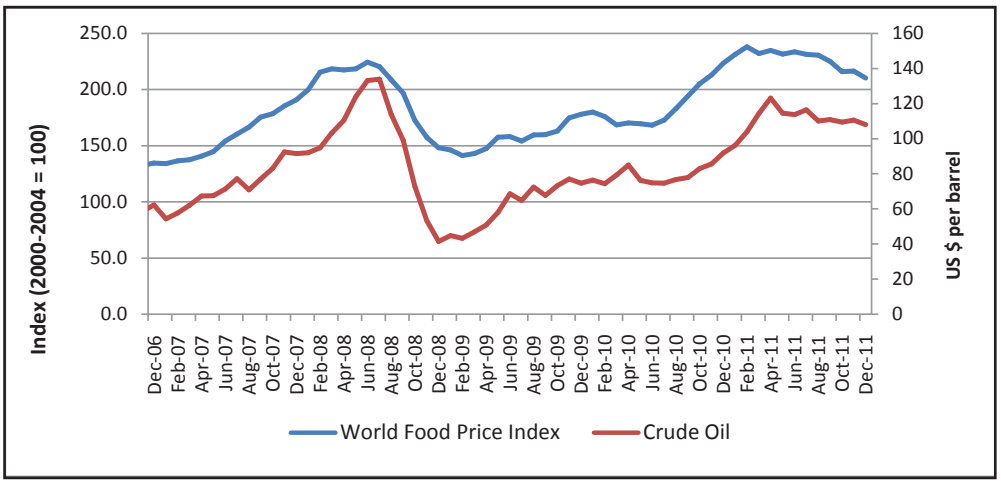
Driven mainly by global trends, Philippine food prices rose sharply between December 2007 and June 2008. Thereafter, food price level rose gradually until October 2010, with the index rising by only 6.6 percent between June 2008 and October 2010. However, between October 2010 and February 2011—a much shorter period—the index rose by 3.6 percent, largely driven again by global trends. Since then, the index has been fairly stable, although there was a mild increase between September and November 2011 which can be partly explained by domestic natural disasters.

Higher food prices are partly a result of higher fuel prices. Figure 1.2 shows that international fuel and food prices exhibited the same pattern in the past five years. More importantly, however, this implies that both variables are affected by common underlying factors. One important element is speculation on commodities. Hence, reforms in the global financial architecture that can curb speculation will directly affect both food and fuel prices and have a second-round impact on food prices as the latter is affected by fuel prices.

Impact of higher food and fuel prices

At the macroeconomic level, higher food and fuel prices led to higher inflation. Inflation in 2011 averaged 4.5 percent, slightly higher than the 3.8 percent recorded in 2010. Higher inflation reduces spending and higher costs curtail production. A counterfactual simulation applied by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) assumed a 27 percent increase in global food prices in 2011 and an average crude oil price of $105 per barrel. The benchmark was a 10 percent increase in food prices and an average crude oil price of $90 per barrel. The counterfactual simulation showed a 0.79 percentage point decline in the GDP growth

Figure 1.2. Food price index and crude oil price



Sources of basic data: FAO and International Monetary Fund (IMF)
Note: crude oil (petroleum) – dated Brent, light blend 36 API, fob UK

rate of the Philippines and a 1.24 percentage point rise in inflation.[1]

The average increase in global food prices in 2011 was 24.3 percent and the crude oil price averaged $110.9 per barrel. Based on the UNESCAP simulations, this would translate to a faster inflation rate and a deterioration in the GDP growth rate in 2011 compared to 2010. Higher global food and fuel prices definitely contributed to the disappointing GDP growth rate in 2011.

At the microeconomic level, higher food prices and inflation hurt most the lower income groups. This is one of the major reasons why poverty incidence in the Philippines in 2009 was even higher than in 2006. Aggregate food prices in the Philippines rose by 24.2 percent between 2006 and 2009. In 2006, 26.4 percent of the population was estimated to be below the poverty threshold. This increased to 26.5 percent in 2009.

Global economic slowdown

The economic difficulties in the United States and Europe and the political turmoil in several Middle East countries are well documented. There has also been extensive analysis on their potential impact on emerging markets like the Philippines. This would also include the effects of the disaster in Japan.

The primary impact of these adverse developments was a sharp downturn in global economic growth in 2011 (Table 1.2). This can be gleaned by comparing the most recent estimate for 2011—which is 4 percent—with the global output growth in 2010 of 5.1 percent. The likely outcome for 2011 is even lower than the initial forecast for said year of 4.4 percent.

Conventional wisdom states that the financial and debt crises in the United States and Europe will have spillover effects on countries like the Philippines through three major channels:[2]

> "The first is the impact on the cost of sovereign debt financing for Asia-Pacific economies. The second is the trade channel, driven by the effect of reduced

[1] UNESCAP (2011), pp. 24–25.
[2] UNESCAP (2010), Macroeconomic Policy and Development Division, MPDD Policy Brief No. 4, p.1.

Table 1.2. Global economic outlook (output growth in percent)

	2008	2009	2010	2011[a]	2011[b]	2012[a]	2012[b]	2012[c]	2013[c]	2016[b]
World	2.8	-0.7	5.1	4.4	4.0	4.5	4.0	3.3	3.9	4.9
United States	-0.3	-3.5	3.0	3.0	1.5	2.7	1.8	1.8	2.2	3.4
Japan	-1.2	-6.3	4.0	1.6	-0.5	1.8	2.3	1.7	1.6	1.3
Euro Zone	0.4	-4.3	1.8	1.5	1.6	1.7	1.1	-0.5	0.8	1.7
China	9.6	9.2	10.3	9.6	9.5	9.5	9.0	8.2	8.8	9.5

Notes: a - January 2011 forecast; b - September 2011 forecast; c - January 2012 forecast
Source: IMF World Economic Outlook

growth in some European countries on import demand for Asia-Pacific goods and services. The third is the impact of the debt crisis on the global financial sector, and the consequent effect on the provision of credit to the regional banking and private sectors."

Trade or the second channel is the most prominent as export growth rates across the world have dropped beginning in the middle of 2010 (Figure 1.3). The same pattern is true in the case of the Philippines' exports (Figure 1.4) with exports even contracting year-on-year beginning May 2011. The impact of the tsunami in Japan on international trade was particularly severe since the disaster disrupted global and regional production and distribution networks.

With regard to the third channel, it deals primarily with the possibility of financial contagion. One possible feature is the impact of the European crisis on interbank lending. For instance, affected banks would be less able to lend to other banks due to provisioning for losses on sovereign bond holdings. Another possibility is that banks in emerging markets like the Philippines may have significant holdings of European sovereign debt products, although this is highly unlikely.

What has been more evident is the impact on asset markets. The emerging market economies have experienced a surge in capital inflows as portfolio investments from developed countries sought higher returns. Data for the Philippines indicate a surge in portfolio investment from the last quarter of 2010 to the first three quarters of 2011 (Table 1.3). The impact of portfolio investment will be discussed in a subsequent section.

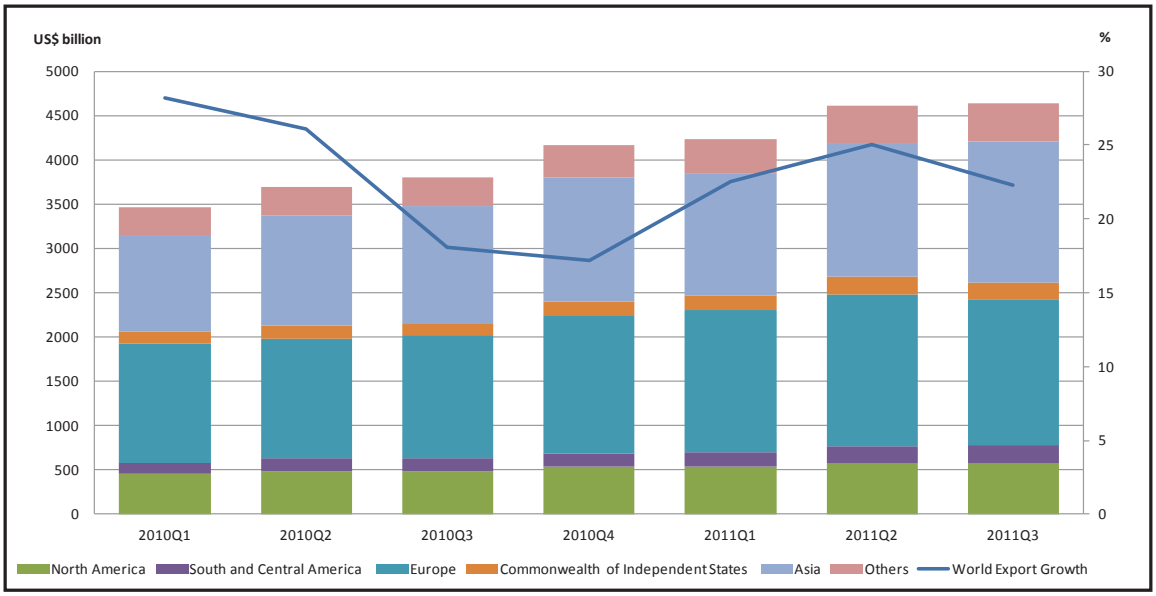
The inflow of portfolio capital combined with the steady and large inflow of remittances from overseas Filipinos has led to a dramatic increase in the level of gross international reserves (GIR) during the period 2009–2011. At the end of 2008, the GIR was $37.5 billion. This has more than doubled to $75.3 billion as of December 2011 (Table 1.3). This is not necessarily a welcome development and is actually evidence that domestic investment spending is depressed.

Macroeconomy

GDP and its components

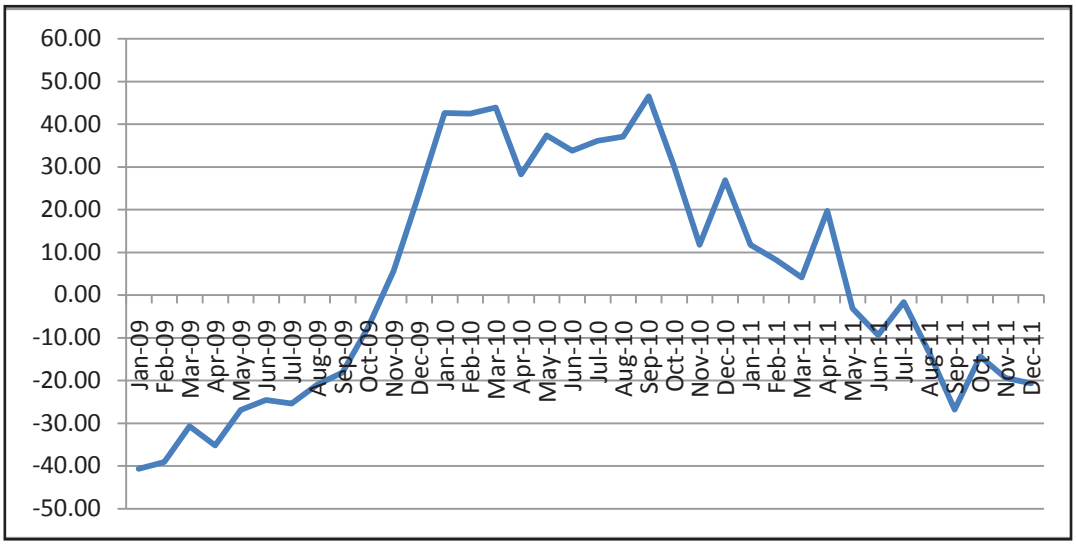
GDP grew by 3.7 percent in 2011, a dismal performance compared to the 7.6 percent growth achieved in 2010 (Table 1.4). Tracking the sectoral contribution to GDP growth (GDP growth

Figure 1.3. World merchandise exports, 2010–2011



Sources: Eurostat, Comext Database; National Statistics; Global Trade Atlas; IMF, International Financial Statistics

Figure 1.4. Growth rates of Philippine exports (year-on-year)



Source of basic data: NSO

weighted by sectoral share in change in GDP) reveals that the growth slowdown is largely due to the negative contribution by the construction industry in the production or value-added side and by net exports in the expenditure side (Table 1.5).

The construction industry contracted during the year, primarily because of lower public construction activities as many government infrastructure projects were delayed. As a whole, the construction industry pulled down GDP growth

Table 1.3. Current transfers, net capital flows, and foreign exchange reserves in the Philippines (in $million)

							Jan–Sep	
	2005	2006	2007	2008	2009	2010	2011	2010
Current transfers	11,391	13,197	14,153	15,247	16,279	16,604	12,790	12,163
Current account balance	1,980	5,341	7,112	3,627	8,788	8,924*	-	-
Capital and financial account	2,229	20	3,527	-1,649	-1,627	7,344	5,075	2,026
Financial account	2,189	-118	3,503	-1,702	-1,731	7,246	4,975	1,943
Direct investment	1,665	2,818	-620	1,285	1,604	1,226	699	613
Portfolio investment	3,475	3,043	4,623	-3,627	-625	4,100	5,622	423
Financial derivatives	-43	-138	-288	-113	32	-191	917	-184
Other investments	-2,908	-5,841	-212	753	-2,742	2,111	-2,263	1,091
Foreign exchange reserves (end-of-period)	18,494.35	22,966.72	33,751.05	37,550.82	44,242.64	62,373.09	75,302.42[a]	62,373.09[a]

Source: BSP, *World Bank
Note: a - figures are for the month of December

Table 1.4. Selected macroeconomic indicators, Philippines
Annual growth rates and share to GDP
At contant 2000 prices, in percent unless otherwise stated

	2006	2007	2008	2009	2010	2011
Gross national income	5.0	6.2	5.0	6.1	8.2	2.6
Gross domestic product	5.2	6.6	4.2	1.1	7.6	3.7
Agriculture, fishery, and forestry	3.6	4.7	3.2	-0.7	-0.2	2.6
(share to GDP)	*13.1*	*12.9*	*12.8*	*12.5*	*11.6*	*11.5*
Agriculture and fishery	3.5	5.0	3.2	-0.7	0.0	0.0
	13.0	*12.8*	*12.7*	*12.5*	*11.6*	*11.4*
Forestry	17.4	-24.5	2.1	-2.0	-31.3	57.1
	0.1	*0.1*	*0.1*	*0.1*	*0.0*	*0.1*
Industry sector	4.6	5.8	4.8	-1.9	11.6	1.9
(share to GDP)	*32.5*	*32.2*	*32.4*	*31.5*	*32.6*	*32.0*
Mining and quarrying	-0.2	18.6	-1.4	16.1	11.4	4.1
	0.9	*1.0*	*1.0*	*1.1*	*1.2*	*1.2*
Manufacturing	4.1	3.6	4.3	-4.8	11.2	4.7
	23.5	*22.8*	*22.8*	*21.5*	*22.2*	*22.4*
Construction	9.8	14.6	7.0	6.8	14.3	-6.4
	4.6	*5.0*	*5.1*	*5.4*	*5.7*	*5.2*
Electricity, gas, and water	2.9	5.5	6.8	-0.9	9.9	-2.8
	3.5	*3.5*	*3.6*	*3.5*	*3.6*	*3.3*
Service sector	6.0	7.6	4.0	3.4	7.2	5.0
(share to GDP)	*54.4*	*54.9*	*54.8*	*56.0*	*55.8*	*56.5*
Transportation, storage, and communication	4.3	8.4	3.9	-0.1	1.0	3.9
	8.0	*8.1*	*8.1*	*8.0*	*7.5*	*7.5*
Trade and repair of motor vehicles, motorcycles, personal	6.0	8.6	1.4	1.4	8.4	2.6

Table 1.4. (Continued)

	2006	2007	2008	2009	2010	2011
	16.6	*16.9*	*16.5*	*16.5*	*16.6*	*16.5*
Financial intermediation	11.9	10.2	1.8	5.5	10.1	6.6
	6.1	*6.3*	*6.2*	*6.4*	*6.6*	*6.8*
Real estate, renting, and business activities	6.5	7.9	9.0	4.1	7.5	7.7
	9.5	*9.6*	*10.0*	*10.3*	*10.3*	*10.7*
Public administration and defense: compulsory social security	3.5	1.4	2.0	6.1	5.8	3.2
	4.7	*4.4*	*4.3*	*4.5*	*4.5*	*4.5*
Other services	4.8	6.1	6.0	6.5	8.4	6.7
	9.5	*9.5*	*9.7*	*10.2*	*10.2*	*10.5*
Household final consumption expenditure	4.2	4.6	3.7	2.3	3.4	6.1
(share to GDP)	*72.9*	*71.6*	*71.2*	*72.1*	*69.2*	*70.8*
Government consumption	10.6	6.9	0.3	10.9	4.0	-0.7
(share to GDP)	*9.8*	*9.8*	*9.4*	*10.4*	*10.0*	*9.6*
Capital formation	-15.1	-0.5	23.4	-8.7	31.6	11.1
(share to GDP)	*17.0*	*15.9*	*18.8*	*17.0*	*20.8*	*22.2*
Exports (nominal $)	14.9	6.4	-2.9	-21.8	34.2	-6.7
Imports (nominal $)	9.2	7.2	2.0	-24.1	26.7	10.3
Inflation (2000=100) (average)	6.2	2.8	9.3	3.2	3.8	4.5
Inflation (2006=100) (average)	-	2.9	8.3	4.1	3.8	4.8
91-day Treasury Bill rate (average)	5.4	3.4	5.4	4.2	3.7	1.4
Nominal exchange rate (P/$ average)	51.3	46.1	44.5	47.6	45.1	43.3

Sources: National Accounts of the Philippines, NSCB; Selected Philippine Economic Indicators BSP; NSO

Table 1.5. Contribution to 2011 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	0.4	
Fishing	-0.1	
Industry		0.6
Mining and quarrying	0.0	
Manufacturing	1.0	
Construction	-0.4	
Electricity, gas, and water supply	-0.1	
Services		2.8
Transport, storage, and communication	0.3	
Trade and repairs	0.4	
Financial intermediation	0.4	

Table 1.5. (Continued)

Sector	Contribution to Growth	
Real estate, renting, and business activities	0.8	
Public administration and defense	0.1	
Other services	0.7	
By expenditure		
Household final consumption expenditure		4.2
Government final consumption expenditure		-0.1
Capital formation		2.3
Fixed capital	0.9	
Construction	-0.4	
Public construction	-0.7	
Private construction	0.4	
Durable equipment	0.9	
Breeding stock and orchard development	0.0	
Changes in inventories	0.5	
Intellectual property products	1.3	
Exports		-1.9
Exports of goods	-2.2	
Exports of services	0.3	
Imports		-1.0
Imports of goods	-0.6	
Imports of services	-0.4	
Net exports		-2.9
Statistical discrepancy		0.2
GDP growth	**3.70**	

Note: Figures are in percentages. The sectoral contributions sum up to the GDP growth figure; details may not exactly add up due to rounding.

by 0.4 percent. However, public construction alone contributed negative 0.7 percentage points to GDP growth.[3] An interesting issue is which factor(s) can be identified as the major cause(s) for the disappointing economic performance. This is answered in Box 1.1.

Value added in the electricity, gas, and water supply also declined during the year, resulting in a negative 0.1 percent contribution of the sector to GDP growth. The decline in value added reflected the fact that not much additional production activities occurred in these subsectors, owing in part to slow investments in power generation and very gradual water supply expansion in areas outside Metro Manila. The steam industry grew during the year but it was not enough to counter the decline in electricity and water supply industries.

Meanwhile, the fishing industry also contracted during the year because of the "fish kill"[4] that affected Luzon in the second to the third quarter as well as the lower yield in some fishing grounds and the typhoons that hit the country in

[3] The negative 0.7 percent contribution is based on expenditure data.

[4] The term "fish kill" refers to the death of fish populations in fishing grounds and is commonly caused by reduced oxygen in the water, which in turn could be caused by overpopulation, increased water temperature, increased population of organisms vying for oxygen in the water, infectious diseases, and toxicity in the water.

Box 1.1. What was the main cause for the economic slowdown in the Philippines?

The economy decelerated sharply from 7.6 percent GDP growth in 2010 to 3.7 percent in 2011. The election spending in 2010—and the absence thereof in 2011—was definitely a major factor. Nevertheless, the consensus forecast was still 5.5 to 6 percent GDP growth in 2011. NEDA's target was 7–8 percent.

What caused the sharp drop to 3.7 percent?

By referring to the growth decomposition in Table 1.5, the knee-jerk reaction would be to cite net exports as the primary culprit. Exports contributed -1.9 percentage points to GDP growth. Some analysts actually pointed out that the economy would have grown by 5.7 percent if exports had attained the same level in 2011. This conclusion is misleading at best.

Using the previous year or period as the benchmark for the growth decomposition shown in Table 1.5, the correct argument would be that the fall in exports was just one of the major causes for the drop in the country's GDP growth from 7.6 percent to 3.7 percent. Of course, given the expected slowdown in the global economy, the decline in exports was more or less already anticipated and incorporated in the forecast of 5.5 to 6 percent Philippine GDP growth. But what was unanticipated was the severity of the slowdown in the global economy—from 5.1 to 4 percent instead of from 5.1 to 4.4 percent (Table 1.2). Other things remaining the same, the growth rate of the Philippine GDP should have been 5.3–5.8 percent.

At the same time, it should be noted that Philippine exports have a relatively weak link to the domestic manufacturing sector. In other words, they have relatively little value added. This is the reason why a fall in global output growth and consequently, lower demand for Philippine exports has little impact on Philippine GDP. This implies that the production side should also be considered. "Electrical machinery and apparatus" and "radio, television, and communication equipment and apparatus"—the counterparts of electronics exports in the manufacturing sector—contracted by only 1.4 percent in 2011. Their combined contribution to GDP growth in 2011 was only -0.07 percentage points.

The other major factor in the GDP growth decline was the higher than anticipated level of food and fuel prices. In fact, if the UNESCAP simulation results are adopted, the GDP growth forecast should have been lowered further to 4.7–5.2 percent because of the higher food and fuel prices.

And the other major factor was government underspending. If the PHP 165 billion estimate of underspending is converted to constant prices and directly added to GDP, the growth rate in 2011 would have been 5.2 percent instead of 3.7 percent. Again, the -0.7 percent in Table 1.5 is not relevant because this figure is obtained with 2010 as a benchmark. The difference of 1.5 percentage points, i.e., 5.2 minus 3.7, is obtained based on planned expenditures in 2011 as compared to actual expenditures.

To summarize, the difference between a potential GDP growth of 5.5 to 6 percent in 2011 and the actual growth rate of 3.7 percent can be attributed to the following factors:

- Lower than anticipated global output growth leading to lower demand for Philippine exports: -0.2 percent
- Higher than anticipated food and fuel prices: -0.6 percent
- Government underspending: -1.5 percent

This analysis points to policy failure on the part of the Philippine government. In the wake of the unfavorable global economic environment and slowdown in private investment, government spending had to be sustained and not slashed drastically. Monetary policy was constrained by the inflow of capital, increasing foreign exchange reserves, relatively low interest rates, and appreciating currency. Fiscal policy was therefore critical. It is likely that policymakers were relying on private consumption to cushion the impact of lower government spending. But while consumption spending was fairly robust, it was not enough to prevent a sharp deceleration in the economy.

the first half of the year and in December 2011. The Bureau of Agricultural Statistics (BAS) reported that the volume of fisheries production in 2011 fell by 3.47 percent at 4.98 million metric tons, relative to 5.16 million metric tons in 2010. This led to a negative 0.1 percent contribution of the fishing industry to GDP growth. The resilient services sector saved the economy from further decline and was the major source of 2011 growth in the production side, contributing 2.8 percent to overall GDP growth.

In the expenditure side, the sharp decline in exports of goods pulled down GDP growth by 2.2 percent. There was lower demand for Philippine

exports in 2011 owing to the weak economic performance of the country's trading partners and the global supply chain disruptions. The contraction in exports, together with a negative 1.0 percent contribution of imports (which are leakages in GDP accounting), led to a negative 2.9 percent contribution of net exports to GDP growth.

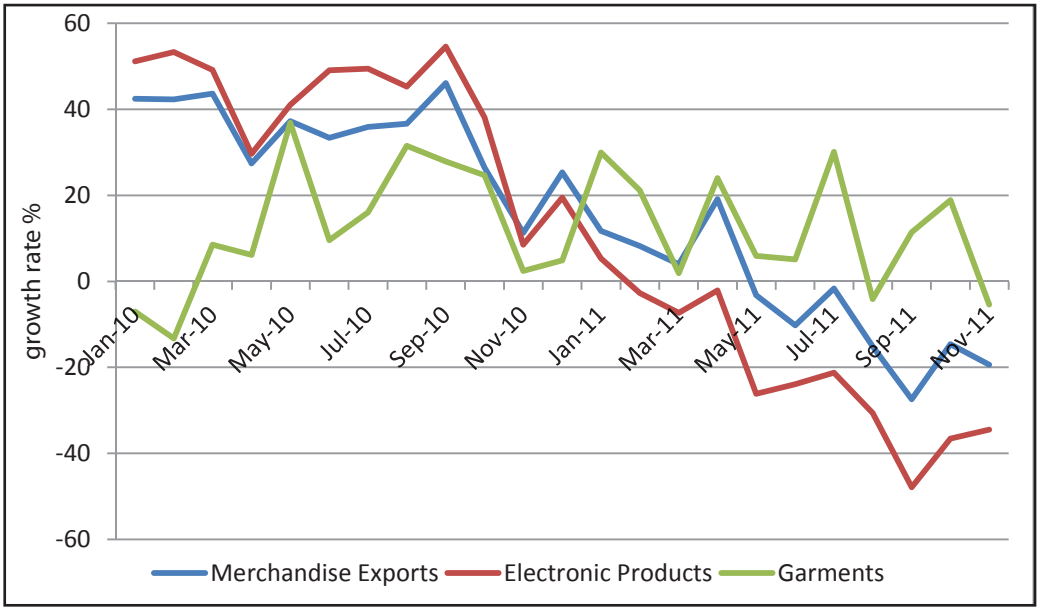
Government final consumption expenditure cut down GDP growth by 0.1 percent because of underspending, mostly in infrastructure projects and programs, which actually started in 2010. The government tried to accelerate spending in the latter part of 2011 but it had not been enough to elevate GDP growth significantly. Investment spending or capital formation contributed positively to growth, at 2.3 percent contribution. A close examination of the components of capital formation shows that the positive growth contribution could have been larger had there been no negative contributions by construction spending and breeding stock and orchard development spending. High household spending in 2011 made up for the negative factors by expanding by 6.1 percent and recording a contribution to GDP growth of 4.2 percent.

Export performance

2011 was not a good year for Philippine exports. After recovering from a slump in mid-2010 and accelerating in late 2010 up to the second quarter of 2011, world export growth decelerated in the third quarter of 2011 (Figure 1.3) as global demand declined due to the effects of the natural disasters in Japan, the weak import demand in China, the credit downgrade and disappointing economic performance of the United States, and the lingering sovereign debt crisis in Europe. In the Philippines, the weak global demand induced not just a slowdown but a decline in exports, at -3.8 percent in 2011, which pulled down GDP growth by 1.9 percent.

The poor performance of Philippine exports was largely due to a sharp drop in exports of electronic products, which accounted for 61 percent of total exports of goods in 2011. Electronics

Figure 1.5. Philippine merchandise exports growth



Source: NSO

exports posted negative monthly year-on-year growth rates since February 2011 (Figure 1.5). In addition to the weakening global demand and slow industrial spending in developed markets, supply chain disruptions in the semiconductor industry adversely affected electronics export growth. The US Semiconductor Industry Association reported that the global supply chain disruptions resulted from the floods in Thailand.[5]

The continuing appreciation of the peso also made Philippine exports more expensive. The peso appreciated by 4.1 percent in 2011. The increasingly high price of electricity also raised the production cost of exporters and contributed to the declining competitiveness of exports. The Philippines now has the highest cost of electricity in Asia. According to an independent study by the Australia-based International Energy Consultants, the average retail electricity rate in the Philippines was 18.1 US cents per kilowatt-hour by October 2010. At this price level, the Philippines eased out Japan as having the highest average retail electricity rate in Asia.[6] The Philippine Exporters Confederation Inc. also reported that some exporters were thinking of relocating outside the country because of the high electricity rates.[7]

Fiscal performance

The fiscal deficit target for 2011 was 3 percent of GDP, or about PHP 300 billion deficit given a 5 percent GDP growth assumption in the 2011 Budget of Expenditures and Sources of Financing (BESF). The January–November 2011 fiscal performance shows that the fiscal deficit stood at PHP 96.25 billion, which is just 32 percent of the whole year target. The primary fiscal surplus during the first eleven months of 2011 also indicated that the government did not need to borrow in order to finance interest payments on debt; the primary fiscal surplus stood at PHP 155.30 billion as of November 2011. Table 1.6 shows that the speedy decline in interest payments and underspending in other expenditures contributed to the overachievement of the fiscal deficit target.

The lower settlement of interest obligations in 2011 was reported to be mainly a result of the

Table 1.6. Indicators of fiscal performance (in billion pesos)

	Programmed	Actual Jan–Nov 2011	Percent Difference
Revenues	1,410.00 [a]	1,249.77	13%
Expenditures	1,645.00 [b]	1,346.03	22%
of which:			
Interest payments	357.09	251.56	42%
Other expenditures	1,287.91	1,094.47	18%
Primary fiscal surplus /(Deficit)		155.30	
Total fiscal surplus /(Deficit)	(300.00) [c]	(96.25)	212%

Notes: [a] from the BESF
[b] from the General Appropriations Act (GAA)
[c] from the Department of Budget and Management (DBM)-published *The People's Budget*
Sources: DBM, Department of Finance (DOF)

[5] January 2, 2012 press release of the US Semiconductor Industry Association, www.sia-online.org.
[6] "Philippine power rates now the highest in Asia." *Manila Standard*. 30 August 2011.
[7] "High power rates force exporters to relocate." *Philippine Daily Inquirer*. 02 November 2011.

lengthening of the maturity of government debts and the favorable impact of peso appreciation on foreign debt servicing.[8] However, the decline in interest payments could alternatively be viewed as a missed opportunity for the government to use spending to boost economic growth. In fact, one of the criticisms[9] raised against the current administration is that in trying to improve the fiscal position, it sacrificed needed government expenditures on projects and programs. Relative to the target expenditure or programmed amount of PHP 1,554 billion from January–November, total national government disbursements were 13 percent lower at PHP 1,346 billion. Manasan (2011) estimates full-year underspending to be PHP 165 billion. Preliminary reports indicate that the full-year deficit may have been PHP 140 billion–PHP 170 billion, or 47 percent to 57 percent of the target.[10] The cuts in spending could have easily contributed at least 1.5 percentage points to GDP growth in 2011.

An assessment of disbursements made by the Department of Budget and Management (DBM) shows that in the first quarter of 2011, capital outlays were 56.8 percent short of the programmed amount. Of the capital outlays, releases for current payables for infrastructure lump sum funds substantially declined because of pending submission or approval of budget requests and additional documentation. Maintenance and other operating expenditures also fell significantly, reportedly a result of more careful fleshing-out of details of lump sum items in the budget. In the second quarter of 2011, spending exhibited a similar pattern, with the addition that there were lower claims and progress billings by private contractors for government contracts. In the third quarter of 2011, the government engaged in a disbursement accelerated program and allotted a PHP 72 billion stimulus fund for it. However, some of the items, e.g., the increase in Bangko Sentral ng Pilipinas (BSP) capitalization, as cited earlier, are not expected to contribute directly to economic activity.

With respect to the revenue side, the Development and Budget Coordinating Committee (DBCC) set as target for the Bureau of Internal Revenue (BIR) a tax effort increase of 0.3 percent of GDP annually. The BIR's performance shows a tax effort of 9.8 percent of GDP in the first three quarters of 2011, an increase of 0.4 percent of GDP relative to the first three quarters of 2010. The BIR attributes the three-quarter improvement to higher collection efficiency and its campaign against tax evaders, with the latter being a subject of wide media attention in 2011. Nevertheless, the tax agency still missed its January–November cumulative target by 0.67 percent. The Bureau of Customs (BOC) is also experiencing a collection shortfall, which already reached PHP 24.24 billion as of end-August 2011, reportedly influenced by the country's compliance with free trade agreements and the appreciation of the peso.

Prices and Employment

Inflation

Headline inflation[11] inched toward the 5 percent target ceiling during the first five months of 2011 and breached it from May to July, largely

[8] See, for example, the pronouncements by the Department of Finance (DOF) and DBM officials in "Government debt payments decline in first 3 months due to lower interest rates," Manila Bulletin, 04 May 2011; and "Strong peso cut Philippine interest payments in first 7 months," Philippine Daily Inquirer, 26 August 2011.

[9] See, for example, "Senators roast Aquino economic team over government underspending," *Philippine Daily Inquirer.* 15 September 2011.

[10] "Deficit may have only hit P140–170B last year." Businessworld. 11 January 2012.

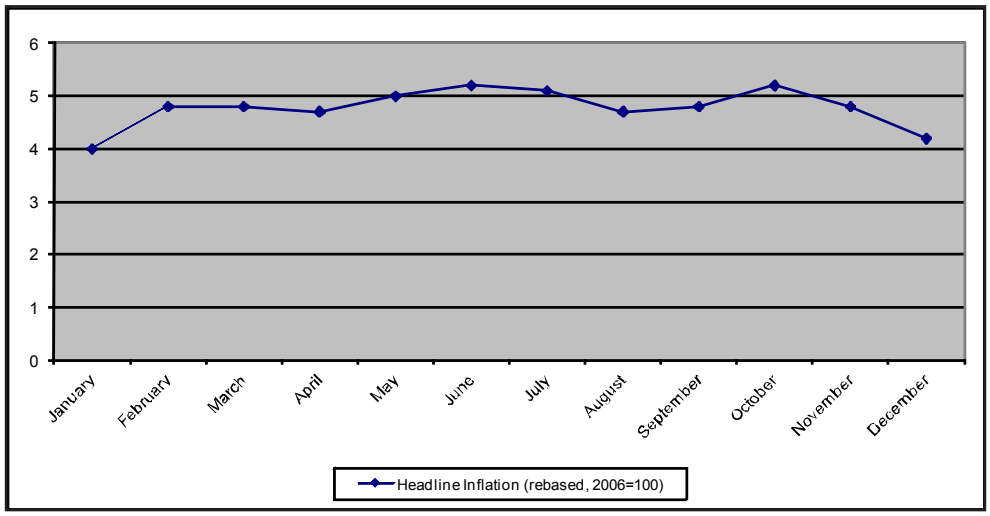
[11] Headline inflation rate captures the movements in the prices of a basket of representative commodities and therefore reflects the changes in the cost of living.

due to high oil and food prices. The target was breached again in October as the country was hit by several typhoons. Inflation then started to trend downwards during the latter part of the year (Figure 1.6). Average annual headline inflation rate was 4.5 percent in 2011 whereas it was only 3.8 percent in 2010. Nevertheless, this average is still within the government's target range of 3–5 percent annual inflation for 2011–2013. Transport goods and services posted the fastest increase in prices as they were affected by the upsurge in imported crude oil prices. Food and nonalcoholic beverages also posted a higher inflation rate of 5.4 percent in 2011, relative to 4.0 percent in 2010. This high rate is in large part an offshoot of high global food prices. Other indexes which registered high inflation rates are: alcoholic beverages and tobacco, 5.3 percent in 2011 from 3.0 percent in 2010; and housing, water, electricity, gas, and other fuels, 5.2 percent in 2011 from 5.1 percent in 2010.

The deflation in communication-related goods and services continued in 2011 (although at a slower rate) at -0.2 percent from -1.1 percent in 2010; this suggests that price declines resulting from industry competition and technological improvements continue to be enjoyed by Filipinos.[12]

In the face of growing pressures to inflation, the Monetary Board increased the BSP overnight borrowing rate or reverse repurchase (RRP) rate and overnight lending rate or repurchase (RP) rate by 25 basis points twice during the first semester. This action is intended to signal to the market that commercial interest rates will generally be on an uptrend, temper the demand for loans, and slow down inflation. This brought the RRP rate to 4.5 percent and the RP rate to 6.5 percent, which were then maintained through the rest of the year as the monetary authorities assessed that inflation expectations indicated that inflation would be manageable. Core inflation[13] averaged at 3.6 percent in 2011.

Figure 1.6. Inflation rates



Source: NSO

[12] There are, however, concerns that competition in the communications sector will weaken with the PLDT-Digitel merger and prices could increase in the future if market power will be exercised by a bigger PLDT.

[13] Core inflation is measured by filtering out the effects of temporary disturbances or shocks on the consumer price index and thus captures the general or underlying trend in prices. This underlying inflation is what can be influenced by monetary policies.

Funds parked in special deposit accounts (SDAs) at the BSP rose by 34 percent in 2011. Since a rapid expansion in monetary aggregates could lead to a surge in inflation, the BSP usually mops up excess liquidity in the banking system by offering to banks placements in SDAs at higher than market rates. SDAs stood at PHP 1.66 trillion in 2011, which is PHP 420 billion higher than the PHP 1.24 trillion funds parked in 2010. The huge amount of SDAs indicates the fairly high liquidity of the banking sector. The growth in SDAs may have been useful in curbing inflation but perhaps at a high opportunity cost. The parked funds could be viewed as missed opportunities to use private money for developmental financing such as for necessary infrastructure investments.

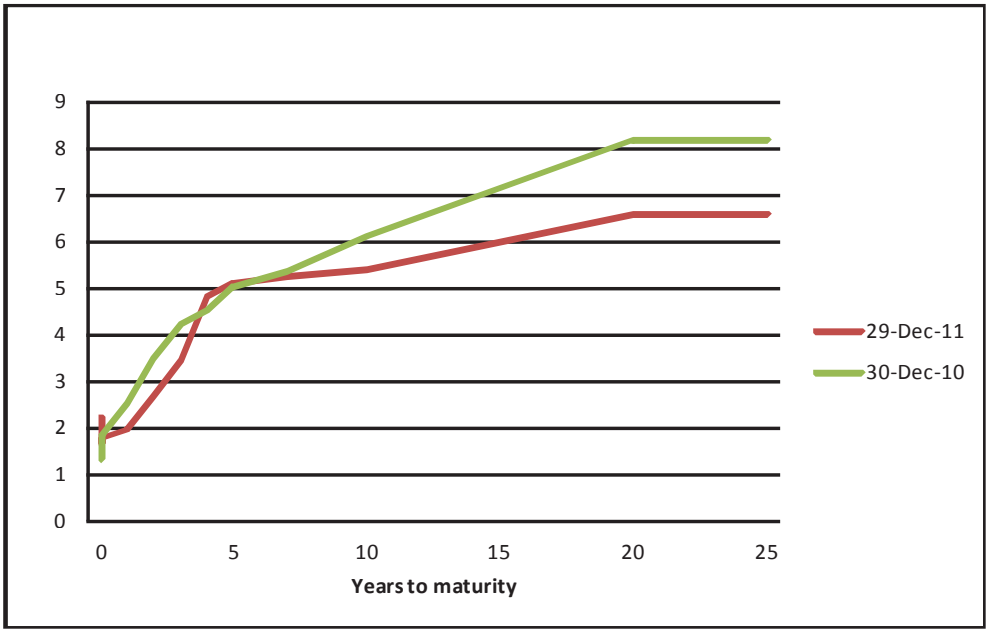
Price of capital

The Philippine benchmark yield curve during the last trading day of 2011 relative to the yield curve during the last trading day of 2010 demonstrates that expectations on the price of capital changed significantly during the year (Figure 1.7). The yield curve, generated from trading results in the secondary market, was flatter in end-2011; interest rates for all maturities, except for the four- to five-year tenor, declined. The flatter yield curve indicates that investors expect future interest rates to be lower, probably because of greater excess liquidity or higher supply of funds in the financial system. It also shows that investors put lower premiums on risks as they demand lower yields on long bonds.

Financial asset prices

Asset prices in the financial market generally trended upwards in 2011 but negative global developments made the Philippine Stock Exchange Composite Index (PSEi) more volatile relative to the 2010 PSEi performance. The local bourse started the year 2011 with a reversal of the rally in end-2010 as the PSEi trended downwards, largely because of concerns over the sovereign debt crisis in Europe, the effects of the earthquake and tsunami in Japan, and the continuing political tension in the Middle

Figure 1.7. Philippine benchmark yield curve

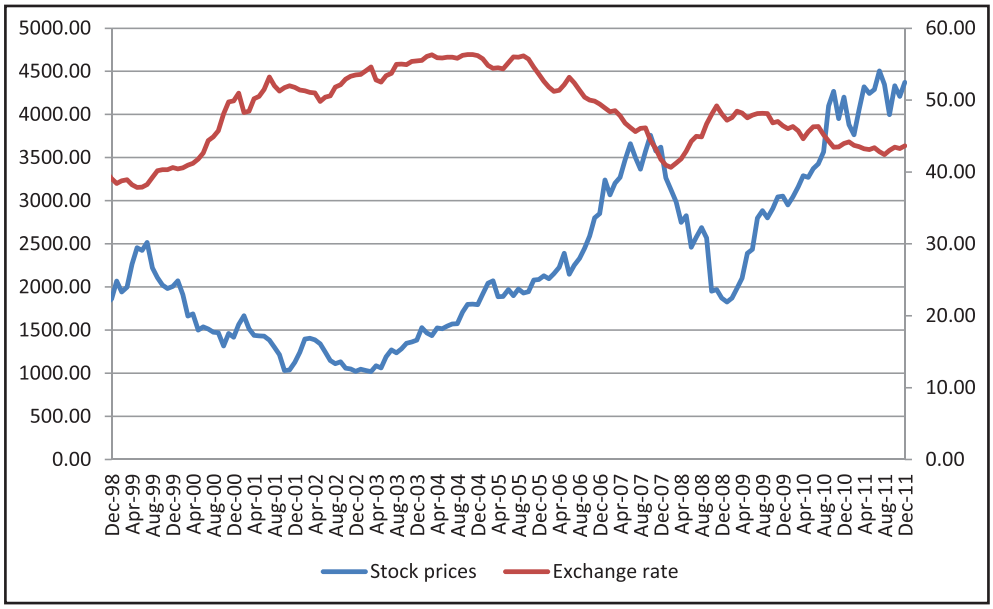


Source: Philippine Dealing System Treasury Reference Rates

East and North Africa (MENA) region. Despite the volatility, the PSEi reflected the resilience of the Philippine market to global woes as the index breached the 2010 peak in April 2011 and pushed upwards for the rest of the year. Trading closed in 2011 with the PSEi at 4,371.96 points, 4.07 percent higher than in end-2010 (Figure 1.8). Total market value turnover in the Philippine Stock Exchange (PSE) reached PHP 2.85 trillion, 18 percent higher than the 2010 turnover.

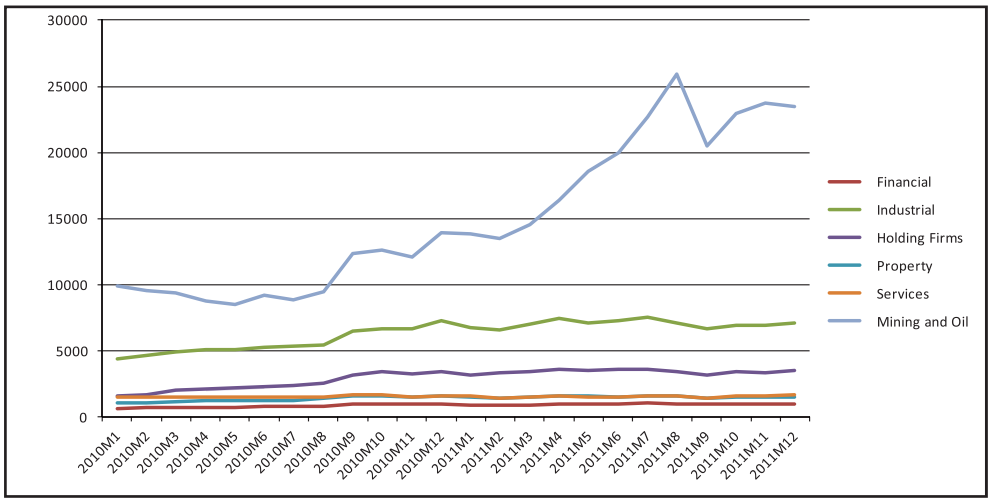
Among the sectoral components of the PSEi, trading was most bullish in the mining and oil sector, which posted a 68.52 percent increase in the price index (Figure 1.9). The second top gainer,

Figure 1.8. Exchange rate and stock prices in the Philippines



Source: Philippine Stock Exchange (PSE) and Bangko Sentral ng Philipinas (BSP)

Figure 1.9. Movement of the components of the PSEi



Source: PSE

with a 3.39 percent price index increase, was the holding firms sector, which also had the highest share in total value.

The price of the domestic currency increased during the year. BSP data show that the average Philippine peso to US dollar rate in 2010 was 45.11 and the average in 2011 was 43.31, or an appreciation of the peso by 4.1 percent (Figure 1.8). The exchange rate closed at 43.93 pesos to a dollar during the last trading day of December 2011. The volatility of the exchange rate was 0.52 in 2011. According to the BSP, the peso was the least volatile in the Asian region.[14] Thus, although the peso appreciation was hurting the competitiveness of Philippine exporters, the low volatility is allowing them, including importers and other kinds of businessmen, to plan their actions more effectively.

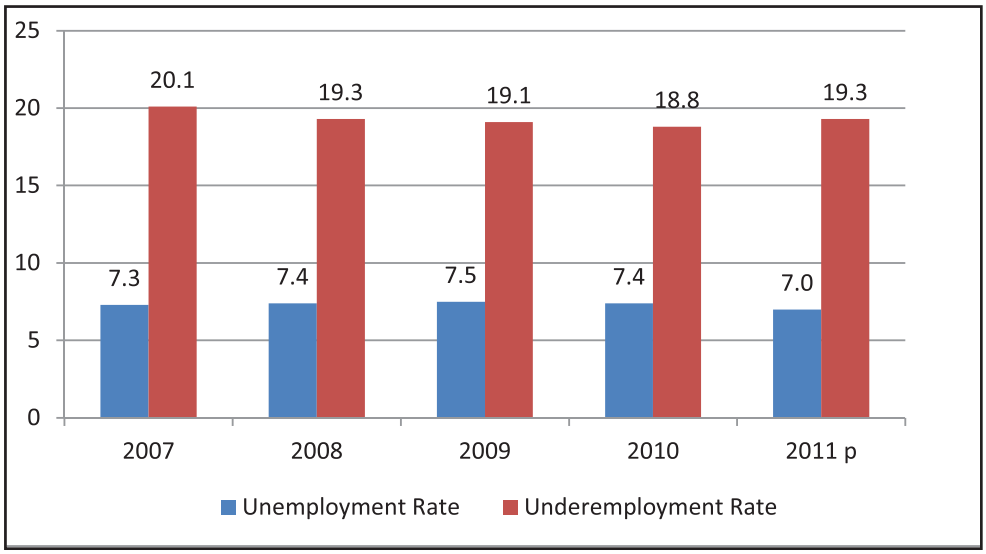
Employment

Economic growth with significant jobs creation remains an elusive goal. Although unemployment decreased to 7.0 percent in 2011 from 7.4 percent the year before, unemployment nevertheless has not significantly dropped from the 7.0–7.5 percent range since 2007 (Figure 1.10). The 2011 figure implies that there are about 2.8 million unemployed Filipinos.

With respect to the quality of employment, indicators point to weak improvement. Underemployment remained high at 19.3 percent in 2011, a slight increase from the 18.8 percent underemployment rate recorded in the previous year. Since 2009, the underemployment rate hovered close to 20 percent, meaning that about two out of ten working Filipinos expressed a "desire to have additional hours of work in their present job or an additional job, or to have a new job with longer working hours."[15]

The dynamics of labor movement in the National Capital Region (NCR), where most large enterprises are located and which could suggest patterns on job creation and job losses in major

Figure 1.10. Unemployment and underemployment



Source: NSO Labor Force Surveys

[14] "Peso least volatile currency in Asia – BSP." *Philippine Star.* 23 December 2011.
[15] National Statistical Coordination Board (NSCB) definition per Resolution No. 14 Series of 2007.

sectors nationwide, show that the accession or hiring rate increased to 11.4 percent and the separation or termination rate decreased to 9.5 percent in the first quarter of 2011, from 10.2 percent and 11.1 percent, respectively, during the same period in 2010 (Table 1.7). This means that more workers were hired than terminated during the first quarter of 2011 and this is reflected as a positive labor turnover rate of 1.9 percent, compared with a negative turnover rate of 0.9 percent in the first quarter of 2010. In the second quarter of 2011, labor turnover was negative at 2.0 percent, given that 10.6 percent of the total employment during the period was terminated whereas only 8.6 percent of the total employment represented new hires.

Meanwhile, the 2011 third quarter figures show a positive labor turnover rate of 2.5 percent, albeit lower than the labor turnover rate of 4.2 percent in the same period in 2010. New hires exceeded terminations in all sectors except in: (a) fishing, (b) mining and quarrying, (c) electricity, gas, and water supply, and (d) wholesale and retail trade plus related services. Such is a pattern that is roughly consistent with the slowdown in value-added growth in these sectors.

The negative labor turnover was most severe in the services sector in the second quarter, where the overall turnover was negative 3.0 percent. The sector most adversely affected was real estate, renting, and business activities, with a negative 6.4 percent turnover rate. However, the services sector experienced a turnaround in the third quarter. Surprisingly, the industry sector had the most favorable outcome in terms of labor turnover, with higher accession rates than separation rates in the first two quarters of 2011. The turnover rate remained positive in the third quarter. This implies that the overall improvement in employment in 2011 was likely biased toward higher productivity jobs.

Meanwhile, total remittances of overseas Filipinos in 2011 amounted to PHP 20.1 million, a 7.2 percent increase from the same period in 2010. This proves that employment abroad continues to provide opportunities for overseas Filipinos despite the challenges posed by global uncertainties, especially the risks to employment prospects in the MENA region: the so-called Arab spring or political crises in the MENA region, deployment ban in Afghanistan, Iraq's halt to foreign visa issuances for an indeterminate period, and the "Saudization" policy of encouraging employment of natives in Saudi Arabia's private sector.

Infrastructure Investment and Long-term Inclusive Growth

One factor blamed for the GDP growth slowdown in 2011 is the significant decline in government spending, particularly spending for programmed infrastructure projects. While it is true that external events such as weak global demand and supply chain disruptions heavily impacted the growth slowdown, goal-directed public spending is something that is within the control of the government and could have softened the impact of such external events on economic growth. Government underspending was heavily felt by the construction industry, where public construction contracted by 26.4 percent in 2011.

The Executive defended the underspending as a consequence of the attempt to institute good governance. The oversight and implementing agencies' due diligence review of projects and programs, especially those in the infrastructure sector, consequently led to postponement or

Table 1.7. Labor turnover in large enterprises in NCR, 2010 to third quarter of 2011

Sector	2010											
	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
	Accession Rate	Separation Rate	Percent Difference	Accession Rate	Separation Rate	Percent Difference	Accession Rate	Separation Rate	Percent Difference	Accession Rate	Separation Rate	Percent Difference
All Sectoral Groups	**10.23**	**11.11**	**-0.88**	**13.52**	**10.66**	**2.86**	**12.11**	**7.88**	**4.22**	**12.56**	**8.51**	**4.05**
Agriculture, fishery, and forestry	**4.94**	**4.82**	**0.12**	**5.16**	**4.35**	**0.81**	**5.11**	**6.92**	**-1.81**	**2.39**	**3.93**	**-1.54**
Agriculture, hunting, and forestry	2.71	1.61	1.10	1.61	0.99	0.62	5.01	6.51	-1.51	1.89	1.40	0.49
Fishing	5.63	5.80	-0.18	6.13	5.26	0.86	5.15	7.07	-1.91	2.55	4.73	-2.18
Industry	**14.75**	**19.66**	**-4.92**	**14.20**	**15.16**	**-0.97**	**16.34**	**12.43**	**3.91**	**16.23**	**12.90**	**3.33**
Mining and quarrying	23.94	9.92	14.02	21.62	16.05	5.57	20.32	24.24	-3.91	14.31	19.45	-5.14
Manufacturing	18.11	24.52	-6.41	16.11	15.01	1.10	16.35	13.71	2.64	19.46	12.41	7.05
Electricity, gas, and water supply	3.10	3.23	-0.13	2.77	1.77	1.00	2.26	1.23	1.03	1.28	1.07	0.21
Construction	5.07	8.12	-3.05	9.42	17.51	-8.09	17.91	9.13	8.78	10.16	15.12	-4.96
Services	**9.07**	**8.88**	**0.19**	**13.42**	**9.72**	**3.70**	**11.25**	**6.92**	**4.33**	**11.84**	**7.59**	**4.25**
Wholesale and retail trade and related services	6.42	8.32	-1.90	8.78	7.17	1.61	8.48	6.30	2.18	10.62	7.95	2.67
Hotels and restaurants	7.41	9.83	-2.42	12.26	12.99	-0.73	13.01	10.98	2.02	9.15	7.83	1.32
Transport, storage, and communications	4.45	3.32	1.13	5.58	4.11	1.47	6.05	3.57	2.47	5.72	3.38	2.34
Financial intermediation	1.26	2.88	-1.62	3.22	2.36	0.86	3.66	2.87	0.79	2.11	2.08	0.03
Real estate, renting, and business activities	15.46	13.60	1.86	21.74	15.15	6.59	17.02	9.61	7.41	19.05	11.38	7.67
Private education services	1.67	2.38	-0.71	9.69	7.40	2.30	5.42	2.42	3.00	3.51	3.37	0.14
Health and social work (private)	5.13	5.96	-0.82	6.11	4.96	1.14	5.89	4.20	1.69	4.79	3.92	0.87
Other community, social, and personal service activities	9.59	9.64	-0.06	10.51	8.89	1.63	9.79	8.74	1.00	6.93	6.54	0.39

Table 1.7. (continued)

Sector	2011								
	1st Quarter			2nd Quarter			3rd Quarter		
	Accession Rate	Separation Rate	Percent Difference	Accession Rate	Separation Rate	Percent Difference	Accession Rate	Separation Rate	Percent Difference
All Sectoral Groups	**11.36**	**9.47**	**1.89**	**8.60**	**10.65**	**-2.05**	**11.05**	**8.55**	**2.51**
Agriculture, fishery, and forestry	**6.02**	**4.56**	**1.46**	**4.01**	**4.76**	**-0.75**	**3.56**	**4.01**	**-0.45**
Agriculture, hunting, and forestry	4.21	2.62	1.59	3.71	2.46	1.25	3.21	2.30	0.92
Fishing	7.41	6.04	1.37	4.16	5.95	-1.79	3.73	4.87	-1.13
Industry	**12.44**	**7.60**	**4.84**	**9.46**	**7.12**	**2.34**	**9.88**	**7.58**	**2.30**
Mining and quarrying	25.78	9.05	16.73	15.21	9.29	5.92	14.55	18.34	-3.79
Manufacturing	11.46	8.67	2.79	10.18	7.59	2.59	10.06	7.76	2.30
Electricity, gas, and water supply	2.68	3.89	-1.21	2.62	2.00	0.63	1.39	2.24	-0.85
Construction	15.18	5.78	9.40	8.28	6.53	1.74	10.04	7.04	2.99
Services	**11.07**	**10.07**	**0.99**	**8.43**	**11.45**	**-3.02**	**11.35**	**8.78**	**2.56**
Wholesale and retail trade and 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	13.10	11.54	1.56
Transport, storage, and communications	3.57	5.21	-1.63	4.53	4.16	0.37	5.60	3.20	2.40
Financial intermediation	7.76	2.92	4.83	6.36	3.79	2.56	5.49	4.09	1.40
Real estate, renting, and business activities	13.32	13.65	-0.33	8.58	14.98	-6.40	14.64	10.76	3.88
Private education services	2.16	3.30	-1.14	11.33	13.42	-2.10	6.47	2.92	3.55
Health and social work (private)	3.67	4.07	-0.39	4.52	3.66	0.86	5.48	5.32	0.16
Other community, social, and personal service activities	4.37	1.80	2.57	3.41	4.40	-1.00	7.13	3.41	3.73

delays in the disbursement for these projects and programs. On the other hand, when the Executive engaged in a disbursement acceleration program through the PHP 72 billion stimulus fund in late 2011, it also had to respond to criticisms that it was "spending for spending's sake"[16] and that its stimulus package was a program that merely spends what was actually originally programmed in the budget.

This "damned if you do and damned if you don't" situation actually reinforces the truth that the application of policies anchored on macroeconomic aggregates such as fiscal expansion should be treated as a delicate balancing act. As failures of macroeconomic policies are often blamed on constraints posed by institutions,[17] it makes sense to address weaknesses in these institutions. At the same time, however, addressing the institutional weaknesses should not result in too little macroeconomic intervention when the situation calls for a more aggressive intervention.

Engaging in fiscal expansion would be futile if much of this expansion would leak out of the domestic economy because of weak institutions and systemic corruption. If indeed there had been gains in instituting good governance in the 2011 government spending, this would conform to an institutional economics approach to raising long-term economic growth.

The positive impacts of instituting good governance on economic growth may escape measurement under traditional and regularly conducted methods such as growth accounting by production-side and expenditure-side components. Nevertheless, the connection between institutions and growth is there and has empirical support. Thus, in a country where instituting good governance is needed, it should be accorded the same level of importance as expansionary macroeconomic policies when trying to stimulate growth. They should go hand in hand. Put another way, governance reforms should not be considered as a substitute for actions needed to achieve gains in the immediate term.

Immediately measurable gains from public and private spending on needed infrastructure will take the form of value-added creation in industry, increased employment in sectors such as construction, and increased final consumption of goods and services by firms directly involved in the production of infrastructure facilities and by households benefiting from increased employment. There is a huge demand for quality infrastructure facilities and services that has been waiting to be met for many years now. Since the Philippines has to rely more on domestic demand to mitigate the impacts of declining external demand and global economic slowdown, aggressively pursuing an expansionary investment strategy for infrastructure in 2012 and some years onward is thus appropriate and timely.

The finding of the 2007 ADB Critical Development Constraints study which states that inadequate infrastructure investment is a binding constraint to Philippine economic growth continues to be relevant. For instance, the current transport capacity in Metro Manila cannot meet increasing demand and the mass rail network urgently needs significant investments in rolling stock and integration technology to match ridership. Congestion is so severe in Metro Manila that economic losses were estimated to be around PHP 100 billion a year in 1996 prices (Dato et al. 2010). In the Global Competitiveness

[16] Benjamin Diokno, "Government spending for spending's sake?" *Malaya*. 5 December 2011.

[17] The term "institutions" refers to what may be informally called "the rules of the game" and is usually defined in the literature following North (1990). North identified two forms of institutions—the *formal* institutions such as the rules and regulations codified in laws and societal promulgations, and the *informal* institutions which regulate behavior such as norms, value systems, and customs.

Report 2009–2010, the Philippines ranked at the bottom among Southeast Asian countries with respect to quality of infrastructure (Table 1.8). Infrastructure investment, especially in a country with a relatively low stock and low quality of infrastructure like the Philippines, will therefore have a huge potential to elevate the country's long-term growth trajectory through productivity gains and competitiveness enhancement.

There are many empirical studies establishing that investment in infrastructure has inclusive growth effects because it is a significant determinant of poverty reduction and complements the provision of social services such as basic education and health (e.g., Balisacan and Pernia 2002). But the more interesting developmental research questions relate to the factors posing risks to the infrastructure investment-inclusive growth nexus in the country, the identification and rational prioritization of infrastructure-deficient areas and sectors, and the levels and speed at which infrastructure investments must be undertaken.

In terms of risks, weak institutions pose significant risks to the efficiency and effectiveness of infrastructure investments; the current administration is therefore on the right track in addressing this issue. It must nonetheless always be on guard against substituting such action for other needed actions.

As to the identification and prioritization as well as determination of the right amount and speed of infrastructure investments, meanwhile, recent policy developments in the Philippines show that these have not progressed much, as may be gleaned from the section on infrastructure policy developments in Chapter 2 of this *Economic Policy Monitor* (EPM) report.

References

Balisacan, A. and E. Pernia. 2002. Probing beneath cross-national averages: poverty, inequality, and growth in the Philippines. Economic Research Department Working Paper Series No. 7. Manila: Asian Development Bank.

Table 1.8. Ranking of Southeast Asian countries in terms of quality of infrastructure

Country	Quality of Roads	Quality of Port Infrastructure	Quality of Air Transport Infrastructure
Singapore	1	1	1
Malaysia	24	19	27
Brunei Darussalam	29	42	47
Thailand	35	47	26
Cambodia	77	89	88
Indonesia	94	95	68
Viet Nam	102	99	84
Philippines	104	112	100

Note: A total of 133 countries were ranked. Lao PDR and Myanmar were not included in the survey.
Source: *The Global Competitiveness Report* 2009–2010, World Economic Forum

Dato, V., B. El-Hifnawi, B. Gericke, N. Moreno, and A. Navarro. 2010. Discussion Note No. 8: Transport. *Philippines Discussion Notes: challenges and options for 2010 and beyond*. Manila: World Bank.

Manasan, R. 2011. Analysis of the president's budget for 2012. PIDS Discussion Paper No. 2011-20. Makati City: Philippine Institute for Development Studies.

Ortiz, I., J. Chai, and M. Cummins. 2011. Escalating food prices: the threat to poor households and policies to safeguard a Recovery for All. UNICEF Social and Economic Policy Working Paper. New York: United Nations Children's Fund.

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). 2011. *Economic and social survey of Asia and the Pacific: sustaining dynamism and inclusive development*. Bangkok: UNESCAP.

2 Policy Updates: Developments and Responses

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This chapter presents some of the policies issued and adopted by the Philippine government in 2011 both in response to developments at the global and domestic fronts, and as part of the government's overall development direction.

The policies mentioned here refer to those issued from October 2010 to October 2011. The subsequent sections describe them, explain their rationale, and assess some of their impacts and recommendations (i.e., when available information permits an assessment).

Policy Responses to the Global Economic Slowdown

What is notable in the government's response to the slowdown is the restraint of Philippine policymakers in applying protectionist measures to offset the adverse effects of the global economic crisis. The Philippines has maintained a liberal trade and investment regime even during the height of the crisis in 2008–2009. Thus, it is not surprising that the major and continuing policy response of the government to the 2011 global economic slowdown is to let liberalization proceed as part of the country's commitments in its various trade agreements. These include preferential tariff reductions in line with the Philippines' commitments in the Association of Southeast Asian Nations (ASEAN) and the ASEAN-plus-1 free trade agreements (ASEAN-China, ASEAN-Korea, ASEAN-Japan, ASEAN-Australia-New Zealand, and ASEAN-India) and in its lone bilateral free trade agreement with Japan (Philippines-Japan Economic Partnership Agreement or PJEPA). These agreements are listed in Table 2.1. The Philippines also remains open to possible partnerships that could yield significant potential benefits. It likewise continues to be an active member of the

Table 2.1. Free trade agreements with trading partners

Free Trade Agreements with Trading Partners	Implementation by Virtue of	Date of Issuance
ASEAN Trade in Goods Agreement (ATIGA) -formerly ASEAN-CEPT	EO 850	23 December 2009
ASEAN-China Free Trade Agreement (ACFTA)	EO 618; EO 814	23 April 2007; 30 June 2009
ASEAN-Korea Free Trade Agreement (AKFTA)	EO 638; EO 812	21 July 2007; 15 June 2009
Philippines-Japan Economic Partnership Agreement (PJEPA)	EO 767	7 November 2008
ASEAN-Japan Comprehensive Economic Partnership Agreement (AJCEP)	EO 852	23 December 2009
ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA)	EO 851	23 December 2009
ASEAN-India Free Trade Agreement (AIFTA)	EO 25	10 February 2011

Source: Various executive issuances, as compiled by PIDS

Asia-Pacific Economic Cooperation (APEC) and upholds its goals of open regionalism and support for the World Trade Organization (WTO).

Meanwhile, in the short term, the more crucial aspect that policymakers have to deal with is the surge in capital inflows as portfolio investments from developed countries seeking higher returns pour in. The looser monetary policy of the United States implemented through quantitative easing has a major influence on these inflows. Adjustment will be difficult for developing countries that are experiencing relatively strong economic growth and inflationary, rather than deflationary, pressures. Nevertheless, the BSP should look at measures such as prepaying outstanding external debt obligations, to deal with the burgeoning gross international reserves.

A medium- to long-term response to the global economic slowdown is economic rebalancing in East Asia. This has been discussed extensively in previous studies (e.g., Yap 2009). What is crucial for countries like the Philippines is to dovetail rebalancing at the domestic level with rebalancing at the regional level. Some experts have noted that Asia's outward-oriented development model does not need to be overhauled. What will be required is adjustment in net exports and some shift toward production for Asian demand. In other words, the main thrust of regional rebalancing should be an increase in intraregional trade and investment among East Asian economies, with more of the final exports going to economies in the region instead of to the United States and Western Europe.

Policy Responses to the Surge in Food Prices

In terms of responses to the global hike in food prices, the measures tried by various countries can be classified into three categories:[1]

Supporting consumption. This type of responses included food assistance (e.g., direct food transfers, food stamps/vouchers, and school

[1] Ortiz et al. 2011, p. 17.

feeding programs), price subsidies and controls, cash transfers, reduced consumption taxes, and food-for-work schemes.

Boosting agricultural production. This mainly focused on providing subsidies and reducing taxes for grain producers; some countries also offered other types of incentives such as credit programs for small farmers to spur agricultural output.

Managing and regulating food markets. Many developing countries tried to lower domestic food prices by encouraging imports and discouraging exports through the reduction of import tariffs and/or introduction of different export restrictions. Building up and releasing strategic food reserves was another frequently employed strategy to stabilize local food prices.

In the case of the Philippines, the 2008 rice price surge provoked dramatic policy responses. The National Food Authority (NFA), for one, expanded its rice distribution program and inventory of rice stocks, in part through domestic procurement, but mostly through aggressive importation. The government also enhanced its Food-for-School Feeding Program and broadened the conditional cash transfer program in 2009. It likewise suspended tariffs on rice importation and launched a rice production program known as FIELDS (**F**ertilizers, **I**rrigation and other infrastructure, **E**xtension and education, **L**oans, **D**ryers and other postharvest facilities, and **S**eeds Program). The FIELDS program targeted rice self-sufficiency by 2013, powered by a PHP 44 billion budget (Balisacan et al. 2009).

The Aquino administration reversed the rice importation policy in an attempt to cope with the massive NFA debt. An import quota was set conservatively and the majority of the quota was allocated to private sector importation. Other policies such as the conditional cash transfer program and food self-sufficiency target were, on the other hand, maintained. However, some of the more dubious spending elements of previous programs such as the hybrid seed and chemical fertilizer subsidy, have been dismantled under the current self-sufficiency road map.

By equating food security with food self-sufficiency, the government maintains interventions that are costly to consumers and public coffers. The WTO deadline to terminate the quantitative restriction on rice by 2012 opens a window of opportunity for reforming the NFA and even the Department of Agriculture (DA), and for promoting instead improved food affordability and long-term competitiveness of Philippine agriculture.[2]

Looking at Poverty-related Issues: Is the CCT Program Reaching the Extremely Poor?[3]

In the 2000 Millennium Declaration, the Philippines was among the many nations that committed to reduce its poverty rate by 2015. There are only a few years left before 2015 but the improvement in the country's poverty situation is still far from its target. Worse, the poverty trend is going upwards.

Tackling the worsening poverty situation is one of the current government's main anchors along with good governance. Good governance is the main instrument in fighting poverty (NAPC Part 1, 2011). The current administration's national antipoverty program's centerpiece is *Pantawid Pamilyang Pilipino Program* (4Ps) or what is commonly known as the conditional cash transfer (CCT) program. Other current poverty reduction programs include the

[2] For more details about the food security issue in the Philippines, please refer to Briones and Parel (2011).
[3] Based on a forthcoming PIDS Discussion Paper titled "Conditional cash transfer program in the Philippines: Is it reaching the extremely poor?" (Reyes and Tabuga 2012).

subsidized health insurance coverage, supplemental feeding program, the food-for-work program, rice subsidy program, the Self-employment Assistance-Kaunlaran (SEA-K) program, and the Kapit Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services (KALAHI-CIDSS) program, among others.

Being the government's centerpiece program to fight poverty, it is judicious to see how the CCT or 4Ps program is designed and how it works.

The basic common structure of CCTs refers to transferring monetary and nonmonetary resources to the poor or poorest families who have school-aged children, on the condition that they meet certain commitments aimed at improving their capacities (Cecchini and Madariaga 2011). The Philippines' version of the CCT, the 4Ps, is patterned after this basic CCT structure. The 4Ps offers PHP 6,000 annually (PHP 500 per month) for each household selected by the program for health and nutrition expenses. It also provides PHP 3,000 per child for one school year (i.e., 10 months) or PHP 300 per month for educational expenses. Only up to a maximum of three children for each household can receive a subsidy. The beneficiaries will receive the subsidy for, at most, five years so long as they comply with the conditions set under the program.

The eligible beneficiaries are selected by the Department of Social Welfare and Development (DSWD) from the poorest municipalities based on the 2003 Small Area Estimates (SAE) of poverty incidence generated by the National Statistical Coordination Board (NSCB). To obtain the poorest households in the municipalities, the DSWD uses the National Household Targeting System for Poverty Reduction (NHTS-PR) which employs a proxy means test model to identify the poor families. The proxy means test model was estimated using data from the 2006 Family Income and Expenditure Survey (FIES) and the 2006 Labor Force Survey. The identification assessment is conducted by using certain proxy variables like ownership of assets, type of housing, education of household head, livelihood, and access to water and sanitation facilities to predict income. To verify compliance, the DSWD coordinates with the program's multisectoral Advisory Committee to conduct monthly verification through the Compliance Verification System (CVS) developed for the program.

The 4Ps was piloted in 2007 and was launched on a wider scale starting 2008. To date, there are already 2.3 million households in 80 provinces enrolled in the program, covering 734 municipalities out of a total of 1,495 municipalities, and 62 key cities out of 138 cities. It targets 3 million household beneficiaries by end of 2012 as gleaned from Figure 2.1.

With its current coverage of 2.3 million beneficiaries, the 4Ps can be considered as one of the larger CCT programs in the world, being almost at par with Colombia's 2.6 million beneficiaries for its Families in Action program and bigger than Ecuador's and Indonesia's 1.2 million and 1.0 million beneficiaries, respectively, for their programs. Meanwhile, Brazil and Mexico have the largest number of families covered in their respective CCT programs (Table 2.2).

Design and implementation issues

Since its inception, the 4Ps has been the subject of many praises and criticisms. It has been hailed as a program to help fulfill the country's commitment to meet five of the eight Millennium Development Goals (MDGs) and, at the same time, has been questioned on whether it is the most effective and sustainable way of reducing poverty.

Figure 2.1. Number of beneficiary households of 4Ps, Philippines

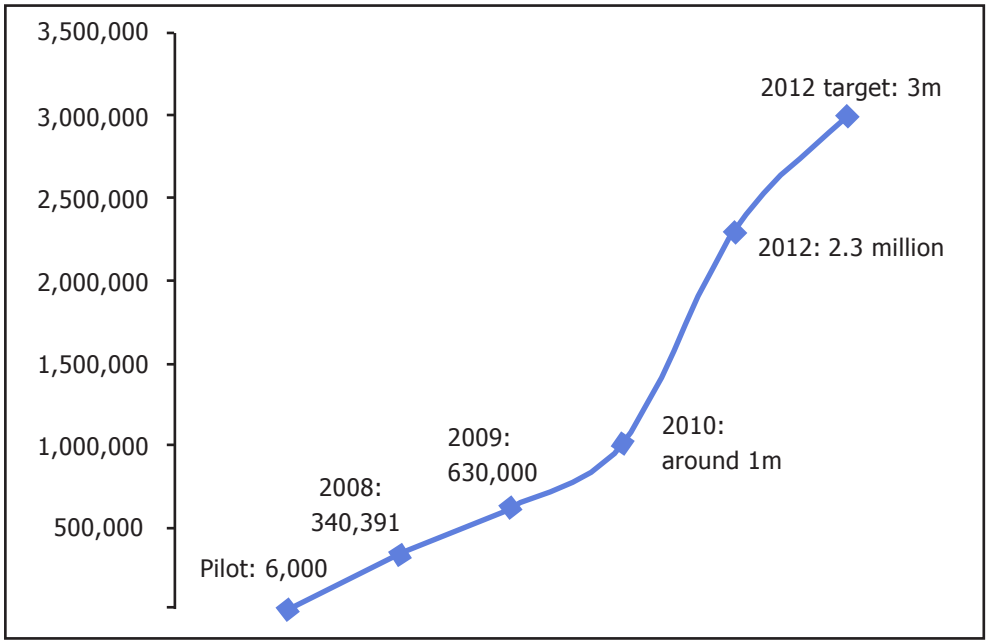

Table 2.2. Coverage of conditional cash transfer program in selected countries

Country	Program	Start	Coverage (number of families in millions)
Mexico	Progresa/Oportunidades	1997	5.6 (2010)
Ecuador	Solidarity Grant/Human Development Grant	1998	1.2 (2010)
Colombia	Families in Action	2001	2.6 (2010)
Brazil	Bolsa Familia	2003	12.6 (2010)
Indonesia	Program Keluarga Harapan	2007	1.0 (2011)
Philippines	4Ps	2007	2.3 (2011)

Table is based from Cecchini and Madariaga (2011).
Source of Philippine data: DSWD
Source of Indonesian data: http://pantawid.dswd.gov.ph/index.php/news/280-indonesian-delegation-commends-philippine-cct-during-study-tour

One of the main issues being raised concerns the *targeting* or selection of the 4Ps beneficiaries. Two points relate to the targeting issue.

One, 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 families in 2009. However, this number differs from the NSCB official poverty estimate in 2009 of 4.9 million poor families based on the old methodology of poverty estimation and the 3.9 million poor families based on the refined methodology. The proxy means test model of the NHTS-PR thus appears to be overestimating the number of poor families. 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.

And *two*, the 4Ps did not seem to fully consider the fact that the poor are not a homogeneous group. Studies (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 (52.6%) were transient poor who were moving in and out of poverty, and only 47.4 percent of poor households are considered to have been consistently or chronically poor since 2003.

Because the two groups have varying characteristics, the programs or interventions that must be addressed for them would necessarily differ. For the transient poor who fall into poverty during certain periods of economic shocks and natural calamities due to certain vulnerabilities but who may be able to recover given the proper assistance, programs like crop insurance, access to credit, or emergency employment programs would be ideal. On the other hand, for the chronic poor who are mostly uneducated, lack capacities, and would more likely perpetuate intergenerational poverty because they cannot send their children to school, the CCT program or the 4Ps would be the ideal intervention for them as it builds capacities and requires sustainability.

The implication for this is that in the targeting scheme used in the 4Ps, the concept of heterogeneity must be considered to ensure that the appropriate intervention is given and that the appropriate allocation of resources is made.

Meanwhile, another major issue being raised about the 4Ps is the *size of the cash transfer* made.

In providing cash grants, programs need to account for the distance of the poor from the poverty line to ensure that the amount is of the value that would yield an impact. The 4Ps provides poor families of five members a maximum amount of PHP 15,000 annually (assuming that they have three eligible children) or PHP 3,000 per person. With this amount, only around a quarter of the chronic poor (26%) are able to get out of poverty, assuming that they do not get exposed to significant economic shocks.

At the same time, the income of the transient poor has to be augmented by around PHP 3,400 per person annually. Given the actual per capita income of the transient poor in 2009, the 4Ps cash grant can lift only about half of them out of income poverty.

Recommendations

The Philippines' CCT program or the 4Ps is in its fifth year. The current size of the 4Ps is already significant with 2.3 million family beneficiaries, given that the number of poor families is 3.9 million. Before further scaling it up, however, it is essential to assess its implementation and address the concerns about the program to ensure that the extremely poor experience the maximum benefits from the program. The same was suggested by Llanto (2008). He noted that it is important to establish empirical evidence that the 4Ps program impacts human capital outcomes

before contemplating any rapid expansion. The 4Ps being implemented on a phased mode allows for this generation of empirical evidence to test crucial program components such as targeting and monitoring system.

More importantly, it should reconsider how it identifies the extremely poor. Targeting the chronic poor would provide better focus to the program. Moreover, to properly identify the extremely poor, one needs to utilize more than one reference period to account for the movements in and out of poverty. Data show that majority of the poor in 2009 are transient poor while only 47 percent are considered chronic poor (Reyes et al. 2011). This important information was extracted using longitudinal data obtained from tracking the same households for several years.

It will also be good to 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 2003 small area estimates may lead to significant exclusion. Only 25 percent, or 404 municipalities and cities, have poverty incidence greater than or equal to 50 percent. The rest, representing three out of every four municipality and city, have poverty incidence less than 50 percent. Limiting the survey area therefore to "poorest municipalities" to reduce data collection costs may not be the most appropriate way since this will lead to exclusion of some of the extremely poor. Other options such as using community-based monitoring system (CBMS) data already collected by the local government units (LGUs) or partnering with LGUs in implementing CBMS may thus be a more practical solution.

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. Moreover, it would be good to see whether the exit policy of the program (the beneficiary can only participate in the program by at most five years) is feasible.

It would also be helpful if the NHTS updates its proxy means test model for its targeting system by using the most recent FIES data and adopting the revised estimates of poverty thresholds. This would likely address the seemingly too large number of eligible beneficiaries being identified by the current system.

It is also important to evaluate how effective the program is in terms of the amount of the grant. Is the size enough to encourage the children to remain in school? Are there evidence of reduced child participation in the labor force because of the transfer?

To conclude, it is critical that an impact monitoring and evaluation be done at this stage to improve the mechanisms of identifying the beneficiaries to minimize leakages and exclusion, address loopholes in the system to avoid wastage of scarce resources, and address the supply-side deficiencies such as the lack of the necessary services and facilities (e.g., schools, health centers) in the 4Ps program sites. The 4Ps is such an important and expensive program; hence, plans for further expansion must be carefully thought of.

Infrastructure Policy Developments

Expectations were high in 2011 as it was the first full-year implementation of the government's revitalized public-private partnership (PPP) program. Ten priority projects, which were projected to boost GDP growth as these involve an estimated total investment of $3.4 billion or PHP 146.2 billion, were identified for 2011

rollout. However, in July 2011, the target rollout was deemed unworkable and was reduced to eight projects. This was then further reduced to five projects in September 2011. By end-2011, only one project had been auctioned off[4] and the expected impact of PPP investments on 2011 GDP growth never materialized.

In the air transport sector, Executive Order (EO) 28 was issued to reorganize the panels responsible for air services agreements and EO 29 was issued to authorize these panels to offer and promote third, fourth, and fifth air freedom rights[5] to foreign air carriers in airports other than the Ninoy Aquino International Airport (NAIA). The purported benefits are tourism growth and increased opportunities for the Philippines as an investment location. The realization of these benefits, however, is not immediate because negotiating agreements takes time and there is no assurance that the country will get what it wants and submit to the negotiating table. On the other hand, the immediate requirement in the air transport sector is for the government to take definite actions on the NAIA Terminal 3 expropriation issue and the NAIA Terminal 1 upgrade.

Another EO issued during the year and one that cuts across the transport and energy sectors is EO 32. It created the *Pantawid Pasada* program to mitigate the impact of rising fuel prices. Direct subsidies from a Special Fund of the Department of Energy amounting to PHP 450 million were given to the public transport sector, supposedly to cushion the impact of high oil prices on the riding public.[6] What should concern policymakers, however, is that this type of subsidy is unsustainable and may have had only a negligible impact on both consumers and public transport operators.

In the energy sector, the implementation of two major policies—the open access and retail competition policy[7] and the feed-in-tariff (FIT) system[8] for renewable energy—was deferred. The implementation of open access and retail competition was deferred due to the technical unreadiness on the part of the government and private parties. The issues related to this must be settled within a definite timetable because the inability to do so creates uncertainty in the electric power industry. With respect to the FIT system, further deliberations by the regulator through public hearings will have to resolve the claims that the subsidies are huge, that some energy technologies are still too expensive and uneconomical to replace conventional technologies, and that the high FIT rates will only penalize consumers in the end.

Still in the energy sector, a precedent policy was issued through EO 27 which reduced the liabilities for real property taxes levied on power plants operated by independent power producers (IPPs) but are tax obligations of the contractual counterparty government corporations. It is specifically applicable to the Pagbilao plant in Quezon but observers say that this could be a

[4] This was the 2.3-kilometer Daang Hari-South Luzon Expressway Linkage Project which was auctioned for PHP 2 billion on December 15, 2011. The actual implementation of the project is targeted to take place in 2012.

[5] The International Civil Aviation Organization defines the first to fifth freedoms of the air as follows: first freedom – the right to fly over a foreign country without landing there; second freedom – the right to refuel or carry out maintenance in a foreign country on the way to another country; third freedom – the right to fly from one's own country to another country; fourth – the right to fly from another country to one's own; and fifth freedom – the right to fly between two foreign countries during flights while the flight originates or ends in one's own country.

[6] Fuel subsidy "smartcards" that carried loads of PHP 1,050 per card were issued to public utility jeepney drivers while loads of PHP 150 per card were also given to tricycle drivers.

[7] Open access and retail competition are intended to enable electricity consumers to exercise freedom in choosing suppliers depending on reasonableness of cost and reliability of supply.

[8] The FIT system is supposed to accelerate renewable energy development by ensuring fixed tariffs for certain technologies, e.g., as of 2011 proposal, PHP 17.95/kWh for solar technology and PHP 10.37/kWh for wind technology.

test case for other IPP plants in the country. The language of the EO emphasized that the originally levied real property taxes will threaten the financial stability of the government corporations and will increase the cost of electricity. Contract-related data and financial information are not readily available and, thus, it is difficult at this time to make a statement regarding the impact of this EO. However, at stake here will be the local autonomy and power of LGUs to levy real property taxes against the desire of the national government to manage the cost of electricity, which affects consumers and producers alike.

In the information and communications technology sector, the controversial PLDT-Digitel merger put the competition framework of the government to a serious test. With the National Telecommunications Commission's (NTC) "conditional approval" of the merger on October 26, 2011, an industry where the Philippine Long Distance Telephone Company (PLDT) will have at least 70 percent ownership dominance is about to emerge. The NTC's conditions are: (i) making the "unlimited" service promotions a permanent offering; (ii) divestment of the 10 MHz 3G radio spectrum of a PLDT subsidiary; and (iii) reduction of interconnection rates imposed by PLDT on other carriers. However, observers state that these conditions can be imposed even without the merger as they can form part of regulatory measures to promote greater competition. Moreover, the merger would allow PLDT to significantly control internet connectivity as a "bigger" PLDT would take ownership of most submarine cables in the country. This clearly exposes the industry to potential market power abuse.

In the water supply and sanitation sector, a policy that is meant to restructure the water supply industry, perhaps to the same extent that Republic Act (RA) 9136 restructured the electric power industry in 2001, is germinating. Senate Bill 2997 filed in 2011 seeks, among others, to organize the country into "provincial water resource zones" within which water service provision with arrangements similar to the water concessions in Metro Manila could be implemented. The bill has to be thoroughly studied and its possible institutional impacts have to be examined. For instance, the bill provides numerous incentives that do not discriminate among service providers based on viability and may not be necessary. The bill also wants to create certain entities which will perform both regulatory and operation functions. The experience with similar types of entities, which have regulatory, developmental, and financing functions as part of their mandate, shows that conflicts of interest will eventually rise in the course of implementation.

Getting Started with the Philippine Competition Office

On June 9, 2011, Malacañang issued EO 45 designating the Department of Justice (DOJ) as the country's Competition Authority. The Competition Authority is mandated, among others, to investigate all cases violating existing competition laws, prosecute violators, enforce competition policies and competition laws, and supervise competition in markets. The EO also created an Office for Competition (OFC) under the office of the Secretary of Justice to carry out the Competition Authority's mandate.

The designation of a Competition Authority and creation of an OFC serve to make up for the absence of a comprehensive antitrust legislation in the Philippines. The country has laws on monopolies and anticompetitive practices in the Constitution as well as in the Criminal and Civil Codes; however,

these have proven inadequate and ineffective to stave off the ill effects of anticompetitive structures and behavior in the market. In Southeast Asia, the Philippines is one of the few remaining countries without a comprehensive antitrust legislation. Thailand, Indonesia, Singapore, and Viet Nam have antitrust laws while Malaysia already passed its Competition Act last year. Since the early 1980s, the Philippine legislature has attempted to pass a comprehensive competition law but without much success due to lack of political will.

Despite the considerable number of laws in the country and their varied nature, competition has not been fully established in all sectors of the economy. Competition issues continue to pervade in vital sectors of the economy such as power, port operations, oil, cement, flour, rice, sugar, and other manufactured products. The case of the merger of PLDT and Digitel, two of the three major players in the telecommunications industry, provides a concrete example of what happens when competition rules are vague or lacking. It also illustrates the need for an effective competition law and an independent body that can assess the impact of a huge merger on competition and national welfare.

With the PLDT-Digitel merger, the industry returns to a duopoly: PLDT would control about 70 percent of the total cellular subscribers while Globe would account for the remainder. With its huge market power, there is always the danger that PLDT might take advantage of and abuse its dominant position, as it has been observed to behave when handling interconnection with other carriers. Interconnection is important because it enables subscribers of different firms to communicate; it plays a critical role in fostering competition and reducing market dominance. However, interconnection has been slow and difficult due to a weak regulatory authority, vague interconnection rules, and the presence of a large dominant carrier capable of exercising market power. Given its extensive network, PLDT has dictated the pace of interconnection in the country. Interconnection costs have been high and resulted in various consumer complaints like unsuccessful call attempts and irrational calling charges.

Moreover, there is the risk that the duopolists would collude, resulting in a monopoly in the telecommunications industry. Despite real fears that the merger would hurt competition, the regulatory agency, NTC, decided to approve the deal subject to certain conditions. The conditions, as mentioned in a previous section, are as follows: PLDT would give up 10 MHz of spectrum in the 2100 MHz band (3G frequencies), divest itself of its subsidiary (the Connectivity Unlimited Resources Enterprise), and keep unlimited tariff packages in the market. It is worthy to note that said conditions were the ones proposed by PLDT.

Without an effective competition law and strong regulatory framework as safeguards for fair competition, it would be difficult to control mergers and acquisitions, particularly those that substantially increase concentration like the PLDT-Digitel deal. While RA 7925 or the Telecommunications Act has provisions on anticompetitive behavior, it is silent on mergers. There is no explicit mergers and acquisitions (M&As) policy that would ensure that M&As do not enhance market power which can damage competition.

Effective competition laws in developed countries prohibit M&As that limit competition. These keep markets competitive by curbing, whenever necessary, exercises of market power that reduce output or increase prices. Such competition laws, however, do not prosecute firms that have gained market power through legitimate behavior,

i.e., skill, foresight, and hard work. Rather, these laws are concerned mainly with the elimination of abusive monopoly conduct, price fixing, and cartels.

Currently, there are two different competition bills being deliberated at the House and Senate. One major difference between the two is in the organization of the competition body. The House Consolidated Bill proposes to create a Fair Trade Commission which will exercise exclusive jurisdiction to enforce, implement, and administer the law. The Senate Consolidated Bill authorizes the DOJ as its key implementing body and bestows upon it power to investigate and enforce orders and resolutions.

To perform its mandate under EO 45, the DOJ-OFC is formulating its organizational and administrative plans and at the same time trying to craft an enforcement agenda. The tasks detailed under EO 45 represent enormous challenges to the OFC. Expectations from it are extremely high and may not be realistic given that assimilating competition policies takes place gradually. It is important to note that implementation is the Achilles' heel of competition law in many developing countries (Kovacic 1997a). Hence, in the Philippine case, constraints such as the lack of a culture of competition, weak consumer groups, inadequacies of the courts in resolving business disputes particularly competition cases (delays in processing cases, corruption) as well as political opposition to economic reform must be taken into account. Given these constraints, there is a need to carefully design substantive prohibitions and an effective enforcement body as well as improve institutions such as courts, universities, and professional associations.

The institutional ingredients that make ambitious competition systems feasible in developed countries hardly exist in a developing country setting and will take time to build. Hence, the adoption of a gradual strategy through phased implementation is recommended. Priority should be on strengthening institutional foundations through the development of physical and human capital, training of judges, and education of consumers, businesses, government officials, regulators, and civil society.

To build the credibility and establish the independence of the competition agency, appointed officials should not only be competent and honest but should also be knowledgeable and have expertise on antitrust, consumer protection, and economic regulation. They should have sufficient academic background and work experiences that adequately prepare them to enhance policymaking. They should have the professional accomplishments and stature required to have their views taken seriously. Weak appointments would impede the office's capability to implement competition policies. As William Kovacic (1997b) wrote about commissioners in regulatory bodies: "Commissioners learning on the job are more likely to make unwise choices in allocating resources and resolving specific enforcement matters…. An independent regulatory agency's effectiveness depends crucially on the skills of its members."

Supporting Innovation Clusters and Integrating Innovation Policy Actions

Innovation is acknowledged to be a major driver of economic output, productivity, and competitiveness. The term innovation, traditionally equated with research and development (R&D), is more broadly meant as the set of technologies or practices that are new in a given economy, with said technologies or practices being diffused in that economy. At the heart of the innovation are firms

where new knowledge is put to work and diffused in the production process.

In 2007, the country developed a national innovation strategy, called "Filipinnovation," which aims to foster knowledge sharing and dissemination by academe and industry. The main goals set forth in Filipinnovation are: (i) to strengthen human capital; (ii) to support business incubation and acceleration efforts; (iii) to regenerate the innovation environment; and (iv) to upgrade the Filipino mindset. In support of these Filipinnovation goals, government has provided fiscal incentives for firms and financial support for selected innovation activities, especially among micro, small, and medium enterprises (MSMEs). In addition, there are now a number of innovative sites such as technology incubators, business development centers, and science and technology parks.

As part of the country's pragmatic innovation agenda, the government is set to embark on supporting selected innovation clusters, i.e., groups of interconnected firms in a particular field, that cooperate with research centers and higher education institutions (HEIs) in the conduct of knowledge-intensive activities for greater competitiveness. A Senate bill sponsored by Senator Edgardo Angara seeks to provide PHP 322 million to fund activities of innovation clusters that aim to address challenges on food security, climate change, energy use, and sustainable exploitation of resources. Under this proposed bill, support will be earmarked in 2012 to five innovation clusters, viz., Algae Research and Commercialization; Disaster Science and Management; Information and Communications Technology (ICT) for Cloud Computing and Software-as-a-Service; Responsible Mining Technologies; and Precision Farming and Smart Agriculture. Such funds are meant to boost government's R&D spending, estimated in 2009 at 0.12 percent of the country's GDP. They also serve to jumpstart a form of public-private partnership in the selected innovation clusters. In addition, this will clearly foster the improvement of linkages among firms, government, HEIs, and research institutions. The funds earmarked for the selected innovation clusters are meant to encourage firms and research institutes to cooperate for innovation, rather than be averse to networking, and to solve emerging practical concerns.

A report by Albert et al. (2011) that examines results of the 2009 Survey of Innovation Activities conducted by the Department of Science and Technology (DOST) with the NSO suggests that while 54 percent of sampled firms are innovation active, these firms indicate that government, HEIs, and research institutions are not key partners in their innovative practices. The same report also indicates that most firms appear to be of the mindset that they are left on their own to implement innovation activities, with very little support from networking arrangements and government support. Cost factors have also been cited by firms as barriers to innovate. Sample firms that are located in Philippine Economic Zone Authority (PEZA) areas within Laguna and Cavite are found to be more likely innovation active than establishments in the three other study areas, viz., Quezon City, Metro Cebu, and Davao City.

While the growing literature on innovation (e.g., Porter 1990; OECD 1999, 2001, 2007; Anderson et al. 2004) suggest that innovation clusters are an effective mechanism for producing an environment conducive to innovation, it may be important for government to lay out its plans to support these clusters. The DOST and other implementing agencies such as the Commission on Higher Education (CHED) and the DA will need

to have a concrete innovation roadmap to spell out how long such funds for the selected innovation clusters will be made available, and what monitoring and evaluation (M&E) mechanisms will be set up to look into the outcomes and impact of the funds for the supported innovation clusters. Government should be prepared to realize that there is no recipe for success, i.e., there will be some trial and error involved in any pragmatic innovation policy agenda. There will be a need for some adaptation and flexibility in innovation policies. This, however, is not a license to waste resources. Government support for these innovation clusters will still need to be regularly evaluated to ensure value for money. Changes in the business climate within these clusters, the quality and quantity of products produced in the clusters, increased collaboration between firms in an innovation cluster are candidate process, output, and outcome indicators that could be tracked. M&E of these innovation clusters will also require cluster stakeholder feedback toward assisting government in stopping support for failing projects in an innovation cluster, and in adjusting spending toward successful activities. Public grants to the innovation clusters have to be considered not as entitlements but as part of an accountability framework that rewards good performance.

Support appears to be targeted to these five innovative clusters because of their innovative potential, collective efficiency, and importance in addressing some emerging national concerns. But government and the innovation cluster stakeholders will have to recognize the need to rationalize such investments and grants, and the need to regularly monitor the progress of returns on these investments.

Putting in place the foundations of innovation policy on a rather large scale is no easy task given the scarce resources, including requisite human resources, the competing aims of public policy, and the institutional challenges in the country. Innovation policy should go beyond science and technology policy, with which it is usually merged; it should be a component of an overall strategy of continually transforming the country into a knowledge-based economy through concerted action in many different public policy arenas, including basic and higher education, trade and investment, and finance. This will require the DOST to collaborate and coordinate with other national government agencies as well as with local governments so that innovation can be fostered through concrete policy actions and articulated more effectively, with specific time-bound targets identified for each Filipinnovation goal. This means that said targets should be monitored across time so that policy adjustments may be made, if and when warranted.

Policy Initiatives in the Environment and Natural Resources Sector

The Executive issued various environment and natural resources (ENR)-related national policies in 2011 in the form of executive orders, administrative orders, memorandum orders, and other government issuances. The actual economic, social, environmental, and other impacts of said policies, however, have not been determined as yet by any available study as of this writing. These policies would thus be good subjects for future investigation.

Fishery policies

Fisheries Administrative Order (FAO) No. 237 Series of 2010, issued in October 2010, requires the Installment of Juvenile and Trash Fish Excluder Device in trawls in Philippine waters. This policy is expected to reduce the incidence of fish by-catch, including juveniles and other species (trash fish),

and thereby reduce the ecological impact of fishing, promote sustainable use of resources, and maintain Philippine marine biodiversity. FAO 237 also puts in place a penalty provision which stipulates the punishment, upon conviction of the operator, boat captain, or three highest officers of the boat who violate the order, by a fine equivalent to the value of catch or PHP 10,000, whichever is higher; imprisonment of six months; confiscation of catch and fishing gears; and automatic revocation of the fishing license.

The DA and the Department of Interior and Local Government (DILG) jointly issued an administrative order (AO) in August 2011 establishing a "closed season" for catching sardines in East Sulu Sea, Basilan Strait, and Sibuguey Bay for conservation purposes. DA-DILG AO 1 series of 2011 mandates that it shall be unlawful to catch sardines during the closed season for three years. The AO declares December 1, 2011–March 1, 2012 as the closed season on the first year of implementation and November 1–February 1 as the closed season during the next two years. Violators of the order shall be penalized by imprisonment of six months and one day to six years and/or a fine of PHP 6,000. Their catch shall also be forfeited and their fishing boat and gear licences canceled.

Fisheries General Memorandum Order (FGMO) No. 1 Series of 2011 was issued in March 2011. The order mandates that all applications for sanitary/phytosanitary clearance for the importation of fish and fishery products from Japan should be accompanied by results of laboratory examinations by the competent authority in Japan, and the results should show that the fish or fishery product to be imported conforms with the guidance levels for representative radionuclides in foods following accidental nuclear contamination. The order was issued to ensure food safety in view of the recent nuclear accident in Japan.

Forestry policy

Presidential Proclamation No. 125 issued in March 2011 declares 2011 as the National Year of Forests. The Philippines is a member of the United Nations Forum on Forests. Through the proclamation, the Philippines recognizes the United Nations-declared International Year of Forests as an opportunity to increase the Filipinos' awareness of the importance of forests and the central role of people in the conservation and development of forests through collaborative actions at the national, regional, and local levels.

Mining policy

In January 2011, Department of Environment and Natural Resources (DENR) Secretary Ramon J. P. Paje signed Department Memorandum Order 2011-01 which suspends the acceptance and processing of new mining applications by all regional offices of the Mines and Geosciences Bureau. The stated purpose of the order was to ensure that the ongoing cleansing of mining applications will be successfully implemented pursuant to existing DENR guidelines. The suspension covers any and all mining applications for Exploration Permit, Mineral Production Sharing Agreement, Financial or Technical Assistance Agreement, and Industrial Sand and Gravel Permit. Those who are against mining in the Philippines, however, argue that the memorandum order is not enough as it only calls for a halt in the acceptance of new mining applications and not an actual moratorium on mining.

At present, a draft presidential executive order titled "Institutionalizing and Implementing Reforms in the Philippine Mining Sector: Providing Policies and Guidelines Therefore and

for Other Purposes" has been prepared to continue the mining reforms initiated by the government. Unofficial copies acquired by the press indicate that this new EO mandates, among others, the following: a) replacement of the "first-come, first-served" system in mining applications with competitive public bidding; b) addition of declared prime agricultural lands and ecotourism zones to areas closed to mining; c) conduct of the total economic valuation scheme in mining areas before mining applications are approved and mining activities are allowed; d) review of all existing incentives and mining contracts to see if these are in line with the new mining policies; and e) promotion of downstream processing.

Since it was leaked to the media, the draft EO has caused serious controversy between the pro- and antimining lobbies. The Joint Foreign Chambers, in particular, wrote a strongly worded letter to President Benigno Aquino on February 9, 2012, arguing that "The draft EO as presented is profoundly disturbing in that it creates great uncertainty for established and potential investors into the Philippines. It proposes to review all existing contracts, and renegotiate or impose an increased government tax or royalty share, and potentially close out granted contracts completely." In contrast, Mining Watch Canada, Indigenous Peoples Links (PIPLinks), and the Working Group on Mining in the Philippines assert that the aforementioned stand of the mining industry and its supporters "…seems to be more of the same alarmist rhetoric that has been recycled by these organizations on a number of occasions over the years. The industry claims it is for responsible mining, and yet when measures are proposed that would ensure responsible mining, the cries go up that they are unfair and uncompetitive."

The draft EO is currently under review and in circulation among the concerned government departments.

Energy policy

Presidential Administrative Order No. 6 issued in March 2011 organizes the Interagency Energy Contingency Committee (IECC), with members coming from the Departments of Energy, Finance, Budget and Management, Justice, Trade and Industry, Agriculture, National Defense, the Interior and Local Government, Transportation and Communications, and Foreign Affairs as well as the National Economic and Development Authority and the National Security Council. The order was issued for the following reasons: (i) although there is no imminent danger of any oil supply disruption, the government deems it prudent to have a precautionary measure to ensure that the necessary preparations are in place in the event the oil supply situation deteriorates; (ii) the government is taking steps to ensure the continuous, adequate, and stable supply of petroleum and other energy sources in the country; (iii) there is a need to carefully study and evaluate the government's strategy in addressing contingencies arising from energy supply disruptions; and (iv) the coordination of all government agencies is vital in evaluating and enhancing the existing contingency plan for its effective implementation.

Environmental policy

The National Greening Program (NGP) was formulated through two EOs issued in 2011. EO 23 mandates the development of the NGP while EO 26 declares the implementation of the NGP as a government priority. The NGP consolidates and harmonizes all greening efforts such as

Upland Development Program, *Luntiang Pilipinas* program, and similar initiatives of the government, civil society, and private sector under a single comprehensive program.

Conclusion

Many of the policies issued by the government in 2011 as presented in this chapter have had immediate and varied responses from stakeholders in the sectors affected by said policies. Some have hailed the policies and programs related thereof as helping, for instance, to fulfill the country's commitments in certain trade agreements and international goal declarations while some have criticized them as short and wanting in planning, preparation, and consultations as in many of the infrastructure-related policy issuances and in the design and implementation aspects of the administration's centerpiece antipoverty program.

Still, good intentions always mark a policy pronouncement of government as it is supposed to be anchored on the government's overall development thrust. The objective of this *PIDS Economic Policy Monitor* (EPM) is to document these pronouncements and issuances and in the process, see how they (and their potential impacts) help fulfill (or fail to fulfill) the country's development objectives.

In so doing, the EPM hopes to help in the policy debates where validation, adjustments, strengthening, and/or rethinking of the policies, if needed, may be made accordingly.

References

Albert, J. R., R. Aldaba, F. Quimba, and D. Yasay. 2011. Results of the 2009 Survey of Innovation Activities (SIA). PIDS Discussion Paper No. 2011-15. Makati City: Philippine Institute for Development Studies.

Anderson, T., S. Schwaag Serger, J. Sörvik, and E. Wise Hansson. 2004. *The cluster policies whitebook 2004*. Malmo: International Organisation for Knowledge Economy and Enterprise Development (IKED).

Barrientos, A., D. Hulme, and K. Moore. 2006. Social protection for the poorest: taking a broader view [online]. In *Poverty in focus: social protection: the role of cash transfers*. International Poverty Centre. United Nations Development Programme. http://www.ipc-undp.org/pub/IPCPovertyInFocus8.pdf [Accessed January 3, 2011].

Bloom, K.S. 2010. Transfers: lessons from Indonesia's Program Keluarga Harapan. In S.W. Handayani and C. Burkley, *Social assistance and conditional cash transfers*. Proceedings of the regional workshop. Asian Development Bank.

Cecchini, S. 2009. Do CCT programmes work in low-income countries? [online]. International Policy Centre for Inclusive Growth One Pager No. 90. http://www.ipc-undp.org/pub/IPCOnePager90.pdf [Accessed December 18, 2011].

——— and A. Madariaga. 2011. Conditional cash transfer programmes: the recent experience in Latin America and the Caribbean. Chile: United Nations Economic Commission for Latin America and the Caribbean (ECLAC).

Delos Reyes, C. 2011. CCT debt trap? Future of propoor deal a poser [online]. *Philippine Center for Investigative Journalism* (PCIJ). 31 May. http://pcij.org/stories/cct-debt-trap-future-of-pro-poor-deal-a-poser/ [Accessed December 18, 2011].

Department of Social Welfare and Development (DSWD). n.d. Pantawid Pamilyang Pilipino Program Briefer [online]. http://pantawid.

dswd.gov.ph/images/stories/briefernew.pdf [Accessed December 18, 2011].

———. 2011. Pantawid Pamilya registers 2.3 millionth household beneficiary [online]. DSWD Social Marketing Service. http://www.dswd.gov.ph/index.php/component/content/article/1-latest-news/2461--pantawid-pamilya-registers-23-millionth-household-beneficiary [Accessed December 19, 2011].

Fernandez, L. and R. Olfindo. 2011. Overview of the Philippines conditional cash transfer program: The *Pantawid Pamilyang Pilipino Program* (*Pantawid Pamilya*). Philippine Social Protection Note No. 2.

Kovacic, W. E. 1997a. Getting started: creating new competition policy institutions in transition economies. *Brooklyn Journal of International Law* 23(2).

———. 1997b. The quality of appointments and the capability of the Federal Trade Commission. *Administrative Law Review* 49(4).

Llanto, G. 2008. Make 'deliberate' haste in rolling out the 4Ps. PIDS Policy Notes No. 2008-09. Makati City: Philippine Institute for Development Studies.

Manasan, R. 2011. Pantawid Pamilyang Pilipino Program and school attendance: early indications of success. PIDS Policy Notes No. 2011-19. Makati City: Philippine Institute for Development Studies.

National Anti-Poverty Commission (NAPC). n.d. National Anti-Poverty Program (2010–2016) Part 1 [online]. http://www.napc.gov.ph/National%20Anti-Poverty%20Program/National_Anti-Poverty_Program_Part1.pdf [Accessed December 18, 2011].

———. n.d. National Anti-Poverty Program (2010–2016) Part 2 [online]. http://www.napc.gov.ph/National%20Anti-Poverty%20Program/National_Anti-Poverty_ Program_Part2.pdf [Accessed December 18, 2011].

Organisation for Economic Co-operation and Development (OECD). 1999. *Boosting innovation: the cluster approach*. Paris: OECD.

———. 2001. *Innovative clusters: drivers of national innovation systems*. Paris: OECD.

———. 2007. *Competitive regional clusters*. Paris: OECD.

Porter, M. E. 1990. *The competitive advantage of nations*. New York: Free Press.

Reyes, C., C. Mina, A. Tabuga, R. Asis, and M. Datu. 2011. Dynamics of poverty in the Philippines: distinguishing the chronic from the transient poor. PIDS Discussion Paper No. 2011-31. Makati City: Philippine Institute for Development Studies.

3 A Critical Look at the Education Sector: Achievements, Challenges, and Reform Ideas

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This chapter presents a critical review of the education sector. It examines the sector's achievements, challenges, and the government's policy agenda. In the context of this review, the chapter also discusses reform ideas for research and development.

The current administration views education as a key element in its pursuit of sustained, inclusive, and rapid growth. This view has been articulated in various discussions of the president's priorities and underpins his ambitious education reforms and election promises, which include the alignment of the Philippine education cycle with international practice. Despite its laudable intentions, however, serious questions have been raised about its education priorities and the consequences of some of its reform ideas. Critics find them untimely, raising concerns about their impact on the pace and quality of the implementation of much more urgently needed education reforms. Therefore, a critical stocktaking of the education sector is desirable.

The purpose of the chapter is not to assess the success or failure of the administration's education efforts. It is too early for that. Rather, it is to help the education stakeholders understand the context, direction, and implications of key education sector developments. The hope is for stakeholders to assess the sector's priorities and identify critical gaps in the education reform agenda to give the government suggestions on possible needed adjustments.

The chapter will cover early childhood education (ECE), basic education (BE), and postbasic education (PBE). The latter includes higher education (HE), and technical and

[1] The authors are grateful to Michael Ralph Abrigo for research assistance and to Christopher Spohr for allowing them to use his data.

vocational education and training (TVET). The structure of the chapter is as follows. First, it will discuss the roles, achievements, and challenges of the education sector. Then, it will describe and analyze current priorities, policy developments, and key reform ideas. The final section will summarize its conclusions and recommendations.

The Economic and Development Context

It is generally acknowledged that education contributes substantially to Philippine development although some skepticism had been raised regarding the ability of tertiary education to spur economic growth (Berhman 1990). Clearly, however, despite its many weaknesses, education has had a positive impact on individual and household welfare. Without private and public investments in education, the country's development would have been slower and people's welfare would have been lower.

On this point, empirical studies have found that education is significantly correlated with individual earnings as well as health status and other indicators of welfare. Estimates indicate substantial rates of returns to different levels of education as seen in Table 3.1. The conclusion is that spending on education is a good investment in human capital. Further analysis suggests that with better quality education, these rates of return could be higher, as indicated by the international literature on education and economic growth (Hanushek and Woessmann 2008).

The rates of return by level of education in Table 3.1 exhibit an interesting pattern. As usual, the elementary education rate of return is the lowest among the three levels of education. This is not surprising for a middle-income country. As the country approaches universal elementary education coverage, its return is bound to fall. What is noteworthy is that it continues to be significantly positive, implying that there remain economic gains from further expansion of elementary education coverage. These economic gains are on top of the positive externalities expected from education as a public good.

The rate of return for postsecondary education appears to have increased to 24.4 percent although for HE, it remained steady at a high rate of about 22 percent. The study of di Gropello (2010) is noteworthy

Table 3.1. Private returns to education (in percent)[1]

	Unadjusted		Adjusted [2]	
	1999	2008	1999	2008
Elementary	5.5	7.1	12.0	13.4
Secondary	16.6	17.5	19.9	22.5
Postsecondary	13.9	18.4	20.8	24.4
Tertiary (4 years)	19.1	20.0	22.7	22.2

[1] IRR estimates are relative to level immediately below indicated level, e.g., elementary refers to elementary graduate against alternative no grade completed, college (tertiary) graduate against high school (secondary) graduate, etc.
[2] IRR adjustment (Adjusted) using probability of employment.

in this regard. It reports that the wage premium for higher education has risen in the recent past. The Philippine rates of return patterns are consistent with the experience of Latin American and other countries. A key explanation for this pattern is the rapid pace of technological progress and its bias toward employment of workers with greater technical skills and competencies. These abilities are usually developed by workers with the help of better and higher levels of education and training.

Di Gropelo's finding signals that the demand for more highly educated labor is now outpacing supply, at least in certain modern industries. This trend is good news in that rising returns mean higher incomes for those with postsecondary education and greater incentives for households to invest in HE. But the concern is that families, especially the poor, might not have the means and realistic opportunity to get better educated due to the problem of liquidity and capital market imperfections. The fear then is not only that the supply of HE graduates might not be enough to meet the increased demand; it is also about the possibility that it could mean the persistence, if not worsening, of income inequality over time.

Another (related) consequence of more rapid technological progress and increasing openness of international trade and finance is the accelerating pace of job destruction, creation, and churning—a trend that makes the labor market increasingly unpredictable. Because of this uncertainty, it is impossible to define the particulars of the future labor market demand and supply to support detailed manpower planning for specific competencies and skills. With the declining length of the market cycles between shortages and surpluses, today's labor market uncertainty means that detailed manpower planning has little practical value.

The above economic environment implies the need for greater labor agility, adaptability, and trainability. To produce competitive workers with these characteristics requires a smart education strategy. On this score, some businessmen and casual observers of the labor markets have been advocating for government reforms to improve postbasic education and TVET programs. Others, in contrast, want the government to keep its focus on universal and better quality basic education, including early childhood and preschool education.[2] Yet another opinion is that creating a wider pool of more educated and trainable workers requires improvements at all levels of education from early childhood development to higher education. Following this thought, the discussion of the sector's achievements and challenges in the next section starts with early childhood development and then moves on to elementary, secondary, and higher education and TVET.

Achievements and Challenges

The education system is vast. In 2010–2011, over 1.6 million children were served in school-based Early Childhood Care for Development (ECCD), more than 14.0 million pupils enrolled in almost 46,000 elementary schools, and more than 7.0 million students were served in about 13,000 secondary schools. About 83 percent of elementary schools are public (serving 92% of total enrollees) while about 44 percent of secondary schools are private (but accounting for only 20% of enrollment). In 2009–2010, 2,180 HEIs enrolled about 2.8 million students while the TVET system served about 1.6 million trainees.

Early childhood and kindergarten

In 2000, the government passed the ECCD

[2] Since the 1990s, recognition of the high economic rate of return from Early Childhood Care for Development (ECCD) and its long-term impact on subsequent academic outcomes in high grade levels have become increasingly widespread.

Act (RA No. 8980). The Act underpins the organization and development of the country's delivery of ECCD services, including the establishment of coordination mechanisms. Prior to 2000, the government approved the Day Care Law (RA 6972) calling for the establishment of a day care center (DCC) in every barangay.[3]

Significant progress has been made in achieving the ECCD goals since 2000. As of the second quarter of 2010, about 87 percent (36,338) of the total barangays in the country had DCCs, compared to 78 percent in 2002 (31,464). However, the proportion of barangays with DCCs varies considerably across regions. The Autonomous Region in Muslim Mindanao (ARMM) appears to have the least access to DCCs among the country's regions. And while some barangays have more than one DCC, a few barangays remain unserved. Clearly, more DCCs are needed in remote communities in regions where poverty is high and in densely populated areas.

As a result, the gross enrollment rate (GER) of the four- to five-year-old children (including in both public and private preschools) rose. For example, the GER increased from 19.2 percent in 2004 to 24.7 percent in 2008, reducing to about four in ten the number of five-year-old children not in school, according to the 2008 Annual Poverty Indicator Survey (APIS) of the NSO. Further analysis of the APIS data points to inequality as a key issue: the participation rate of five-year-olds in school is lower in rural areas (59.7%) than in urban areas (73.3%).

Although access to DCCs across barangays has improved, the quality of services provided by DCCs varies widely despite the accreditation system for DCCs set up by the DSWD. On this score, about 26 percent (12,648) of the total (50,144) DCCs have not yet been accredited as of the second quarter of 2010. While this rate is lower than the rate (52%) in 2002, only two-fifths of DCCS were in fact accredited and about three-tenths have expired accreditations.

The Philippine Development Plan for 2011–2016 shows that the percentage of Grade I pupils with ECCD background increased from 56.3 percent in 2000 to 60.7 percent in 2005. This is positive news given that the ECCD experience tends to be associated with lower Grade 1 dropout and repetition rates. Nonetheless, despite the progress achieved as a result of the implementation of the ECCD law and the assistance of the donor community and other stakeholders,[4] the percentage of Grade I students with ECCD experience is still way below what is desirable.

Elementary and secondary education

Access and enrollment

As part of its international commitment to the MDGs, the Philippines seeks to reach universal education by 2015. Quantitatively, this means achieving a primary education net enrollment rate (NER)[5] of 100 percent.

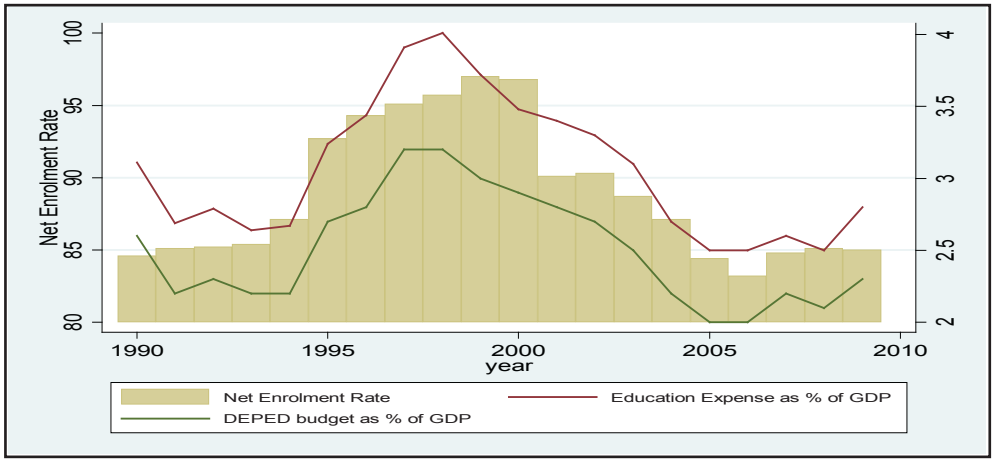
Official statistics show primary education NER on an upward trajectory in the period 1990–2000, but it dropped after 2000. The NER recovered some lost ground after 2005 but appears to have stalled and reached a plateau in recent years as illustrated in Figure 3.1.

[3] Under the ECCD Act, the ECCD is the responsibility of the DSWD, with the Department of Education (DepEd) as the lead agency for the operation of preschools within the public elementary schools. The DSWD, DepEd, and the ECC Council, together with local government units (LGUs), form the ECCD service delivery network.

[4] For instance, one of the components of the United Nations Children's Fund's (UNICEF) Country Programme for Children (CPC) called the Integrated Early Childhood Care for Development has provided instructional materials in the form of storybooks, preschool education handbook, work books on readiness skills, manipulative/educational toys, and radio cassette player and taped songs.

[5] The net enrollment ratio, also called participation rate, is the ratio of the enrollment in a school-age range (6–11 years old for primary school) to the total population of that age range.

Figure 3.1. Primary school net enrollment rate (NER) and public expenditures in education



Sources: Basic Education Information System (BEIS), DepEd; Department of Budget and Management (DBM)

Similarly, data regarding secondary education enrollment reveal a worrisome trend (Table 3.2). Secondary level NER and GER appear to have also reached a plateau in recent years. NER has fluctuated around 60 percent between 2006 and 2011. This means that about two in five high school-aged children are not in school. A longer time series of secondary education participation rates would indicate that these rates might have worsened across the years, particularly for boys.

Gross enrollment ratios in primary school in recent years have generally been over 100 percent, reflecting the relatively high access of children to primary schools in the country (Table 3.2). The gap between GER and NER for both primary and secondary levels indicates that a considerable number of children are overaged for their grade or year levels due to late entrance to school and grade repetition (mostly in Grade I). The 2008 APIS suggests that about 3.9 million children in 2008 between the ages 7 and 15 were overaged by at least two years. These overaged students may be at risk of dropping out (or may have already dropped out).

Dropout, repetition, and internal efficiency

Due to the high rates of dropout and repetition, only three in four children (about 75%) reach Grade VI on time, implying high internal inefficiency. The cohort survival from first to fourth year high school is slightly higher at close to 80 percent at present. It is remarkable that there has been no significant improvement in the above measure of internal efficiency (Table 3.2).

Learning achievement and basic education quality

In general, the learning achievement of children continues to be low and the quality of elementary and secondary education remains poor. Table 3.3 shows the average scores on the National Achievement Test (NAT) for both elementary and secondary students. Despite some recent improvements, the scores are still well below what is defined as mastery of subject matter (75% rating). This finding is further evidenced by the distribution of NAT scores. In 2009, among the 204 school divisions, only 55 percent of these divisions

Table 3.2. Selected education statistics in the elementary and high school levels, school years 2005–2006 to 2009–2010

Education Statistics	Elementary					High School				
	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Gross enrollment ratio (%)	105.5	106.2	106.8	107.2	107.5	80.9	80.9	82.5	81.5	81.8
Net enrollment ratio (%)	87.9	88.3	89.2	89.4	89.9	59.6	59.9	60.5	59.9	60.9
Cohort survival rate (%)	73.4	75.3	75.4	74.4	74.2	77.3	79.9	79.7	78.4	79.4
School leavers rate (%)	6.4	6.0	6.0	6.3	6.3	8.5	7.5	7.5	8.0	7.8
Number of schools	43,584	44,140	44,691	44,846	45,964	9,255	9,599	10,066	10,384	12,950
Pupil to teacher ratio	1:35	1:35	1:36	1:36	1:36	1:39	1:39	1:39	1:38	1:38

Source: BEIS, DepEd

Table 3.3. Mean percentage scores of grade six students in the NAT by sex

	2005–2006		2006–2007		2007–2008		2008–2009		2009–2010	
Subject	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Filipino	58.00	63.52	65.04	68.98	72.05	74.77	70.32	73.46	73.11	76.83
Math	52.03	55.39	58.41	61.47	63.11	65.14	66.16	68.56	62.15	64.35
English	51.99	56.24	58.69	63.10	60.64	63.08	60.55	63.05	66.10	69.48
Science	46.08	47.64	51.47	52.99	57.56	58.75	58.25	59.47	62.47	63.81
Hekasi	56.35	60.11	59.33	62.53	66.53	68.84	66.62	69.05	69.42	72.32
Overall	52.89	56.58	58.59	61.81	63.98	66.12	60.55	63.05	66.65	69.36

Source: National Educational Testing and Research Center (NETRC), DepEd

have over half of their Grade VI students scoring 66 percent or above. In ARMM, none of the divisions has over half of their Grade VI students scoring 66 percent or above. Orbeta (2010) also observes that for school year 2006–2007, more than half of Grade VI students have scores in science below 50 percent and around four in ten students have scores below 50 percent for the other subject areas.

He also points out that for fourth year students in school year 2006–2007, more than seven in ten students have scores below 50 percent.

Given the dismal student learning achievement in school, it is not surprising that functional literacy is alarmingly low, especially among out-of-school youth. Functional Literacy, Education, and Mass Media Survey (FLEMMS) data reveal that while simple literacy is high, only about 62.1 percent of ten- to fifteen-year-old children in school had achieved functional literacy (Table 3.4). Worse, only 31.1 percent of the out-of-school children of the same age are functionally literate. Clearly, lower functional literacy is also a consequence of, and possibly also a reason for, nonparticipation in schools.

Disparities among subpopulation groups

There is need for data disaggregation as national averages hide education underachievement by certain population groups and inequalities among them. On this issue, while on the whole, 91 percent of youth (16- to 19-year-olds) completed elementary education according to APIS 2008 (Table 3.5), only 82 percent of the poorest 30 percent completed it. In comparison, almost all (98%) of the richest 30 percent completed elementary education. Moreover, while 71 percent of young adults (20- to 24-year-olds) for the country as a whole completed secondary education, only 46 percent of the poorest 30 percent completed it. This is about half of what the richest 30 percent have achieved (90%). The reason why completion rates are higher than cohort survival rates is that some dropouts go back to school and students repeat a grade after failing.

Disparities in access (http://www.nscb.gov.ph/iMDGs/), dropout, completion, and learning outcomes are pronounced across the regions as well as between rural and urban areas. These education outcomes are generally poorest in Mindanao. Adjusted net attendance rates (ANAR)[6] of secondary school-aged children obtained from APIS 2008 are lowest in ARMM (47.5%) and highest in Metro Manila (77.8%). In ranking the divisions according to enrollment, completion, dropout, and NAT scores to identify the lowest performing divisions, the Department of Education (DepEd) observed that of the 40 least performing divisions, 25 are located in Mindanao, with six lowest performing divisions in ARMM.

Data also indicate significant differences in school quality. The pupil-to-teacher ratios (PTR) for primary and secondary schools are on average within DepEd's reasonable standard of 40:1. These ratios, however, are rather high in many schools, particularly in densely populated urban areas.

Table 3.4. Simple and functional literacy rates (%) of ten- to fifteen-year-old children by sex and school participation

	Male			Female			Both Sexes		
	In School	Out of School	All Males	In School	Out of School	All Females	In School	Out of School	Total
Simple literacy	98.38	78.49	96.06	99.24	82.63	98.05	98.81	80.02	97.03
Functional literacy rate	58.73	30.83	55.51	65.43	31.67	63.00	62.11	31.14	59.20

Source: FLEMMS 2008, NSO

[6] The ANAR is the ratio of the number of children in an age range that attends the proper education tier or higher relative to the number of children of the school-age range.

Table 3.5. Shares of youth and young adults who have completed elementary and secondary schooling
(indicative figures calculated using APIS 2008)

	Overall Completion		Girls' Completion[7]		Boys' Completion	
Family Status	Elementary (%)	Secondary (%)	Elementary (%)	Secondary (%)	Elementary (%)	Secondary (%)
Mean (full sample)	91	71	94	78	87	65
Richest 30 percent	98	90	99	94–96	98	86
Poorest 30 percent	82	46	89	55–63	77	39

Note: The basic analysis uses the first three income deciles (i.e., the 30% of households with the lowest income) to proxy "the poor," with the highest three income deciles to proxy the most affluent or "rich" families. Estimates of elementary and secondary completion are based on attainments of 16–19 and 20- to 24-year-old respondents, respectively.
Source: ADB (forthcoming).

With regard to gender equity, David et al. (2009) point to other dimensions of gender disparity in favor of girls. As mentioned, for every ten children who enter Grade I, only seven finish grade school on time. They show that cohort survival rate is less for boys than for girls. Moreover, males' completion rates are lower in both the elementary and secondary levels than the corresponding rates for females (Table 3.5). Trends in failure and dropout rates also indicate that males are disadvantaged in both elementary and secondary levels. On top of these statistics is the widening gender gap that has become more pronounced through the years. In 2000, the difference between NER of females and males in the secondary level was 6.77 percent; in 2005, it increased to 9.88 percent.

As to learning outcomes, boys in Grade VI on average are underperforming (compared to girls in the same grade) across all topics—whether in communication skills, numeracy, or analytical prowess—as shown earlier in Table 3.3. In the past, boys used to be better in science and mathematics while girls did well in areas pertaining to communication. Compared to other countries, the Trends in International Mathematics and Science Study (TIMSS) shows that the mean score for science among eighth grade level girls from the Philippines is higher by 7 points than boys; in contrast, in other countries in the region that participated in the TIMSS such as Indonesia, Korea, and Malaysia, boys outscore girls by two-digit gaps.

Factors affecting basic education sector performance

How does one explain the dismal trend of primary and secondary NER over the last two decades? One possible explanation for the apparent decline of the NER after 2000 is statistical distortion due to changes in the definition[8] and estimation[9] of the NER. The consequence of these changes is to overstate the 1990 baseline figures. But even after reasonable corrections have been made to minimize data distortion, the trend remains one of stagnation—or at best, one of very slow progress.

[7] Disaggregated estimates for secondary completion may be affected by endogeneity in marriage and household formation. Indeed, the data seem to confirm that girls with less education are more likely to marry earlier and into poor households. The ranges indicated reflect different assumptions on exogeneity/endogeneity.

[8] Prior to 1995, primary school age entry was 7, and in 1995, this school age entry was lowered to 6, together with the institutionalization of ECCD programs, but NER continued to be computed up to the year 2000 for the population between the ages of 7 and 12. From 2001 onwards, the DepEd revised the definition of primary school age NER to cover children in the age group 6–11 years.

[9] Maligalig and Cuevas (2010) point out inaccuracies in the DepEd's NER, which is based on enrollment data and projections of the school-age population.

In substance, there are several possible causes for the underperformance of the basic education sector. One possible cause is the low and declining education spending. As illustrated in Figure 3.1, the primary level NER strongly correlates with public expenditures in education (see also Maligalig and Albert 2008; Diokno 2010; Manasan 2010). From 2005 to 2010, the DepEd budget has been ranging between 1.8 and 2.3 percent only of GDP. This is clearly substantially below the average international practice (4.0–5.0%) for middle-income countries. It is remarkable that real expenditures per student of DepEd (in 2000 prices) decreased from PHP 6,601 in 1997 to PHP 5,022 in 2005, rising to PHP 6,154 in 2009 to partially recover some lost ground (Majuca et al. 2011).

The impact of inadequate public expenditures on education has likely been exacerbated by the failure of the income of the poor to rise rapidly in the past decade. Poverty rate has been slow to decline even when GDP seems to be rising fast. The persistence of poverty in the Philippines is undoubtedly an important cause in view of the high correlation between family income and various educational outcome indicators.

For secondary education, economic issues facing families (such as high cost of education and the need to work) are perceived to be factors hindering children from attending school. Labor is rarely an activity of children aged 5–11 years old. But among secondary school-aged children, the rate of child labor is much larger: roughly one of every ten children (9.6%) is engaged in some labor activity. Here, the rate of child labor is twice higher for boys (12.5%) than for girls (6.7%). Further on the child labor issue, it is noteworthy that according to APIS 2008 data, nearly half (46.6%) of children in the labor force are in the poorest quintile of the per capita income distribution, which suggests that poverty is a major reason why children start to work at an early age and why they do not complete their schooling.

Other possible explanatory factors are also indicated by focus group discussions data (Majuca et al. 2011) and responses to questions on reasons for nonenrollment and dropping out asked by APIS 2008. One of these is school readiness. It is a major factor why children aged 5–11 years old do not go to school and why they drop out prematurely. This observation is consistent with the finding that school leaving as well as repetition rates in primary school are found to be highest in Grade I. Among secondary-aged children, the major reason for lack of school participation is perceived to be lack of personal interest rather than school readiness. The lack of interest in school among secondary-aged students is high for both sexes, but more so for boys.

Higher education

The Philippine higher education system is a mix of public and private universities and colleges. It has one of the most extensive private tertiary education systems in the world. Public HEIs, however, are also numerous and widespread throughout the country. The HEIs in the Philippines were virtually private (Balmores 1990) until the 1970s when the country witnessed a rapid increase of public HEIs. This increase resulted in the current 75 percent–25 percent private-public distribution of HEIs, which has prevailed in the last 30 years.

As of August 2010, there were 2,180 HEIs, 72 percent of which were private (Table 3.6). There were 110 main state universities and colleges (SUCs) with a total of 388 satellite campuses. While the number of SUCs has remained at its 2002 level, the satellite campuses increased from 271 in 2004–2005 to 388 in 2009–2010. For CHED-supervised

Table 3. 6. Distribution of higher education institutions by sector and institutional type

		1994–1995*	2004–2005	2009–2010
Public				
SUCs	Main campus	97	111	109
	Extension/Satellite campus	-	271	389
CHED supervised institution		110	1	1
Local university/college		28	50	93
Other government schools		-	9	10
Special HEIs		-	5	5
Total	with SUC satelite units	235	447	607
	without SUC satellite units	-	176	218
Private				
Nonsectarian		684	1103	1251
Sectarian		266	340	322
Total		950	1443	1573
Grand Total				
with SUC satellite units		1185	1890	2180
without SUC satellite units		-	1619	1792

Notes: *Main campus only
SUCs - State university/college
HEI - Higher education institutions
Source: CHED

institutions (CSIs), their number dwindled from 110 in 1994–1995 to 1 in 2004 until today. This is the result of the deliberate integration program undertaken by the CHED which entailed the merging of CSIs with adjacent SUCs. The number of local universities and colleges (LUCs), on the other hand, steadily increased from 28 in 1994–1995 to 50 in 2004 to 93 in 2010.

Enrollment and graduates

Contrary to what is commonly believed, low participation is not one of the problems in tertiary education. The country has a relatively high enrollment rate in tertiary education compared to other countries in similar development state. It is second only to Japan in the 1980s and continues to have higher enrollment rates today compared to developing East Asia countries and almost double the rates for low- to middle-income group of countries.

In terms of enrollment, data show that 62 percent of the almost 2.7 million tertiary students enrolled in school year (SY) 2008–2009 are in private schools. However, consistent with the rise in the number of public tertiary schools, the share of private schools has been declining from about 90 percent in 1969–1970. Disaggregated data on enrollment and graduates by type of institution also indicate that the proportion of students enrolled in SUCs has substantially increased from 21 percent in 1994–1995 to 37 percent in 2005–2006 and that while the enrollment in LUCs is still small at 5

percent, this has increased fivefold in the last 15 years. With regard to graduates, the HEIs produced a total of 425,171 graduates in 2009–2010. This number is up from 409,628 in 2004–2005 and 312,667 in 1994–1995 (Table 3.7).

Quality of higher education

The HE graduates are of varied quality. Past finding (Johanson 1999) is still valid indicating that a tiny proportion of HEIs is of high quality while the vast majority is of low quality. Several indicators point to low average quality of HEIs' output. First, only a few programs are accredited. Second, the passing rates in professional board examinations (PBEs) are low at around 40 percent and have been declining in recent years. This finding needs to be qualified as a large proportion of graduates are not covered by these examinations. These do not cover, for example, the graduates of business and related disciplines, which constitute the largest group of graduates for several years now. Another indication of HE quality issue is that only three of the Philippine HEIs are in the top 500 in the QS world ranking of universities in 2011–2012;[10] and none is included in the top 300. Finally, it has also been shown that the proportion of college graduates among the unemployed is not declining (Orbeta 2002).

Causes of low quality

There are many factors why the quality of HEIs' outputs is low. One is the level of expenditure per student. A comparison with other countries in the region shows that in 2007, the Philippines spent only less than 10 percent of GDP per capita while Indonesia spent double that proportion at 20 percent, and Malaysia five times more at 50 percent. This low HE expenditure is reflected in the low quality of the faculty and inadequate library, laboratory, and other facilities.

Low qualifications of faculty. Higher education faculty should have at least a master's degree according to current norms. CHED data show, however, that until recently, a substantial proportion of tertiary school faculty do not have the necessary qualification. Even if declining, the percentage of teachers with only baccalaureate degrees still constitutes more than half (54%) of the tertiary education faculty. The proportions with master's and doctorate degrees are only 36 percent and 10 percent, respectively. Relatively, teachers with graduate degrees are a little bit higher in public (47%) compared to private (45%) universities.

Lack of research in HEIs. Research in HEIs remains minimal and is concentrated in only a few large universities. This finding, though disappointing, is hardly surprising and quite common in most developing countries (Sanyal and Varghese 2006). There are two reasons for this finding: (a) lack of research capability due to the low proportion of faculty with graduate degrees (less than half); and (b) lack of support from the administrators of HEIs, whose focus is primarily on instruction (Edralin 2001).

Low rate of program accreditation. The Philippine system of accreditation is voluntary, consistent with the preferred culture of self-regulation. Accreditation is done at the program rather than institutional level. Today, there are five accrediting institutions with three catering to private institutions and two to public institutions. While in theory, HEIs can have their programs accredited by any of the agencies, in practice, the agencies usually cater to their own constituents. Despite the long history of accreditation in the country, less than 20 percent of the HEIs have

[10] The QS world ranking of universities in 2011–2012 is available at http://www.topuniversities.com/.

Table 3.7. Enrollment and graduates by discipline group

Discipline Group		Enrollment						Graudates					
		1994–1995		2004–2005		2009–2010		1994–1995		2004–2005		2009–2010	
		Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Agricultural, Forestry, Fisheries, Veterinary Medicine	h	59,400	3.2	70,824	2.9	59,692	2.2	12,178	3.9	12,803	3.1	12,647	3.0
Architectural and Town Planning		21,665	1.2	23,225	1.0	20,441	0.7	1,947	0.6	2,762	0.7	2,692	0.6
Business Administration and Related	l	545,982	29.2	516,937	21.5	724,215	26.1	85,781	27.4	102,628	25.1	102,399	24.1
Education and Teacher Training		236,464	12.6	366,988	15.3	352,046	12.7	43,674	14.0	70,837	17.3	69,895	16.4
Engineering and Technology	h	287,821	15.4	305,120	12.7	344,662	12.4	46,090	14.7	47,003	11.5	47,844	11.3
Fine and Applied Arts		8,266	0.4	12,221	0.5	16,682	0.6	655	0.2	1,703	0.4	2,209	0.5
General		113,286	6.1	34,234	1.4	14,198	0.5	13,370	4.3	3,817	0.9	3,226	0.8
Home Economics		2,577	0.1	5,342	0.2	5,149	0.2	362	0.1	1,206	0.3	1,043	0.2
Humanities		6,105	0.3	26,962	1.1	28,089	1.0	507	0.2	5,192	1.3	4,705	1.1
Information Technology	h	-	-	229,321	9.5	348,462	12.6	-	-	38,567	9.4	43,328	10.2
Law and Jurisprudence	l	14,950	0.8	19,539	0.8	20,144	0.7	2,111	0.7	3,989	1.0	3,326	0.8
Maritime		-	-	73,250	3.0	88,450	3.2	-	-	12,020	2.9	11,960	2.8
Mass Communication and Documentation		10,614	0.6	25,299	1.1	30,994	1.1	937	0.3	4,398	1.1	4,906	1.2
Mathematics and Computer Science	h	97,853	5.2	10,857	0.5	12,154	0.4	21,338	6.8	2,042	0.5	2,019	0.5
Medical and Allied	l	274,941	14.7	445,729	18.6	440,335	15.9	49,802	15.9	61,916	15.1	70,755	16.6
Natural Science	h	18,475	1.0	23,458	1.0	24,127	0.9	2,134	0.7	4,267	1.0	4,270	1.0
Religion and Theology		7,713	0.4	7,892	0.3	6,943	0.3	1,088	0.3	1,320	0.3	1,389	0.3
Service Trades		7,134	0.4	13,878	0.6	36,355	1.3	626	0.2	1,881	0.5	2,762	0.6
Social and Behavioral Science		27,158	1.5	66,490	2.8	76,546	2.8	2,703	0.9	13,588	3.3	13,112	3.1
Trade, Craft, and Industrial		195	0.0	14,890	0.6	3,833	0.1	14	0.0	2,267	0.6	1,887	0.4
Other Disciplines		131,048	7.0	109,859	4.6	117,448	4.2	27,350	8.7	15,422	3.8	18,797	4.4
Grand Total		1,871,647	100.0	2,402,315	100.0	2,770,965	100.0	312,667	100.0	409,628	100.0	425,171	100.0

h- high priority

l- low priority

Source: CHED

accredited programs. Relative to the 20,000 registered programs documented in Tayag and Calimlim (2003), this means only 7 percent of the programs are accredited. That four-fifths of the programs are not submitted for accreditation speaks a lot about the quality of the programs.

Relevance and external efficiency

Discipline orientation continues to favor so-called low priority fields of study. Table 3.7 shows the discipline orientation of enrollment and graduates in the last decade and a half. Based on SY 2009–2010 data, the bulk of enrollment and graduates were in the fields of business administration (26.1%–24.1%), medical and allied fields (15.9%–16.1%), education and teacher training (12.7%–16.4%), engineering and technology (12.4%–11.3%), and information technology (12.6%–10.2%).

Since early 2000, CHED has been explicitly identifying priority programs and have been focusing resources—scholarship and institutional development fund—on these programs. Conversely, it has identified certain programs as oversubscribed.

According to CHED, the following programs are oversubscribed: (a) business administration, (b) nursing, (c) teacher education, (d) information technology, (e) hotel and restaurant management, and (f) maritime. Undersubscribed programs, on the other hand, include (a) science and technology, and (b) agriculture and fisheries (Licuanan 2011). Despite all the efforts, the shares of the oversubscribed fields have not been declining (Manasan 2012); neither have the shares of enrollment and graduates of high-priority disciplines been rising.

These results may be reflective of poor information and guidance of college-bound students. But these can also be a reflection of the reality that the oversubscribed courses such as business and teacher education are relatively cheap to offer and are, therefore, attractive to students with limited means to finance tertiary education. This explanation is consistent with the observation that tertiary education is not affordable for the average Filipino household.[11]

Putting it differently, the oversubscription of some disciplines is perhaps the result of the convergence of supply and demand on low-cost, low-quality courses. On the demand side, households cannot afford high-cost disciplines. On the supply side, high-cost disciplines are also expensive to supply. Thus, most students flock to disciplines that they can afford—the low-cost, low-quality disciplines.

Equity

Attendance of poor children in tertiary education has always been low. Data show that majority of the poor never reach tertiary levels. As shown in Table 3.8, the bulk of the tertiary level students are from the richer households. The proportion attending monotonically increases as one moves from the poorest to the richest income deciles. While there have been improvements in the distribution pattern during the last decade in favor of the low-income groups, the bias toward the well-off has remained. In 1999, only 7 percent of those attending tertiary schools come from the bottom 30 percent of the income deciles while 63 percent are from the top three income deciles. These proportions are 14 percent and 47 percent, respectively, in 2008. This is the primary reason cited in Manasan et al. (2008) on why the incidence of expenditure in tertiary education is regressive.

[11] Estimates shown in Orbeta (2002) indicate that only those households in the 7th decile can afford to pay the tuition fees in public tertiary school and only households in the top 10th decile can afford the tuition of elite private schools.

Table 3.8. Distribution of college enrollees by income decile, 1999, 2008

	College	
Income Decile	**1999**	**2008**
First (lowest)	1.2	2.9
Second	2.3	4.6
Third	3.5	6.1
Fourth	3.9	7.4
Fifth	5.9	8.6
Sixth	8.9	10.3
Seventh	11.6	13.2
Eight	15.8	14.7
Ninth	20.0	16.8
Tenth (highest)	27.0	15.6
Total (number)	2,557,771	3,221,653

Source of basic data: NSO APIS 1999, 2008

Another dimension of the equity issue is the disparity in education attainment between sexes. An increasingly higher proportion of women compared to men completed college education, consistent with the gender pattern at lower levels of education**.** Comparing the proportion of the population 25 years old and above (i.e., those who have virtually finished schooling by sex shows a higher proportion for women relative to men completing college education since 1975 (Table 3.9). This disparity has been pointed out earlier in Orbeta and Sanchez (1995) and continues on today as shown by updated data. More ominous is that this disparity has not narrowed since then. As Orbeta and Alba (1999) also show, the disparity in school attendance favoring women starts as early as nine years old and widens as one goes on to older ages using survey data in the early 1990s. Recent data, presented previously, reveal that in fact, this reverse gender bias starts much earlier at kindergarten and younger ages.

Technical and vocational education and training (TVET)

The biggest puzzle regarding TVET is that it is persistently a small proportion of the overall labor market in the Philippines. Data on employed persons by highest grade completed using the 2008 APIS,[12] for instance, show that those with TVET education comprise only about 3 percent of the labor force. This is surprising, even allowing for the possibility that this might be an underestimate, as there may be college graduates with TVET training too who do not indicate it as their highest educational qualification. The above finding raises concerns that perhaps the country is underinvesting in TVET or that investing in stand-alone TVET (as designed and implemented) is not

[12] Note that postsecondary education as the highest grade completed is not currently identified under the quarterly Labor Force Survey by the NSO.

Table 3.9. Proportion of population 25 years old and above who finished college by sex, 1970–2007

	Total	Male	Female
1960	3.46	4.00	2.92
1970	5.98	6.09	5.88
1975	7.32	7.07	7.58
1980	9.81	9.15	10.46
1990	10.65	9.42	11.86
2000	14.34	13.01	15.69
2007	18.89	17.52	20.25

Source: Census, various years

as productive and wise as it is thought to be. In light of these concerns, there is clearly a need to review the TVET subsector and its performance.

The sector consists of private and government stakeholders. Training programs are offered by private providers as well as the Technical Education and Skills Development Authority (TESDA), the government arm for developing and implementing TVET policies. Firms provide specific training to their workers on the job. But the dominant mode of delivering TVET appears to be based on institutions and schools. This is followed closely by community-based programs. Of the 1.6 million TVET enrollees in 2010, about 56 percent are enrolled in institution/school-based programs, 4 percent in enterprise-based programs, and 40 percent in community-based programs (Table 3.10). The institution/school-based programs are divided into private and public technical vocational institutions (TVIs) and centers operated by TESDA. As of December 2010, private TVIs comprise 90 percent of the 4,328 TVET providers of TESDA-registered programs (TESDA 2011).

Participation and internal efficiency

Enrollment has been continuously rising in the past. In recent years, though, it has dipped significantly. After reaching 2.1 million in 2007 from 1.2 million in 2002, enrollment began to slide down to 1.6 million by 2010. According to TESDA, the increase in enrollment and graduates in the recent past was due to its massive scholarship programs (TESDA 2011).

Graduation rates are high, particularly in recent years. And as expected, the number of graduates follows a similar trend as enrollment (Table 3.10). The skill orientation of graduates follows the skills currently in demand. The bulk of graduates in 2007[13] are in information and communication technology or ICT (25%), followed by health, social, and other community development services (23%), and tourism (13%). The graduation rates[14] data in Table 3.10 have been generated from the administrative reporting system.[15]

According to the 2008 Impact Evaluation Study (IES) data, a high 82.2 percent passed the certification test (Table 3.11). There is, however,

[13] Data are from the 2008 Impact Evaluation Study (IES).
[14] This is just approximate as not all who enrolled during the year are expected to graduate during the year. Some programs last for more than a year, others require less than a year to finish.
[15] There are problems with the administrative reporting system although this is seen to affect more the data on employment rather than graduation.

Table 3.10. Enrollment and graduation by type of institutions, 2001–2010

	2002		2005		2006		2007		2008		2009		2010	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Enrolled	1,227,218	100.0	1,683,382	100.0	1,736,865	100.0	2,142,414	100.0	2,013,920	100.0	1,984,646	100.0	1,568,617	100.0
Institution-based\a	454,787	37.1	487,086	28.9	772,126	44.5	883,839	41.3	748,120	37.1	910,657	45.9	881,625	56.2
Enterprise-based	73,289	6.0	59,003	3.5	98,329	5.7	108,574	5.1	70,371	3.5	127,708	6.4	66,632	4.2
Community-based	591,446	48.2	1,137,293	67.6	866,410	49.9	1,150,001	53.7	1,195,429	59.4	946,281	47.7	620,720	39.6
Others	107,696													-
Graduated	1,127,363	100.0	1,154,333	100.0	1,340,620	100.0	1,702,307	100.0	1,812,528	100.0	1,903,793	100.0	1,344,371	100.0
Institution-based\a	375,887	33.3	334,757	29.0	388,780	29.0	493,669	29.0	713,678	39.4	873,558	45.9	690,709	51.38
Enterprise-based	67,320	6.0	101,550	8.8	72,592	5.4	96,536	5.7	67,131	3.7	122,505	6.4	54,131	4.03
Community-based	577,682	51.2	718,026	62.2	879,248	65.6	1,112,102	65.3	1,031,719	56.9	907,730	47.7	599,531	44.60
Others	106,474	9.4												
Graduation rate\b	91.9		68.6		77.2		79.5		90.0		95.9		85.7	

Source: Current TVET Data and Related Statistics 2005–2009, Annual Report 2004; 2008 Impact Evaluation Study (IES)
\a includes both private TVI and TESDA centers
\b ratio of enrollment and graduates, thus, approximate as no programs can be less than or more than a year.

Table 3.11. TVET graduates certification, 2007

Assessment Results	Total TVET Graduates		
	Number	As % of Graduates	As % of Assessed
Took the assessment	89,490	41.3	100.0
Not indicated	2,632	1.2	2.9
Passed	73,578	33.9	82.2
Failed	13,280	6.1	14.8
Did not take	127,450	58.7	
Total	216,940	100.0	

Source: IES 2008

a caveat to taking this finding as proof of the effectiveness of the TVET programs. The data are subject to severe self-selection problem. Only a third of graduates got the certification since less than half of the graduates (41.3%) took the test. Given this caveat, administrative data show that the certification rate (certified as a percentage of assessed) is fluctuating but steadily rising in recent years. The lowest rate in the 1994–2009 period was in 1998, with less than one-third of those assessed getting certified. By 2009, the certification rate has reached 82.6 percent.

External efficiency

External efficiency, measured in terms of the different dimensions of employment, appears to be a continuing challenge for the sector. Employment rates are a little over a third using first employment, and less than half using current employment status. Only about a third get employment one month after finishing training and only a quarter say their training are useful for their work. These findings need to be qualified. First, given that the employment of graduates is not fully under the control of the TVET sector, a 100 percent employment rate may be an unfair benchmark. Sadly, there is no established way of determining a more objective benchmark. Nonetheless, since training is for employment purposes, employment rate is arguably still one of the best measures of external efficiency of the sector.

Second, there is no official period (e.g., annual or quarterly) for which the employment rates of total TVET graduates are being estimated. Therefore, the employment rate estimates that sporadically come from administrative reports are open to question due to the way basic data are generated (see Orbeta and Abrigo 2011 for a discussion). A more reliable estimate is given by the aforementioned IES which does a tracer of the TVET graduates. Unfortunately, the tracer data come out only every three years. The IES draws a representative sample from a specific group of TVET graduates, i.e., those who graduate in the preceding year, providing a more defined population against which the employment rate in its various dimensions is computed.

Keeping these caveats in mind, the following findings appear worrisome. E*mployment rates are not very high*. Using the first employment after graduation, the 2008 IES data show that the overall employment rate is only about 34 percent. In the

case of current employment status, data further show that less than half (45%) are employed, which is lower than the 64.6 percent estimated from the 2005 IES. An equally *telling finding is that only a quarter considered their training useful for their jobs*. In terms of usefulness of training to job in the current job/business, IES 2008 data show that only 26 percent of the TVET graduates considered the skills they got from training very useful and 9.4 percent find them of some use. In contrast, 8.2 percent say those skills are of no use at all while the rest are unemployed.

Policy Developments and Analysis

How are the education issues highlighted in the previous section being addressed? What is new in the country's education policy and strategy? What adjustments need to be thought through? This section takes a critical look at the sector's reform agenda. The review first examines the finance of education as a whole to check for gross distortions in resource allocation. It then discusses the reform priorities in each of the subsector of education and identifies critical gaps and weaknesses in the reform agenda.

Education finance and public education expenditures

Over the years, the Philippines had doubled its national government (NG) education spending in real terms from 2000 to 2010 (Table 3.12). Despite this increased spending, though, its total NG expenditure on education still does not match its rhetoric about education as a top priority. Arguably, considering its high rates of return, the education sector deserves a higher rate of investment. An indication that the government has been underspending in education is the low NG education spending of the Philippines relative to the practice in comparator countries. In 2009, the share of NG education spending in GDP (3.5%) was much less than the 4.0 percent–5.0 percent rate common in other middle-income countries. It was worse in 2005; the education share fell to 2.50 percent, its lowest in at least the last 15 years (Figure 3.2). At its highest in 1998, the NG education share was 4.0 percent of GDP. The sector has recovered lost ground slightly since 2006. Comparison of other spending indicators with other countries such as the expenditure per student as a percentage of GDP per capita further confirms the inadequacy of Philippine spending on education.

A laudable feature of Philippine public education spending is the priority the government gives to basic education. As can be seen from Table 3.12, the bulk of the GAA education budget goes to DepEd. In 2010, the share of DepEd budget to total education expenses was 85.7 percent, up from 81.7 percent in 1998. In 2011 and 2012, the expenditure shares of basic, kindergarten, and early childhood education to total GAA budget are expected to remain high especially when education grants provided by the conditional cash transfer (CCT) program and the DSWD's early childhood education and development (ECED) budget are included in the calculation. The current administration considers the achievement of the ECED, kindergarten, elementary, and secondary education goals a high priority. Remarkably, TESDA gets only about 2.0 percent of the GAA budget. The rest goes mostly to CHED and SUCs.

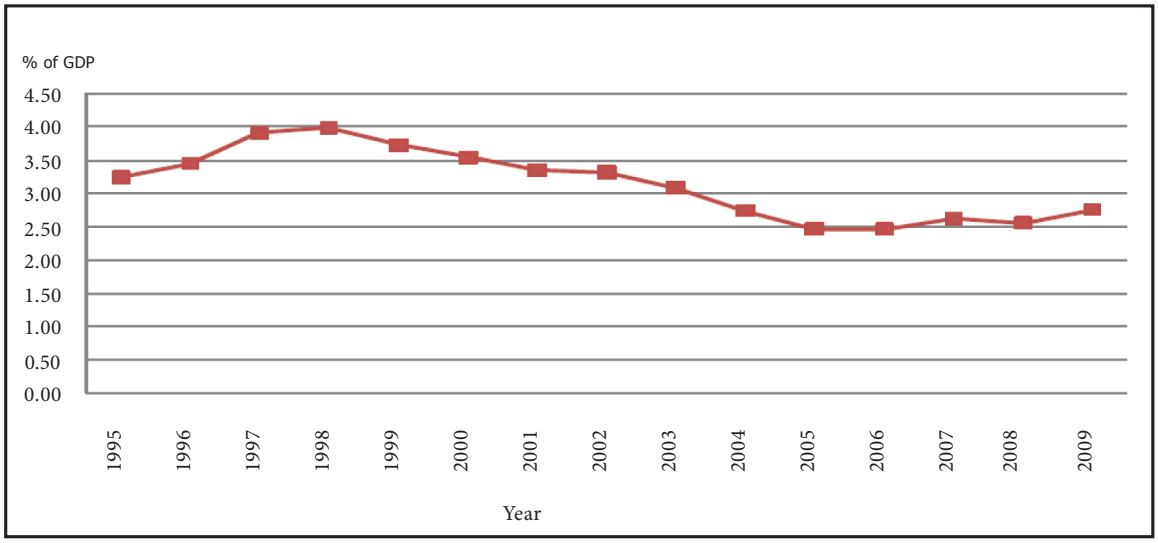
The above pattern of budget distribution among the education subsector is consistent with public finance principles. It is widely believed among economists that basic education is a public good with huge externalities compared to tertiary education. In contrast, it is usually assumed that the benefits of HE are largely expropriated

Table 3.12. GAA budget of education sector by agency and fiscal year

Agency	Fiscal Year												
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Level (PHP million)													
DepEd	77,202	81,204	82,693	82,693	95,259	96,279	96,279	102,630	102,630	126,863	138,244	158,210	161,406
CHED	2,669	2,182	1,800	1,800	595	215	215	207	207	379	720	950	1,669
TESDA	29	2,112	2,104	2,104	2,808	2,445	2,445	2,330	2,330	2,436	3,163	3,484	2,891
SUCs	14,632	13,866	13,810	13,810	15,877	15,714	15,714	15,712	15,712	17,371	19,638	22,829	22,402
Grand Total	94,532	99,365	100,406	100,406	114,539	114,652	114,652	120,878	120,878	147,049	161,765	185,474	188,368
Percent (%) of total													
DepEd	81.7	81.7	82.4	82.4	83.2	84.0	84.0	84.9	84.9	86.3	85.5	85.3	85.7
CHED	2.8	2.2	1.8	1.8	0.5	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.9
TESDA	0.0	2.1	2.1	2.1	2.5	2.1	2.1	1.9	1.9	1.7	2.0	1.9	1.5
SUCs	15.5	14.0	13.8	13.8	13.9	13.7	13.7	13.0	13.0	11.8	12.1	12.3	11.9
Grand Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Growth rate (%)													
DepEd		5.2	1.8	0.0	15.2	1.1	0.0	6.6	0.0	23.6	9.0	14.4	2.0
CHED		-18.2	-17.5	0.0	-66.9	-63.9	0.0	-3.9	0.0	83.4	90.1	32.0	75.6
TESDA		7198.0	-0.4	0.0	33.5	-12.9	0.0	-4.7	0.0	4.6	29.8	10.1	-17.0
SUCs		-5.2	-0.4	0.0	15.0	-1.0	0.0	0.0	0.0	10.6	13.1	16.2	-1.9
Grand Total		5.1	1.0	0.0	14.1	0.1	0.0	5.4	0.0	21.7	10.0	14.7	1.6

Source: DBM

Figure 3.2. NG education spending as percent of GDP, 1995–2009



Source: Manasan (2012)

by individuals, except in the case where higher education contributes to research and public policy analysis. Externalities in public finance refer to welfare benefits or losses not captured or internalized by the individual decisionmaker who is responsible for those consequences. The implication of such analysis is that even if tertiary education develops more employable youth, it does not in itself mean that it is a public good, contrary to opinions expressed by some commentators.

There are several reasons for the pattern of NG spending on education in 1998–2009. The low rate of NG education spending as a percent of GDP is arguably due to the low rate of tax collection, which stands at about 12 percent, compared to recommended international practice of over 20 percent. Many education advocates have often argued for a greater share of the NG budget for education. The problem is that there are other high priority sectors like infrastructure that are equally deserving of additional budget allocation. It is politically difficult to give more to education at the expense of these other sectors. The current administration, however, has shown that huge amounts of savings can be realized if wasteful and corrupt government expenditures are slashed. A large part of these savings has been allocated by the administration to education, as reflected in the recent surge in the DepEd budget as noted earlier.

There is no question that financial and material inputs are important in achieving desired results. However, it is also clear from the empirical literature and experience that money is not everything. There are other key factors such as institutions and teaching/learning practices that impede or facilitate the translation of resources into results.

Basic education and preschool reforms

Over the years, DepEd has undertaken various initiatives to enable it to carry out its mission fully. These initiatives range from small projects to big programs, including a series of high-profile reforms. Many studies have been conducted to review those reforms and propose ideas on how to improve the education of Filipino children (see Luz 2008 and Bautista et al. 2008). The following highlights and reviews key basic education reforms

currently in the process of being designed and implemented.

Millennium Development Goals (MDGs)

Assessments of the country's performance on the MDGs (e.g., Caoli-Rodriguez 2008; Maligalig and Albert 2008) have indicated serious constraints in meeting the goal for education. One of these constraints is the tight fiscal condition of the country to ensure that the MDGs/Education for All (EFA) goals are met (Manasan 2010). Based on sector budget and performance over the last decade, it is arguable that the political will of the previous administration to achieve the MDGs in education was weak despite the rhetoric. It is welcome news, therefore, to hear the present president reiterate the country's international commitment to achieve universal primary education (UPE) in a speech before the United Nations (UN) and then follow up with a relatively hefty budget increase for the sector.

The additional sector resources are being used mostly to close the input gaps on classroom, school furniture, and teachers. The provision of additional inputs, if implemented well, can considerably move the country toward meeting its education MDG. This expectation is in line with the findings of studies (e.g., Maligalig et al. 2010 and Orbeta 2010) and indicate that input deficits are a significant determinant of school attendance as well as student learning achievement.

But simply increasing the budget is not enough. Other steps are needed. As there is not much time left to achieve UPE by 2015, there is need to focus on UPE and accelerate its implementation. On this point, the administration must quickly overcome budget execution issues. In the past, budget execution rates have been persistently low, reflecting crippling and chronic implementation delays.

Basic Education Sector Reform Agenda (BESRA)

Past initiatives to improve elementary and secondary education have generally not accomplished their goals. In general, DepEd failed to sustain and scale up programs that were shown empirically to be effective (e.g., Third Elementary Education Project or TEEP). There were several interrelated factors for this failure. One was reform instability, that is, frequent changes in reform strategies and programs before they could be fully implemented and take root. Another is the conceptualization of those initiatives as discrete projects rather as an integrated and institutionalized reform program. Designed with limited duration, they come and go like flavor of the month. Yet another factor is the inability of DepEd to prioritize and focus on the most strategically important reforms, spreading its limited resources and managerial attention too thinly to be effective.

In 2005, the DepEd adopted BESRA as its flagship reform initiative to improve access, relevance, quality, efficiency, and effectiveness. It was designed as a reform program that comprehensively seeks to address major basic education issues. All the BESRA plans were attuned to EFA targets and the MDGs, whose eight goals include the achievement by 2015 of UPE and the elimination of gender disparity in basic education.

Sadly, BESRA also has had to struggle with crippling delays and poor quality of execution. Several factors have been advanced to explain the difficulty. First, some have argued that it was too ambitious, trying to address all the major issues. Second, there has been lack of effective leadership due to DepEd's failure to focus on the implementation of BESRA and hold responsible officials accountable for results. At the beginning, there was strong program ownership and focus.

Subsequently, however, DepEd became less focused on BESRA implementation as the DepEd secretary who originated the program resigned and his replacement pursued his own pet ideas. Discontinuity in DepEd strategy and leadership is reflected in the fact that the department averaged about one to two secretaries per year during the previous administration.

Under such circumstances, where there has been little focus and accountability on top of lack of absorptive capacity, it is not surprising to see the watering down of BESRA (e.g., in the implementation of the school-based management or SBM policy) and failure to execute planned activities on time, as reflected in the low budget execution rate. The implementation delays have had the effect of BESRA being overtaken by events with the coming of a new administration.

Mother Tongue-Based Multilingual Education (MTBMLE)

Despite the importance of UPE, it is only part of a myriad of EFA goals. In this regard, DepEd will adopt starting school year 2012–13 the MTBMLE policy, which mandates the use of the mother tongue as the first language of instruction in all primary schools in the first three years of primary education while they are learning English as a subject. After Grade III, classes will then be taught in English. This policy is expected to facilitate student learning. The argument is simply that it is difficult for children to learn and be interested in basic concepts in a language they do not understand. The empirical evidence supports the claim that children learn faster and more (including foreign languages) in their mother tongue during the first few years of elementary school while learning the language that will eventually become the language of instruction and wider communication. Many educators believe that this approach is crucial not just for raising student learning but also for promoting completion of children's schooling. They also point out that the successful implementation of MTBMLE requires new resources for new textbooks, teacher training, regular monitoring, and impact evaluation as well as a strategy for dealing with ethnic groups who do not speak one of the nine major languages that DepEd has chosen to initially focus on.

The K-12 reform

This is the flagship reform of the current administration. The K-12 program seeks to implement universal kindergarten and add two extra years to the current basic education system, making it 12 years instead of 10. Children will be required to take 12 years of elementary and secondary schooling at public expense before being given a high school diploma. Beginning this school year, attendance in kindergarten is required of all children. Meanwhile, the structure and content of the curriculum for grades 1 through 10 is being worked out. A newly defined and aligned curriculum will be implemented starting next school year.

While there is hardly any question regarding universal kindergarten, K-12 remains controversial. There are several (albeit, shifting) arguments for extending the basic education cycle by two years. One is the claim that the Philippines is the only country left with a basic education cycle of 10 years; other countries are said to have at least 12 years. As a consequence of this short cycle, the Philippine basic education is "congested" in that it crams a lot of materials in less time than international practice. Filipino children therefore tend to learn the prescribed curriculum only superficially with teachers forced to skim through a wide range of topics. Reduced time on task is

exacerbated by the many holidays, calamities, and other class interruptions. The other argument for the two-year extension is the lack of preparedness and maturity of children to do college or work in the labor market. On this score, the K-12 advocates claim that by extending secondary education by two years, children would have a better chance of being employed in good-paying jobs.

Critics of this reform, on the other hand, have pointed out the following weaknesses in the K-12 arguments. First, in many other countries of the same level of income as the Philippines, their education cycle consists of six years of elementary, three years junior secondary, and three years senior secondary (known as the 6+3+3 system). Many of these countries consider the first nine years as basic education, for which attendance is obligatory and paid for by the government. While there are some subsidies for the senior secondary education, families are expected to pay for their attendance. In the Philippines, the current Philippine law considers the ten-year elementary and secondary cycle as basic education and children are required to attend them and the government is mandated to finance their attendance. In substance, therefore, the international practice argument tends to mislead and pressure stakeholders into immediately adding two more years into its education system and obligating the government to pay for them with general tax money.

There are good reasons to aim at progressively establishing a system that is closer to the aforementioned 6+3+3 system or its equivalent; however, there are also good arguments to minimize at this stage public financing of the two-year extension and to let those who want to take advantage of its purported benefits pay for its costs. In terms of benefits, some critics have expressed doubt as to the effectiveness of the extra two years in raising student learning. Analysis of TIMMS data regarding international experience (Felipe and Porio, n.d.) suggests that adding two more years of ineffective education does not necessarily raise student learning achievement. The claim that the two-year extension would give children more time to learn would depend on the effectiveness of how the extra time is actually used. This is an empirical question that needs to be evaluated. The concern with rushing the implementation of K-12 is that it does not afford DepEd enough time to evaluate the impact of the various curricular changes on student learning and teaching practices for the redesign of the curriculum based on empirical evidence regarding actual Philippine behavior. The consequence would sadly again reinforce the "fits and starts" culture of Philippine education reform.

But even if the two-year extension were to yield the benefits it is said to produce and NG spending on education were increased sufficiently to meet additional supply requirements, mandating public subsidies for the two-year extension would impose substantial opportunity costs. That is, these resources could be more beneficially used for children who do not go to school beyond fourth year high. These children constitute roughly about 29 percent of a population cohort and about 54 percent of children among the poor (see Table 3.5). The benefits that would be forgone could include additional financing needed to effectively and sustainably resolve the perennial classroom, teacher, and educational materials shortages and other problems such as improvement in teacher remunerations and provision for performance incentives.

It would appear then that by pursuing a publicly funded two-year extension in the K-12 program, the current administration has chosen to favor the children of the well-off. To address this inequity, the administration needs to strengthen

more vigorously the effectiveness of its efforts to resolve the issue of equity highlighted in the previous section.

Conditional cash transfers (CCT), equity, and other programs

Despite DepEd's efforts, there has been little progress to reduce education inequities. The CCT program is expected to help in this regard. Contrary to past efforts to reduce education inequities in basic education, which are generally supply-side interventions, CCT directly enables and encourages poor families to send and keep their elementary school-aged children in school. While CCT has been shown rigorously to increase enrollment rate in various countries, its impact evaluation in the Philippines has yet to be completed and reported. Nevertheless, preliminary evidence using data from selected schools have indicated notable surges in elementary and secondary enrollment where CCT has been introduced (Manasan 2011) although evidence on declines in dropout is still anecdotal up to this time.

The long-term effectiveness of CCT depends on the supply response of DepEd and LGUs. Field visits reveal that there are supply issues that need to be addressed in certain areas. With the aforementioned surges in enrollment and reduced dropping out, shortages in classrooms, desks, and educational materials are being exacerbated. Better monitoring and greater transparency, using perhaps the color-coded BEIS geographic targeting system, could be very useful for greater accountability. Equally important is the potential empowerment of disadvantaged communities with the help of civil society organizations (CSOs) to build up political pressures on LGUs and DepEd. DepEd is supposed to have a teacher deployment policy based on the use of the BEIS data and the identification of schools that are in dire need of more teachers. There are a couple of reasons for the persistence of high PTRs. One is the failure to adequately implement the abovementioned teacher deployment policy. The other is the vast and rapidly growing requirements for more teachers due to the high rate of population expansion (Albert 2011).

Gender policy

Gender budgets are available throughout government but they are largely not utilized effectively to mainstream gender issues, reflecting the lack of clear gender policies and strategies on how to deal with gender disparities in education achievements. Field work (Majuca et al. 2011) indicates that boys are having difficulties in adjusting to a routinized school environment, from day care onwards. Moreover, teachers report that boys are difficult to discipline, have a hard time sitting still, do not participate in class, and are unable to focus on written tasks such as assignments and exams. Further on this issue, Majuca et al. (2011) suggest that the disadvantage of boys in learning largely arises from low academic expectations from their parents and teachers.

Accountability and incentives for performance

Finally, the DepEd is now paying more attention to the issue of accountability and incentives for performance, a largely missing factor in past reforms. A characteristic of high-performing organizations is that they imbed in their institutions (that is, in their rules of the game) accountability and incentives for results. In the Philippines, there seems to be a culture of impunity. Therefore, in line

with the president's mandate, the DepEd is seeking ways to hold responsible officials accountable for results more effectively.

Related to this issue is also the lack of results-linked incentives and effective sanctions for bad teaching. For example, there is indeed little linkage between performance and salary increases and promotion. Even so-called productivity bonuses are more in the nature of entitlement rather than reward for performance. DepEd should thus be encouraged to review and explore: (i) the structure of incentives (explicit or implicit) of current rules and practices governing the remuneration, promotion, and sanctions of teachers, principals, and other DepEd officials; and (ii) effective ways to strengthen performance accountability and incentives, particularly on the use of performance contracts and results-based bonuses. The cost effectiveness of the latter can been gleaned from a study of performance pay in India (Box 3.1) showing experimental evidence regarding performance bonus as a means for improving student learning achievement.

Higher education reforms

There are several challenges facing the HE subsector. These include lack of efficiency and effectiveness of public spending on HE; the proliferation of low quality HEIs, many of which are SUCs and LUCs; the inequities in the distribution of HE subsidies; and the lack of efficient mechanisms that would allow liquidity-constrained families to overcome their inability to take advantage of high HE returns due to capital market failures and lack of information.

Addressing some of the above concerns, discussion of ways to improve the performance of the HE system has centered on the following ideas: (i) rationalization of the public HE service delivery structure; (ii) strengthening of the functioning of markets and increase of the public good benefits from HEIs to improve HE's external efficiency; (iii) improvement of HE finance, resource mobilization, and cost effectiveness; (iv) improvement of equity of access to good quality HEIs by less well-off but deserving children; and (v) raising of the quality of HEIs and student learning.

Rationalizing the public HE service delivery structure

The objective of rationalizing the public HE system stems from the need to be efficient, that is, to maximize the results from the use of limited public resources allocated to tertiary education. A key concern has been that the sector is spreading thinly those resources among numerous SUCs and LUCs to support the production of low-quality outputs, whose impact on earnings and the country's development is suspect. Moreover, many HE programs are duplicative, leading to higher cost per student.

As a step toward rationalizing the HE subsector, a moratorium on the establishment of SUCs had been taken, consistent with the recommendations of almost all previous studies of the sector (e.g., PCER 2000).[16] The reactions to this policy have been mixed. On the one hand, there has been strong political resistance from the SUCs' employees and their congressmen.[17]

[16] Former Secretary Jaime Laya, in a panel discussion organized by CHED, revealed that when SUCs were just half a dozen, the call for moratorium had already been issued (CHED 2003).

[17] In a comment to a panel discussion on the rationalization of SUCs, for instance, Senator Angara pointed out that it is the faculty who usually initiate the move to have a small school converted to a state college because once converted, their status and pay become higher. He further pointed out that the request coming from the congressman's constituents will be difficult to resist. In addition, there is a trophy effect that comes with the creation of a state college in the congressman's district (CHED 2003).

Box 3.1. Teacher performance pay: a promising option worth trying

The Philippines needs a strategic breakthrough in education. A promising idea is performance pay for teachers. How performance pay could look like and how effective it could be is illustrated by India's experiment reported by Muralidharan and Sundararaman (2008). This project provided bonus payments to teachers based on the average improvement of their students' test scores in independently administered learning assessments. The mean bonus was 3 percent of annual pay. There were two kinds of result-based rewards given to incentivized schools: bonuses to individual teachers and payments/grants to teachers as a group. The following are among the key findings:

(i) At the end of two years of the program, students in incentivized schools performed significantly better than those in comparison schools by 0.28 and 0.16 standard deviations (SD) in math and language tests, respectively.

(ii) There was no evidence of any adverse consequences as a result of the incentive programs. Students in incentivized schools do significantly better on questions designed to reflect rote learning and on the conceptual components of the test designed to capture deeper understanding of the material.

(iii) Although in the first year, there was almost no difference between the effectiveness of school-level group incentives and teacher-level individual incentives, the latter appear to have a greater impact after two years, suggesting that individualized performance rewards were more effective.

(iv) There was greater extra effort in incentivized schools such as teachers assigning additional homework and class work, providing practice tests, and conducting extra classes after school.

(v) Performance incentives were found to be more cost effective than an intervention package of "smart inputs." The incentive programs spent around 25 percent less in bonuses paid and had a significantly larger impact on learning outcomes (0.22 versus 0.08 SD).

(iv) Finally, there was broad-based support from teachers for the program. Over 85 percent of teachers were in favor of the idea of bonus payments on the basis of performance, and over 75 percent favored such a scheme even if their expected wage were to be held constant.

Source: Karthik Muralidharan and Sundararaman Venkatesh (2008), "Teacher performance pay: experimental evidence from India," draft 24 July.

On the other hand, while acknowledging the moratorium as a necessary first step, critics have argued for more substantive restructuring of the public HE subsector.

The moratorium policy has morphed into many versions (Licuanan 2011). One is the amalgamation of SUCs and the development of the regional university systems to limit the growth of the number of SUCs and exploit economies of scale.[18] Another version relates to the rationalization of program offerings as well. The moratorium policy is also being applied to the introduction of new programs in oversubscribed fields. The hope is for the policy to minimize resource wastage arising from duplications of some program offerings by the private sector and other public HEIs. Too much duplication means failure to take advantage of economies of scale to keep programs cheaper and viable.

Developing a typology of HEIs. The development of a new system for classifying the HEIs has recently been completed to guide the implementation of the HE rationalization process. The "official" classification has five categories, namely: (a) professional, (b) liberal arts, (c) university, (d) graduate, and (e) community

[18] SUCs have varying unit costs that are not related to quality but to enrollment size, i.e., HEIs that have larger enrollments have lower per student cost. This indicates the existence of economies of scale and the proliferation of smaller SUCs will drive up average per student cost (cf. Manasan 2012).

(CHED 2011b). The remarkable feature of the new classification system is that it views these categories horizontally rather than hierarchically unlike the traditional approach.

Efforts at classifying HEIs can be traced as early as 1979 (Bernardo 2003) with more modest objectives like determining the salary grade of the university president. This, however, has since progressed to loftier purposes. For instance, in the CHED Strategic Plan for 2011–2016, the classification is expected to rationalize the HEIs, particularly the publicly funded ones, by aligning their mandates, functions, and operations to national development goals (CHED 2011a). It remains to be seen how this emerging classification system would be translated into resource allocation in the HE sector.

Amalgamation of SUCs and the Regional University System. Still another effort at rationalization is the amalgamation of smaller SUCs in the nearby areas to exploit economies of scale and potentially reduce duplication of program offerings and streamline administration costs. One way of achieving this amalgamation is the establishment of the Regional University System wherein the SUCs in a region are fused to form a regional university system. Region XI with four participating SUCs is being developed as a prototype.[19] The challenge is how to configure a system that would maintain commitment to the goal of establishing one university in the region, given that each of the SUCs has the objective of becoming an independent university in the future.

Implementation results. CHED achieved initial success in the early 2000s in implementing some form of amalgamation by attaching virtually all CHED-supervised institutions into nearby SUCs in the early 2000s. This move probably has had the effect of lowering the cost of these SUCs, as suggested by the empirical findings of Manasan (2012) that indicate potential economies of scale from amalgamating SUCs and reducing duplication of program offerings. This initial success supports wider and more substantive application of the amalgamation policy.

There are, however, forces of reaction that could blunt advances toward wider and more substantive restructuring reforms. Two trends appear worrisome in this regard: (a) the increase in satellite campuses of SUCs; and (b) the continuing rise in the number of LUCs, as can be gleaned from Table 3.1. These are effectively attempts to circumvent the moratorium policy.

Such attempts are reflective of the political resistance to the structural reforms of the public HEIs that will have to be overcome and the strong underlying incentives favoring the expansion of publicly financed HEIs. A strong political will and leadership by the executive branch is needed to advance structural reform. This would require changing the underlying incentive structure as well as the empowerment of CHED to enforce standards with full support of the administration. It would be costly for the current government to adopt the same noncommittal stance of the previous administration and treat the reform as a prerogative of the legislature (OPAE 2008). In the past, the previous administration's response to the call for a moratorium on the creation of the SUCs has been that it is a legislative prerogative (OPAE 2008).

[19] (a) University of Southeastern Philippines, (b) Southern Philippine Agri-Business Marine and Aquatic School of Technology (SPAMAT), (c) Davao Oriental State College of Science and Technology (DOSTST), and (d) Davao Del Norte State College (DNSC). The University of Rizal System is another example. Another being eyed are the SUCs in the Caraga Region (Padua 2003).

Improving the functioning of HE markets and public good benefits

Sector leaders continue to worry about HE's external efficiency and relevance, which in practice has been equated to education's impact on employment, income, and other development objectives. This concern has been a lingering issue because of the persistence of high unemployment rate among the educated (Orbeta 2003) and several initiatives had been proposed to address the issue. For example, the Higher Education Labor Market Study (HELMS) studies, including the last CHED Tracer Study (Arcelo 2003), called for an improvement in employment generation and stronger linkages between academe and the business and industry sector. The same proposal had also been articulated in the Congressional Commission on Education or EDCOM (1992). Moreover, the Task Force on Higher Education of CHED or TF-CHED (1995) called for a quadripartite body composed of government, educational institutions, employers, and student organizations to identify priority areas for instruction and research required for national development. It also proposed that results of the assessment of the quality councils, accreditation status, fees, and programs for each institution be regularly provided.

The approaches to dealing with this external efficiency issue can be summarized as improving market information and control of HEIs' program offerings and their enrollment. The actual measures usually advocated and taken in this regard have been to use the government's regulatory power to approve new program offerings. There has also been some (albeit, little) use of differential enrollment pricing of programs and targeting of some government scholarships and grants-in-aid to fields of study that need to be expanded.

Reform advocates have also called for improved research and development to improve the external efficiency of the sector. On this score, support has been provided to selected HEIs to strengthen their ability to produce public goods, specifically in the development of the country's leadership and capability to do quality research on science, technology, and public policy.

Looking at the results of the abovementioned efforts, it would appear that neither the share of the oversubscribed fields has declined nor the share of the identified priority fields has expanded. Enrollment in agricultural fields, for instance, continues to decline, while those for business continues to expand. There are several explanations for this finding. It is possible that the economic value for families of so-called oversubscribed fields such as business education is higher than programs labeled by government analysts as high priority and undersubscribed. Another possible contributory factor might be the perverse result arising from the way normative financing has been implemented as discussed below.

In terms of education and labor market information, there has been little actual improvement. While basic data may be available, there appears to be no systematic effort at organizing these and making them available to students in useful form. Important data on passing rate in professional examination by school have not been widely published even if this is a mandated function of the Professional Regulatory Commission (PRC). Equally important, there are still no regular labor market and occupation surveys to gauge the current supply and demand conditions for specific work competencies and to estimate the rates of return of investing in specific education programs and enrolling in

certain types of HEIs. The persistence of this failure to develop relevant labor-education market information is consistent with the experience of manpower planning worldwide: it did not produce encouraging results, reminding education officials and advocates again that manpower planning is not as simple as it is believed to be.

Finally, efforts to improve the HE research and development function have not had much success. The capability of the sector and its incentive to do research remains inadequate.

Improving HE finance to raise level of spending and cost effectiveness

There are several key reform ideas being raised with regard to this topic. The first relates to the use of normative financing of public HEIs. The second refers to alternative sources of funding to raise additional resources for HE. And the third is financial autonomy and flexibility to improve efficiency. The concern about the need for reforms to raise efficiency is highlighted by the lack of correlation between the HE enrollment rate and the number of HEIs over time (Manasan 2012).

Normative funding. A major policy thrust for tertiary education is the adoption of a normative funding formula in allocating funds to SUCs starting with the 2005 budget.[20] It is designed to promote basic tertiary education functions (quality instruction, research and extension services), harmonize program offerings of SUCs with national priorities, and promote fiscal prudence and fiscal responsibility.

The assessment done by Manasan (2012) shows that normative funding has had very limited impact. This result, the study explains, may be due to the operational limits imposed in implementing the idea of normative funding rather than the design itself. Those limits combined to stifle whatever effect the program may have had potentially. A further and worrisome observation regarding the current normative financing scheme is Manasan's (2012) finding of its perverse impact on the share of high-priority and medium-priority disciplines. It is the low-priority disciplines that increased in share. The impact on the quality of instruction also appears to be negative, as indicated by results on the Licensure Examination for Teachers (LET) exams where the ratio of passing rate for SUCs as a ratio to the national average passing rate is declining.

On the positive side, normative funding appears to stimulate declining reliance on NG subsidies and raise the SUCs' propensity to increase internally generated income per student.

Financial flexibility of SUCs. The Higher Education Modernization Act of 1997 (RA 8292) authorized the SUCs to retain income generated from tuition and other fees. The aim is to reduce dependence of SUCs on state subsidy and raise internally generated funds to help mobilize additional financing of needed expenditures.

SUCs shared 15 percent of the total government budget for education-related organizations in 1998. By 2010, this has declined to 12 percent. In 1987, subsidies accounted for up to 88 percent of the revenues of public institutions (James 1991). Tuition fees and other sources contributed about 8 percent and 4 percent, respectively. More recent data on SUC finance show a very similar financing structure but with a declining dependence on subsidy and an increasing reliance on internally generated funds. Government subsidy fell to about 84 percent in 2002 and further down to about 70 percent in 2009. Manasan (2012) reports similar results.

[20] DBM-CHED Joint Circular No 2, s. 2004.

These are welcome results. More, however, need to be done as suggested by the data in Table 3.13 which indicate that the shares of government subsidies of public universities in comparator countries relative to their total budgets are much lower than the Philippine SUCs.

Complementary to these reform agenda is giving financial flexibility[21] to SUCs both in retaining income generated and allocating these resources (ADB-WB 1999; TF-CHED 1995). This is designed to give them flexibility to respond to market demand. This idea allows SUCs to charge full cost and compete with the private HEIs for students, scholarships, and research grants. RA 8292 has granted broad corporate powers to the boards of SUCs previously enjoyed only by the University of the Philippines (UP), specifically the retention and allocation of earnings generated, among others.

Improving equity of access to good quality HEIs

Various studies have called for greater equity in the HE development agenda and allocation of public spending on tertiary education (PCER 2000; ADB-WB 1999; TF-CHED 1995). For some advocates, this meant a general expansion of HE enrollment and increase in the number of HEIs or the HE entitlement of all children. Given the country's limited resources and the fact that the Philippine overall tertiary enrollment rate is already at par with comparator countries, it would be difficult to justify increased public subsidies to support untargeted HE enrollment. For other advocates of greater equity, therefore, the focus of the policy discussion has largely been on how to improve the distribution of HE benefits among population subgroups.

The Philippine approach to the equity issue has so far been largely through the expansion of SUCs and LUCs financed predominantly by tax revenues with little effective targeting in place to address the equity issue. It is generally a supply-side strategy with a few scholarship programs. There are doubts as to the effectiveness and efficiency of expanding untargeted interventions and direct public provision to improve equity. Results of regression analysis,[22] using the APIS 2008 data, show lack of significant correlation between the number of HEIs and SUCs and tertiary enrollment. The above finding belies the common misconception that providing more places in the tertiary education sector will automatically

Table 3.13. Public university revenue breakdown by proportion of funding source, selected countries

Economy	Government Subsidies	Tuition Fees	Other Income
China (2004)	47	30	23
Indonesia (2009)	56	38	6
Mongolia (2008)	35	54	11
Philippines (2006)	73	11	16
Philippines (2009)[a]	70	13	17
Viet Nam	50	45	5

Source: Adapted from World Bank (2012), *Putting higher education to work*.

[21] Financial flexibility is deemed more appropriate than financial autonomy which connotes more than what is intended by the law.
[22] The authors' regression estimates are available upon request.

increase the chances of the poor in getting tertiary education. Creating more SUCs is clearly not the solution to greater equity.

It is true that there is a higher proportion of students in SUCs belonging to lower-income groups (less than PHP 100,000 annual income) than in private HEIs. But in absolute terms, there are more students from lower-income groups enrolled in private HEIs (CHED Tracer Study 1999). Moreover, the unit cost of tertiary education is higher in public HEIs than in private ones, implying that the same resources allocated for SUCs could finance more students if they were simply given vouchers that they could use in the school of their choice. Given the above findings, therefore, other options like scholarships and social pricing need to be considered.

HE scholarships. Scholarships have long been identified as a better way of improving equity in access (e.g., Barr 2011). Sadly, the country's student assistance efforts to date are meager and fragmented. For example, the Student Financial Assistance Program (STUFAP) consisting of a combination of scholarships, grants-in-aid, and student loan programs have assisted a total of only 60,885 students in SY 2011 or only about 2 percent of about 2.7 million students (CHED 2011b).

Socialized tuition fees. This scheme calls for academically qualified students to pay according to their means. For instance, students with means should pay the full cost of their education while the poor students get discounts. This has the potential of increasing the reliance of SUCs on internally generated funds. Only UP has the Socialized Tuition Fee Assistance Program (STFAP) which implements a within HEI cross-subsidy among students from different income classes to leverage public subsidies.

An impediment to socialized tuition fees is the fear of student protests if tuition fees are increased. This protest highlights the misguided notion that the bulk of students of SUCs are poor. In reality, as already noted, only a small proportion of the poor reaches tertiary level, explaining why public expenditure on tertiary education benefits the well-off more than the poor, as found by Manasan et al. (2008). The implication of the above observations is the need to build upfront a coalition of low-income stakeholders who stand to gain from a comprehensive HE education finance reform based on a combination of socialized pricing, targeted student assistance, and low-interest student loan.

Student loans. The failure of bright students to enroll in a good tertiary education due to liquidity problem and capital market imperfections means lower productivity and ability to contribute to the economy. The development and expansion of student loans have therefore been proposed in this regard. The objective is to improve the ability of students to take advantage of the high returns of good quality HEIs while further advancing the policy of reducing public HEIs' dependence on tax revenues. The proposal in principle makes eminent sense for several interrelated reasons. First, it would allow greater HE financing without diverting tax money away from basic education, consistent with the widely held view that the benefits of basic education are more in the nature of public good than those of HE. Second, the private rate of return to HE is considerably high and rising, enabling student borrowers to repay their loans. Third, since much of the benefits from tertiary education are largely expropriated by the individuals, it is only fair for them to pay for their higher education.

The need for configuring an extensive student loan program has been identified several times before but none has been developed at this point. Until today, there is no real student loan program in the Philippines except for the token Study Now

Pay Later Plan (SNPLP) which has never expanded coverage beyond a few hundred students and is perennially experiencing problems. The SNPLP had benefited only 800 students in SY 2005–2006. Perhaps, it is now time to introduce a more serious and expanded student loan and aid program. Of course, practical issues need to be resolved, not the least of which are repayment collection, internal control against abuses, and social oversight. These and other challenges need to be sorted out through research and development as well as studies of international student loan experiences.

Targeting and control. In adopting an alternative approach to greater HE equity based on scholarship, tuition discount, and student loan, it is critical to establish good and coordinated targeting schemes and effective control systems. The development of a targeting methodology could draw from the experience of the NHTS-PR, noting though that different cut-off thresholds are probably needed. The targeting methodology is needed to target deserving students from low-income (but not necessarily extremely poor) families. With regard to control, the experience of TESDA is highly instructive of the critical importance of ensuring that the loan, scholarship, and tuition discounts programs have effective controls and oversight mechanism to minimize abuses.

Raising the quality of HEIs and student learning

Ideas to improve quality focus on the upgrading of the inputs used in the education process, namely, faculty, facilities, precollege preparation, accreditation, periodic assessment, and testing. Of these inputs, the qualification of the HE faculty has been long identified as one of the major reasons for the low quality of tertiary education output (Balmores 1990; PCER 2000). Thus, it has been proposed that a massive program of faculty upgrading be launched to increase the proportion of those with master's degrees from the current 30 percent to 70 percent (PCER 2000). Another long-identified solution is the upgrading of the poor quality of HE facilities such as laboratories and library. Still another proposed solution (already in the process of being implemented) is to better prepare the students going to college (PCER 2000) by extending the basic education cycle by two years as discussed earlier.

Faculty upgrading. The Government Assistance to Students and Teachers in Private Education (GASTPE) law (RA 6728) was enacted to fund scholarships for graduate degrees and nondegree workshops for faculty members in private HEIs. However, there is very little information on the program except that CHED (n.d.) states that government has allocated PHP 28 million a year for the program since 1990.

Johanson (1999) has identified some binding constraints regarding faculty improvement. These constraints, which remain key issues today, include: lack of staff and personal reasons such as leaving families behind for extended periods and inability to afford loss of income—factors that prevent some faculty members from pursuing fellowships. To overcome some of these constraints, the recommendation is for more upgrading to be done on-site, i.e., via the Internet. Moreover, noting Johanson's observation that low faculty salaries do not make graduate education attractive, it is essential to find ways to develop effective but affordable and sustainable incentive schemes which have to be linked to the tuition fee reform.

Upgrading of facilities. To address the issue of poor facilities, ADB-WB (1999) has proposed the setting up of a special loan facility for the upgrading of buildings and equipment for private

HEIs. In response to the EDCOM (1992) proposal, 271 Centers of Excellence (COE)/Centers of Development (COD) have been identified to date and given financial support from PHP 1–PHP 3 million a year over a three-year period for faculty development, equipment purchase, international conferences, and networking activities, among others. As of 2004–2005, the CHED has designated 159 CODs and 110 COEs covering 43 programs. Of the 269 designated centers, 150 (56%) are private HEIs. The COEs/CODs appear to have declined in 2010, particularly for public HEIs. In addition to these efforts, the Higher Education Development Fund (HEDF) has also been funding the upgrading of HEIs' facilities. These are steps in the right direction. Tan (2001a), however, points out that the COEs/CODs would need much more than the allocated amount to improve HEIs' facilities.

A*ccreditation*. This has always been acknowledged as a key component of quality improvement. TF-CHED (1995) says that every stage of the accreditation process yields significant improvements in the accredited institutions. It has also been a trigger for institutional development and accountability. EDCOM (1992), therefore, proposed the strengthening of voluntary accreditation at the regional and specific program levels through the participation of corresponding professional associations and experts.

There are currently five accrediting bodies, as mentioned earlier, three catering to private HEIs and the other two to public HEIs. Despite its long history in the country, however, the actual accreditation coverage has been low. As of 2007, less than 20 percent of HEIs have at least one program accredited, and over 65 percent of the 958 accredited programs are at most Level 2. The five accrediting agencies catering to various types of schools are employing different procedures and standards. Thus, the present accreditation process is perhaps too complex and inconvenient, partly explaining the low rate of accreditation. This suggests a need for standardized and simplified sets of accreditation criteria, applicable to all HEIs according to their classification under the new typology of HEIs mentioned previously. This measure, however, can go only so far if there is no structure of incentives that would promote compliance.

Closing of nonperforming programs. A reflection of the lack of social accountability of HEIs is the failure to provide public information relevant to students' choice of HEIs and to deal with programs that are consistently and extremely failing badly. This conclusion is evidenced by three well-known facts. First, closing nonperforming programs/HEIs, a key public sector function over a private-dominated tertiary education sector, has hardly been exercised. This practice or the lack of it undermines the regulatory credibility of government and, therefore, sector compliance with standards. Second, information on HEIs/programs that are not performing well is not well publicized, pointing to failure to attenuate HE market imperfections. Third, neither is there serious research effort at knowing the implications of the presence of nonperforming programs.

In an effort to map program offerings across the country, Tayag and Calimlim (2003) tangentially touched on nonperforming programs defined as those with 0–5 percent passing in board examinations. Their findings point to some interesting conclusions. For example, there appears to be a preponderance of nonperforming in accountancy: it has 80 or 60 percent of the 134 identified nonperforming programs using data from 1997 to 2001.

Remarkably, CHED has recently announced that it is starting the process of closing nonperforming programs.[23] How far this will go remains to be seen. In the meantime, there is still the unresolved issue of how to gauge performance of courses that have no professional examinations. These include those in business administration, which accounts for the largest share of students and graduates for decades now. Another positive step taken by the present CHED is the issuance of a moratorium in the opening of new programs in oversubscribed disciplines (CMO No. 30 s. 2011). These consist, among others, of Business Administration, Nursing, Teacher Education, Hotels and Restaurant Management, and Information Technology Education (Plan 2011–2016). The chances of the moratorium to succeed this time are greater, considering that now the introduction of new programs requires CHED approval (except for deregulated HEIs). The problem though remains for the existing nonperforming programs. Until CHED flexes its regulatory muscle to close nonperforming programs consistently rather than sporadically, these programs will continue to enroll uninformed students. CHED needs the strong support of the government and civil society to instill discipline on the tertiary education sector.

TVET policy developments and analysis

As previously mentioned, there is widespread concern about the effectiveness and efficiency with which TVET resources are being used. These two concerns combine to raise the need for a critical look at alternative ways of financing, providing, and regulating TVET to improve its performance. These policy issues have already been discussed as part of the current and past attempts to improve the contribution of the TVET subsector to the country's development agenda. The issues, which are being revisited below, relate to financing, service delivery, and regulation including questions on increasing public spending on TVET and the restructuring of roles and institutions.

Institutional reforms

The core issue for TVET development planning is institutional reform. TESDA's current institutional arrangement is not conducive for efficiency. First, TESDA is heavily involved in direct service provision through its training centers, which have little incentive to be efficient since their budget and salaries are not closely tied to their performance. Second, it is also responsible for the accreditation and assessment of existing delivery modes, which means that TESDA is both a provider and a regulator of providers. As a consequence, the current institutional arrangements vest TESDA with undue advantages over private TVIs, resulting in the latter's being crowded out.

Clearly, there is a conflict of interest that would tend to undermine the efficiency of the TVET system and its performance accountability. For example, because of the financial advantage held by TESDA and other government agencies, noncontestable program arrangements seem to have emerged. The private firms are unable to compete in programs that are directly given by government units. Apart from financial superiority, the TESDA centers are being managed by the regulators themselves (Lanzona 2008). Arguably, they would tend to protect the centers and fail to make them accountable for the quality and effectiveness of their services.

The lesson from the current TESDA experience is clear. The agency is supposed

[23] http://newsinfo.inquirer.net/84191/ched-closes-failing-schools.

to enforce standards via regulation. But given its other role at present, its performance as a regulator appears inadequate. This can be illustrated by the way the rules laid out in the Training Regulation (TR) are being enforced. As the primary instrument for TESDA regulation, the TR specifies the requirements needed to be granted authority to offer a TVET course. Consequently, although there is supposed to be an annual compliance review, there is not much data on compliance rates and the actions taken in cases where a violation has been discovered.

Furthermore, focus group discussion (FGD) findings reveal that TESDA does not have the police power to implement the sanctions for noncompliance. Apparently, TRs are considered mere guidelines rather than a set of rules that need to be followed. Obviously, an annual review of the implementation and impact of these regulatory tools is needed; but more urgently, it is critical for the government to immediately undertake a legal analysis of the authority of TESDA to issue enforceable regulations and sanctions for noncompliance.

To improve TVET, past discussions have articulated the desirability of changing the role of TESDA from a direct service provider to a standard setter/regulator and enabler of other more efficient providers. The vision is for TESDA's current responsibility as a training provider to migrate to other institutions, preferably the private sector, in order for TESDA to focus on standard setting and regulation free from distractions and inappropriate entanglements. Unfortunately, after some initial enthusiasm, follow-up implementation got stalled. Perhaps, it is time to revive the idea.

Reforming the TVET scholarship system and allocation of subsidies

Scholarships are widely accepted ways of helping the poor and deserving individuals. In line with this thinking, TESDA greatly expanded its scholarship programs consisting of Private Education Student Fund Assistance (PESFA) and Training for Work Scholarship Program (TWSP). Substantial amounts of money have been spent on these programs. The last estimate given by the 2008 IES shows that 17 percent of the TVET graduates had some scholarship. The 2005 IES puts the proportion at 4 percent.

The assessment of PESFA and TWSP scholarship programs show mixed results (Orbeta and Abrigo 2011). The Commission on Audit (COA) report points to abuses and weaknesses in their design and control systems. Internal efficiency does not appear to be a problem. Graduation rates are higher than nonscholars. Certification rates, however, are not better than nonscholars. In terms of external efficiency, again the results are mixed. PESFA scholars have higher employment rates while TSWP scholars have lower employment rates. Both, however, have higher employment rates than nonscholars. A caveat is in order to qualify the above conclusions. Less than half of the graduates take certification tests. Arguably, it is unfair to attribute low employment rates of TVET scholars solely to program ineffectiveness.

Another notable criticism regarding TESDA's programs is that they are not appropriately targeted. In this sense, one can argue that training scholarships should be limited to fulfill equity objectives. This means there should be minimal use of subsidies for the training of well-off people. Since almost all of the gains from general training are likely captured by the individual beneficiary, it does seem fair to ask him to pay for the training cost. Further, it seems also fair for firms to pick up the costs of firm-specific skills training. The problem is that well-off workers might be facing a binding liquidity constraint. For this issue, a training loan scheme should be studied. The same goes for the establishment of a forward-looking,

long-term savings account for enabling workers to acquire new competencies and opportunely adjust to structural market changes.

The conclusion then is that improvements are needed in targeting, design, and operations of the TVET to make it more transparent, demand-based, focused on low income, and accountable for results. A stronger scholarship program with more effective controls and oversights is needed as called for by COA. Better targeting is also needed. With the scholarship system redesigned along with improved regulatory environment and strengthened accountability, the government would be able to provide more and better government TVET assistance by providing expanded scholarships to deserving individuals instead of maintaining TESDA's training centers.

Improved private sector participation

Firms possess information about the skills that they need; therefore, their participation is valuable. Improvement in this regard is not just in supplying TVET training services to TESDA but also in setting priorities. In line with the National Technical Education and Skills Development Plan (NTESDP) objectives, TVET reform should strengthen the relevance, responsiveness, and effectiveness of government TVET interventions. A cursory look at the methodologies used to involve the private sector stakeholders gives the impression that they have been adequately involved in all aspects—from determining the skills in demand to the promulgation of training regulations. A closer look, however, at the employment record of TVET graduates in general and TVET scholars in particular would indicate a need for improvement.

An option here is to strengthen the role of the private sector in the allocation of TVET resources. An example is the arrangement between the Business Processing Association of the Philippines (BPAP) and TESDA. Their agreement allows BPAP to allocate scholarship vouchers with higher employment rate requirement for the BPAP in-house trained (80%) compared to 50 percent for those trained by other TVIs not affiliated with BPAP.[24] Unfortunately, there has been no external evaluation of this scheme that could have informed policy discussion in this area.

Targeting, M&E, experimentation, and capacity development

A few more observations are in order to round out this review. One is that TESDA policy and methodology are quite weak. Therefore, strengthening them should form part of reforming TESDA policies and programs. After all, the strongest justification for TESDA interventions is equity improvement. Thus, an important reform is the development of an explicit and credible targeting system, maybe an analogous and adapted version of the DSWD's NHTS-PR. Targeting a good proportion of TESDA subsidies to CCT beneficiaries might be a good start—one that would support the administration convergence policy.

Another observation is that improved regulation would require good monitoring for effective implementation. On this issue, there appears to be a weak capacity for monitoring within TESDA. Interestingly, monitoring and evaluation capacity in TESDA was mentioned in the FGDs as one of TESDA's weak points. A related problem is the lack of standardized reference period for computing employment rate—the primary indicator of external efficiency. The FGDs reveal that administrative data on employment are dependent on the volition of the TVIs to check

[24] Joint TESDA-BPAP Circular No.9 series of 2008

on the employment of their graduates. Whatever the TVIs report for the period is used to compute employment rates without consideration as to the length of period from completion of training and the extent of reporting coverage. This practice is unacceptable since employment rates are dependent on the length of time since graduation.

Finally, in implementing the above vision of reforms, there is a need for capacity building. This would be in the area of targeting, scholarship design, regulatory policy development, implementation management, and monitoring and evaluation (M&E). Other areas where capacity building is needed include experimentation, testing, and impact evaluation. Many of the issues facing the TVET subsector are not cut and dried. Experimentation and testing of new approaches are therefore an important part of learning-by-doing, for which impact evaluation cannot be overestimated. Without the evaluation of the impact of major programs, it would be difficult to ensure their effectiveness. In the past, there have been many pilot schemes. They turn out to be less useful than they could have been because of lack of impact evaluation studies.

Conclusions and Recommendations

The general conclusions of this chapter can be summarized as follows.

First, on the whole, the education sector has made some progress in recent years after being stalled for a number of years. However, this progress is distressingly slow and inadequate. Consequently, the country could fail to honor its MDG commitment to achieve universal primary education by 2015. Basic education completion rate, functional literacy, numeracy, and other learning achievements remain embarrassingly low. Moreover, many HEIs do not meet quality standards—and not one of them has been ranked in the top 300 universities in the world.[25]

Second, faster progress is not only possible; it is also worth the cost. It appears that the potential returns from investing in education remain high. Besides, as reported by di Gropelo (2010), the wage premium for the more educated appears to have increased, implying that income inequality may persist and might even worsen if the supply of more educated and better trained workers does not keep pace with increased market demand, and the poor are not able to take advantage of the economic gains from more education.

Third, to fully benefit from education, the country needs to effectively address a number of key issues. This includes the underfinancing of education at all levels despite the recent surge in the DepEd's budget under the current administration. Faster progress, however, would require not just more money but also a smarter and steadier approach to reform and its implementation, including faster budget execution.

There have been many reforms in the past. A few of them were state-of-the-art interventions that had been shown to be effective, at least in a pilot or experimental setting. Unfortunately, on the whole, they have not been successful for various reasons. First, they were fragmented and project-based efforts. Learning from projects was never an essential part of project design and implementation. Therefore, their chances of being sustained and scaled up were not well-grounded. Second, on top of tight financial constraints, lack of focus, and policy instability and inconsistencies, the reforms were carried out in an environment of

[25] The QS world ranking of universities in 2011–2012 is available at http://www.topuniversities.com/.

impunity without performance accountability and incentives. As mentioned, implementation suffered for lack of attention due to failure to prioritize and efficiently sequence the reform efforts, thereby spreading management and other resources thinly and ineffectively. Reforms were often initiated and quickly changed or superseded by other concerns even before they have been thoroughly tried and allowed to take root. Part of the reason for this policy and implementation instability is the frequent change in top education leadership.

In the recent past, it was hoped that BESRA would be different. It was expected to be more effective in scaling up and sustaining promising reform efforts, having been designed to be a comprehensive program incorporating lessons learned from local and international experience and research. Sadly, despite its achievement in introducing SBM, BESRA is falling short of expectations—again due to the proverbial leadership instability, lack of focus and prioritization, performance accountability failures, and lack of performance incentives.

And fourth, the current administration is working toward the resolution of key sector issues. For example, in basic education, the administration can be credited with giving DepEd a remarkable boost to its budget. DepEd is accelerating the groundwork for immediate implementation of the mother tongue-based multilingual education policy, a highly promising reform (properly implemented). Concomitantly, the K-12 reform is being pursued vigorously (albeit, perhaps too aggressively for critics). For tertiary education, CHED is trying to put together a sensible reform policy and strategy that in the past can only be described as incoherent and confused.

There are some concerns, however, that the administration should eventually be held accountable for—at least in the history of Philippine education. One of the most important of these concerns is the warning of critics against rushing the implementation of a publicly financed additional two years of secondary education. The fear is that there may be unintended consequences of K-12 on equity and the lack of sufficient empirical evidence to resolve critical design issues. This concern is on top of well-grounded doubts about the public benefits of rushing the extra two years of high school. On this point, scarce managerial and financial resources would almost certainly mean foregone opportunities to ensure a faster and more effective resolution of other more urgent and fundamental challenges in the lower levels of basic education. As before, DepEd is trying to do too much at the same time and, therefore, risks similar reform failures as in previous administrations.

In terms of postbasic education, the issue is the near opposite of DepEd's problem. While CHED has shown interest in developing certain interesting strategic ideas, it remains to be seen how it will end up addressing the politically difficult issues of HE. Moreover, one-and-a-half years after President Aquino's election, TESDA is still searching for ways on how to resolve fundamental issues facing the TVET subsector.

In view of the foregoing analysis, the following recommendations are hereby proposed:

(1) **improve resource mobilization** by (i) increasing public funding of ECCD, kindergarten, elementary, and the four-year secondary education; (ii) making beneficiaries pay tuition fees for the benefits privately gained from higher education, TVET and, prospectively, the additional two years of secondary education of K-12; and (iii) developing an expanded low-interest student loan program to address liquidity constraints and the difficulties of accessing market loans for human capital;

(2) **focus on the implementation of urgent and fundamental program priorities** like the

achievement of UPE by 2015, improvement of student learning achievement early on at lower levels of education (especially raising proficiency in reading and math), and the completion/deepening of key measures supported by BESRA such as closing perennial basic education input shortages, the MTBMLE, and reducing rote learning;

(3) **improve equity** through (i) explicit and credible targeting of tertiary education subsidies; (ii) use of targeted fee discounts; and (iii) greater attention/resources for the special needs of indigenous peoples (IPs), boys, and the grossly disadvantaged areas like ARMM;

(4) **raise the education system's effectiveness and efficiency** through (i) greater accountability and incentives for results; (ii) making rigorous evaluation and learning essential parts of policy development, project design, and implementation; (iii) shift of government subsidies from direct ownership and operations of HEIs and TVIs to the expanded use of the targeted scholarships and vouchers for deserving students that private and other providers can compete for (provided the much-needed reforms of these programs have been first carried out); and (iv) establishment of a better regulatory environment and improvement of the governance and stewardship of the tertiary education system; and

(5) **give higher priority to the "public good function" of the HE sector** by increasing the funding and strengthening of incentives for selected HEIs, specifically in the development of the quality and diversity of the country's leadership and their capability to do quality research on science, technology, and public policy.

References

Alba, M. and A. Orbeta. 1999. A probit model of school attendance for children 7 to 14 years old. In A. Orbeta *Household models: estimates and policy simulations using Philippine data*. International Development Research Centre and MIMAP Philippines.

Barr, N. 2004. Higher education funding. *Oxford Review of Economic Policy* 20(2):264–283.

———. 2011. Financing higher education: lessons from economic theory and operational experience. In S. Armstrong and B. Chapman (editors), *Financing higher education and economic development in East Asia*. Canberra: ANU E Press.

Bautista, C.B., A. Bernardo, and D. Ocampo. 2008. When reforms don't transform: a review of institutional reforms in the Department of Education (1990–2008). Background paper prepared for the Philippine Human Development Report (PHDR) 2008/2009. The original paper with complete footnotes is available at http://hdn.org.ph/papers-and-publications.

Berhman, J. 1990. Human resource-led development? Asian Regional Team for Employment Promotion. International Labour Organization.

Bernardo, A. 2003. *Toward a typology of Philippine higher education institutions*. Commission on Higher Education.

Caoli-Rodriguez, R.B. 2007. EFA Global Monitoring Report 2008: The Philippines country case study. Country profile commissioned by UNESCO for the EFA Global Monitoring Report 2008, Education for ALL by 2015: will we make it. Full report can be requested through efareport@unesco.org.

Commission on Higher Education (CHED). 2003. Toward rationalizing Philippine higher education. CHED.

———. 2011a. CHED Strategic plan 2011–2016.

———. 2011b. CHED 2012 budget presentation.

di Gropello, E., H. Tan, and P. Tandon. 2010. *Skills for the labor market in the Philippines*. Washington, D.C.: World Bank.

Felipe, A. and C. Porio. n.d. Length of school cycle and the quality of education. Processed.

Hanushek, E. and L. Woessmann. 2008. The role of cognitive skills in economic development. *Journal of Economic Literature* 46(3):607–668.

Lanzona, L. 2008. Technical, vocational education and training in the Philippines. Background paper for World Bank Skill Study.

Licuanan, P. 2011. Challenges in Philippine higher education. Presentation at the National Education Forum, 25 May.

Luz, J. M. 2008. The challenge of governance in a large bureaucracy (Department of Education): linking governance to performance in an underperforming sector. Philippine Human Development Network Discussion Paper 2008/2009.

Majuca, R., R. Manasan, C. Reyes, J. Yap, C. Mina, and A. Tabuga. 2011. *PIDS 2010 Economic Policy Monitor: fiscal space, investment, and poverty alleviation*. Makati City: Philippine Institute for Development Studies.

Maligalig, D. and J. R. Albert. 2008. Measures for assessing basic education in the Philippines. PIDS Discussion Paper Series No. 2008-16. Makati City: Philippine Institute for Development Studies.

Maligalig, D., R. Caoli-Rodriguez, A. Martinez, and S. Cuevas. 2010. Education outcomes in the Philippines. ADB Economics Working Paper Series No. 199. Mandaluyong City: Asian Development Bank.

Manasan, R. 2010. Financing the MDGs and inclusive growth in the time of fiscal consolidation. PIDS Discussion Paper Series No. 2010-34. Makati City: Philippine Institute for Development Studies.

———. 2011. Pantawid Pamilyang Pilipino Program and school attendance: early indications of success. PIDS Policy Notes No. 2011-19. Makati City: Philippine Institute for Development Studies.

———. 2012. Rationalizing national government subsidies for state universities and colleges. PIDS Discussion Paper No. 2012-03. Makati City: Philippine Institute for Development Studies.

———, J. Cuenca, and E. Villanueva-Ruiz. 2008. Benefit incidence of public spending on education in the Philippines. PIDS Discussion Paper Series No. 2007-06. Makati City: Philippine Institute for Development Studies.

Office of the Presidential Assistant for Education (OPAE). 2008. *Education quality and relevance updates*, Vol 1.

Orbeta, A. Jr. 2002. *Education, labor market, and development: a review of the trends and issues in the past 25 years for the Philippines*. Makati City: Philippine Institute for Development Studies.

———. 2008. Higher education in the Philippines. Background paper prepared for di Gropello, Tan, and Tandon (2010), *Skills for the labor market in the Philippines.* World Bank, Washington, D.C.

———. 2010. Achievement test scores and school characteristics: evidence from public elementary and secondary school. Research Brownbag. Philippine Institute for Development Studies.

——— and M. T. Sanchez. 1995. Population change, women's role and status and development in the Philippines. Population and Development Asian Population Studies

Series No. 143. Bangkok: Economic and Social Commission for Asia and the Pacific (ESCAP).

Orbeta, A. Jr. and M. Abrigo. 2011. An assessment of TESDA scholarship programs. Unpublished report prepared for the Department of Budget and Management.

Padua, R. 2003. Models of amalgamation: regional university system models in Caraga. CHED.

Presidential Commission on Education Reforms (PCER). 2000. Philippine Agenda for Educational Reform: The PCER Report. Manila.

Sanyal, B. and N. Varghese. 2006. Research capacity of higher education sector in developing countries. Technical report, UNESCO.

Tan, E. 2003. Studies on the access of the poor to higher education. CHED.

———. 2011. What's wrong with the Philippine higher education. AC-UPSE Economic Forum, 22 February.

Tayag, J. and C. Calimlim. 2003. HEI and program map of the Philippines. In *Toward rationalizing Philippine higher education*. CHED.

Technical Education and Skills Development Authority (TESDA). 2010. Current TVET data and related statistics 2005–2009. Retrieved on 28 February 2011 from TESDA database.

———. 2011. Investing in the 21st century skilled Filipino work force: the National Technical Education and Skills Development Plan 2011–2016.

———. n.d. The Philippine technical and vocational education and training (TVET) system.

World Bank. 2012. Putting higher education to work: skills and research for growth. World Bank East Asia and Pacific Regional Report, Washington, D.C.

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This second issue of the *PIDS Economic Policy Monitor* (EPM) focuses on education. Recognizing the critical role of education in development, this year's EPM takes a special look at the sector's achievements, direction, priorities, and critical gaps in order to help the government and other education stakeholders craft the necessary education reform agenda that will further push the education sector's contribution for a sustained, inclusive, and rapid growth of the country's economy. After a decade of lackluster performance, the sector has been seeing some progress in recent years. The progress, however, has been distressingly slow and inadequate. The good news is that faster development is not only possible; it is also worth the cost.

Following the format of the EPM, the issue begins with the macroeconomic trends that took place during the year. The Philippine economy faltered in 2011, with the gross domestic product (GDP) growing by a mere 3.7 percent as compared with the 7.6 percent growth in 2010. Other macroeconomic developments in the country and how global trends affected them, and an analysis of various events in the different economic sectors and how they affected economic growth are likewise presented.

Important policy decisions taken in 2011, both as responses to global and domestic developments and as part of the government's overall development thrust, are also presented in this issue. This is in consonance with one of EPM's objectives of looking into the impact or potential impact of policy measures instituted in the year under study. Thus, policies made during the year in the areas of trade and industry, competition policy, infrastructure, innovation strategy, environment and natural resources, and poverty-related matters are likewise discussed.

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