
# UP School of Economics
## Discussion Papers

Discussion Paper No. 2010-08 August 2010

**The Philippine Economy and Poverty During the Global Economic Crisis**

by

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30 June 2010

Abstract

Anecdotal evidence permeates accounts on the impact of the global economic crisis (GEC) on Philippine poverty. This study systematically assesses the evidence and recent data. It adopts a somewhat eclectic approach, applying regression and decomposition techniques to trace the GEC impact on GDP and its major components, constructing panel data from nationally representative household surveys to trace the changes in household welfare during the crisis, and combining national income accounts and household survey data to simulate the differential effects of the crisis across population groups and social divides. Empirical findings suggest that although the Philippine economy did not slide to recession during the GEC, the impact of the crisis on the economy and poverty across population groups was nonetheless severe — and may linger for many years to come.

JEL classifications: I3, O16, O53
Keywords: Poverty, economic growth, global economic crisis, Philippines

Note: This paper has drawn substantially from the authors' work for the Asian Development Bank (ADB) and the United Nations Development Programme (UNDP). The authors thank both UNDP and ADB for financial support, and the participants to the UNDP Forum in June 2010, particularly Joseph Lim, Joey Salceda, Leonor Briones, and Winnie Monsod for thoughtful comments on an earlier draft. They are also grateful to Corazon Urquico and Joel Mangahas for support and assistance. The usual disclaimer applies.

## 1. Introduction

Much has been written about the origin, spread, and ramifications of the global economic crisis (GEC) in 2008/2009. When the crisis erupted in mid-2008, most observers in the development community contended that the global economy would slide to recession and that it would take at best a couple of years or at worst several years, as in the Great Depression of the 1930s, for the world economy to fully recover lost ground. No Asian economy, big or small, was expected to be spared from the fallout of the crisis. Yet, economic performance data in the second half of 2009 showed positive indications that the worst is over and that the major economies are on their way to recovery, thanks to generally synchronized fiscal stimulus programs aimed at reviving growth in these economies. This is more so in Asia, particularly China, India, and Indonesia where economic growth continued to be comparatively robust, albeit less spectacular than their customary levels in the past two decades.

The Philippine economy has also avoided the recession, although the full impact of its sharp slowdown on various population groups, particularly the poor, remains to be ascertained. One common view is that the global crisis has hit most adversely the workers in the export sector, particularly manufactured exports, and overseas Filipino workers (OFWs), as consumer demands and incomes in the country's major trading partners contracted. The initial waves of layoffs and labor displacements from these sectors, as well as the declines in the rate of remittance inflows, have occupied front pages of national dailies. However, it is possible that the channels by which the crisis affected various population groups have been more complex and less visible than those impressed in the public's mind by media. Moreover, household responses to the crisis could have also varied quite enormously, even among the poor, owing to differences in household attributes, socioeconomic circumstances, and location. For many households, as the experiences from past financial and economic crises (e.g., the Asian financial crisis in 1997/1998) suggest, the consequence of the crisis may linger for a long time, even beyond a generation, such as when children are withdrawn from schools or receive inadequate food for balanced nutrition. Furthermore, the government's response to the crisis, especially through its fiscal stimulus program, may have also influenced the incidence, depth, and severity of impact across sectors and population groups.

At least two other major developments prior to the GEC could have likewise influenced the impact of the shock on poverty. One was the sharp spikes in global foodgrain prices in late 2007 and the first half of 2008 owing to a confluence of global supply and demand factors. Although the government intervened aggressively in the domestic market to cushion the impact of the shock, particularly on the poor, domestic rice prices rose by about 40% during the period. Second, in the seven-year period prior to the food price shock, poverty was disturbingly rising even as the economy was growing at a rate (averaging 4.8% a year) faster than the country's population growth rate (2% a year). Both these developments could have made the poor even more vulnerable to the GEC.

Clearly, understanding the impact of external shocks such as the GEC on poverty, particularly their differential effects across population groups and social divides, is crucial to the design of a development strategy aimed at fostering a more inclusive growth, thereby speeding up the pace of poverty reduction. This study goes beyond anecdotal evidence characteristic of many previous accounts on the social impact of the GEC by systematically examining the evidence and recent data and drawing policy lessons and recommendations toward improved poverty-mitigating responses to financial and economic shocks. The next section of this paper provides an overview of the country's economic performance before and during the GEC. It then

discusses the empirical approach used to assess the impact of the crisis on the economy and poverty. The subsequent two sections show the findings of the study based on examination of macroeconomic data and panel survey data. The discussion of crisis impact focuses on economic performance (major components of GDP and employment) and the evolution of poverty during the crisis across social divides. The paper then assesses the effectiveness of the government's response to the crisis in terms of key programs. The last section summarizes the findings and presents their implications for policy reform and design of poverty reduction programs.

## 2. GEC and the Philippine Economy

The Philippines entered the crisis on a sound footing relative to its major East and Southeast Asian neighbors (except Indonesia), which commonly experienced economic contraction, especially in the industrial and export sectors. As such, this has been suggested as evidence of the country's newly gained economic resilience. It must be noted, however, that the country has likewise not experienced the spectacular economic performance of its neighbors in recent decades. The country's neighbors saw their per capita incomes more than doubling during the past three decades. In contrast, per capita income in the Philippines today is only roughly one-fifth higher than it was 30 years ago (Figure 1). Even as the crisis badly hit investments and exports, which fueled rapid growth in East Asia's "early globalizers," it is highly unlikely that it would wipe out the region's economic and social gains during the period. On the other hand, because the Philippine economy has missed the opportunities for economic growth in recent decades, the country has a rather weak capacity to cushion the impact of the crisis on the poor, whose number have increased substantially in recent years even before the onset of the crisis. The proportion of the population deemed poor rose from 31.3% in 2000 to 33.0% in 2006 despite the increase in GDP per capita of about 2.7% a year during the same period.[1,2]

While the economy has escaped recession, substantial erosion in human welfare is likely to occur given past failure to reduce poverty. The country's gross domestic product (GDP) fell sharply from 7.1% in 2007 to 3.8% in 2008 and 0.9% in 2009 (Table 1). Considering the country's rapid population growth rate of 2% a year, this means the per capita GDP in the Philippines for 2009 had a negative growth of 1.1%.

[1] The poverty estimates are based on official poverty lines for 2006. For consistency, these lines are held fixed in real terms. Data used are the National Statistics Office's Family Income and Expenditures Survey (FIES). See Balisacan (2010) for details.

[2] That poverty increased while GDP per capita rose from 2000 to 2006 is quite puzzling to many observers of the Philippine economy. Mean incomes based on the FIES show a decline of 1.5% a year during the period. This appears to adequately explain for the increase in poverty. The decline in income is, however, not consistent with the increase in GDP per capita, as observed from the National Income Accounts (NIA). Although there is circumstantial evidence indicating that the NIA tends to overestimate GDP growth (Medalla and Jandoc 2008; World Bank 2009a), income growth has, nonetheless, been positive. But if growth has been positive and poverty is rising, this can only mean that inequality in the distribution of income is rising, which is a serious concern considering that the country's income inequality is already very high compared with most other Asian countries. Indeed there is likewise circumstantial evidence suggesting that the FIES is inadequately covering wealthy households (World Bank 2009b; Human Development Network 2009; Balisacan 2010). Moreover, Ducanes (2010) has indicated that the FIES has been increasingly underestimating the flow household remittances. This has potentially substantial impact on estimates of poverty and income distribution.

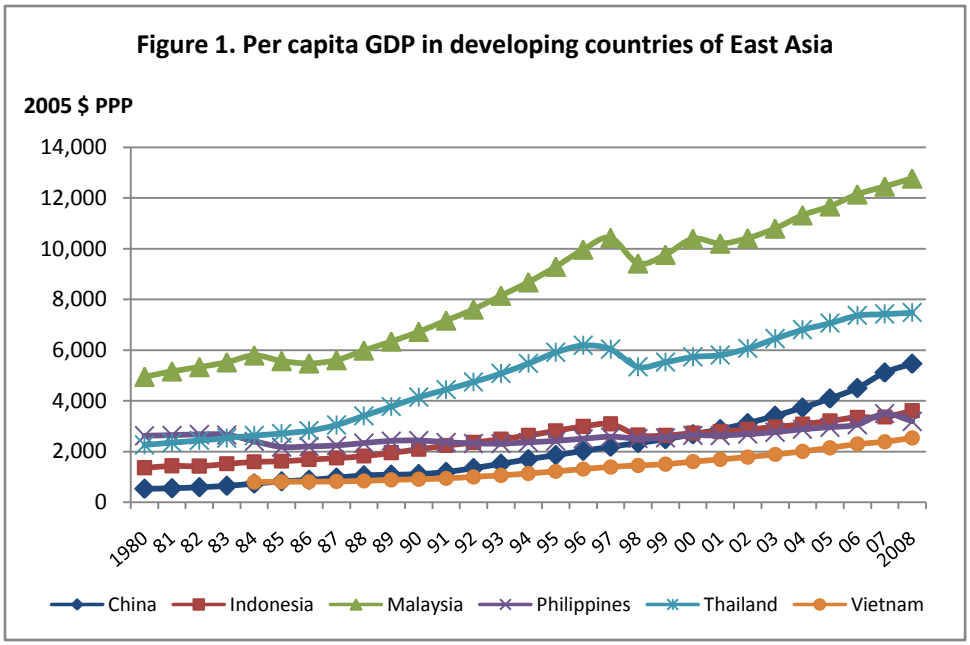
**Table 1. Growth rates of GDP and its components**

| Year/Quarter | | GDP | Sector | | | | Expenditure | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Agri | Industry | Manuf | Services | PCE | GC | CF | X | M |
| 1990-1999 | | 2.8 | 1.5 | 2.5 | 2.3 | 3.7 | 3.7 | 3.5 | 3.2 | 6.6 | 7.2 |
| 2000 | | 6.0 | 4.3 | 9.0 | 5.6 | 4.4 | 3.5 | 6.1 | 23.9 | 17.0 | 4.3 |
| 2001 | | 1.8 | 3.7 | -2.5 | 2.9 | 4.3 | 3.6 | -5.3 | -7.3 | -3.4 | 3.5 |
| 2002 | | 4.4 | 4.0 | 3.9 | 3.5 | 5.1 | 4.1 | -3.8 | -4.3 | 4.0 | 5.6 |
| 2003 | | 4.9 | 3.8 | 4.0 | 4.2 | 6.1 | 5.3 | 2.6 | 3.0 | 4.9 | 10.8 |
| 2004 | | 6.4 | 5.2 | 5.2 | 5.8 | 7.7 | 5.9 | 1.4 | 7.2 | 15.0 | 5.8 |
| 2005 | | 5.0 | 2.0 | 3.8 | 5.3 | 7.0 | 4.8 | 2.3 | -8.8 | 4.8 | 2.4 |
| 2006 | | 5.3 | 3.8 | 4.5 | 4.6 | 6.5 | 5.5 | 10.4 | 5.1 | 13.4 | 1.8 |
| | Q1 | 5.5 | 3.4 | 5.3 | 4.6 | 6.5 | 5.2 | 9.5 | 1.5 | 13.1 | 2.8 |
| | Q2 | 5.3 | 7.4 | 3.9 | 3.0 | 5.5 | 5.2 | 8.1 | 2.3 | 24.9 | 4.2 |
| | Q3 | 5.2 | 3.7 | 5.2 | 4.4 | 5.6 | 5.3 | 14.6 | 13.7 | 10.5 | 0.8 |
| | Q4 | 5.4 | 1.7 | 3.8 | 4.7 | 8.2 | 6.2 | 9.8 | 3.9 | 6.0 | -0.2 |
| 2007 | | 7.1 | 4.8 | 6.8 | 3.4 | 8.1 | 5.8 | 6.6 | 12.4 | 5.4 | -4.1 |
| | Q1 | 6.9 | 4.0 | 6.3 | 3.6 | 8.5 | 5.9 | 12.1 | 18.1 | 10.5 | -1.8 |
| | Q2 | 8.3 | 3.8 | 10.6 | 3.8 | 8.4 | 5.6 | 8.9 | 17.4 | 4.2 | -10.2 |
| | Q3 | 6.8 | 5.6 | 5.7 | 3.1 | 8.1 | 5.7 | -2.6 | 5.3 | 3.3 | -4.7 |
| | Q4 | 6.3 | 5.7 | 4.7 | 2.7 | 7.7 | 6.2 | 8.0 | 7.1 | 4.5 | 0.7 |
| 2008 | | 3.8 | 3.2 | 5.0 | 4.3 | 3.3 | 4.7 | 3.2 | 1.7 | -1.9 | 2.4 |
| | Q1 | 3.9 | 2.8 | 2.7 | 2.4 | 5.2 | 5.1 | -0.3 | -1.7 | -7.7 | -2.6 |
| | Q2 | 4.2 | 4.9 | 4.0 | 6.1 | 4.0 | 4.1 | 0.0 | 13.6 | 6.1 | 0.0 |
| | Q3 | 4.6 | 2.5 | 7.6 | 5.4 | 3.3 | 4.4 | 11.8 | 9.4 | 3.3 | 6.7 |
| | Q4 | 2.9 | 2.9 | 5.3 | 3.4 | 1.3 | 5.0 | 2.5 | -11.7 | -11.5 | 5.0 |
| 2009 | | 0.9 | 0.2 | -2.0 | -5.2 | 3.2 | 3.7 | 8.6 | -9.6 | -13.9 | -6.3 |
| | Q1 | 0.6 | 2.1 | -2.5 | -7.3 | 2.0 | 1.3 | 4.5 | -15.1 | -14.7 | -20.6 |
| | Q2 | 0.8 | 0.2 | -1.7 | -7.2 | 2.7 | 5.4 | 9.7 | -10.3 | -18.1 | -2.2 |
| | Q3 | 0.4 | 1.5 | -5.0 | -7.8 | 3.8 | 3.2 | 8.1 | -12.1 | -13.0 | 0.1 |
| | Q4 | 1.8 | -2.8 | 1.1 | 1.3 | 4.2 | 5.1 | 12.1 | -0.8 | -10.0 | -2.5 |

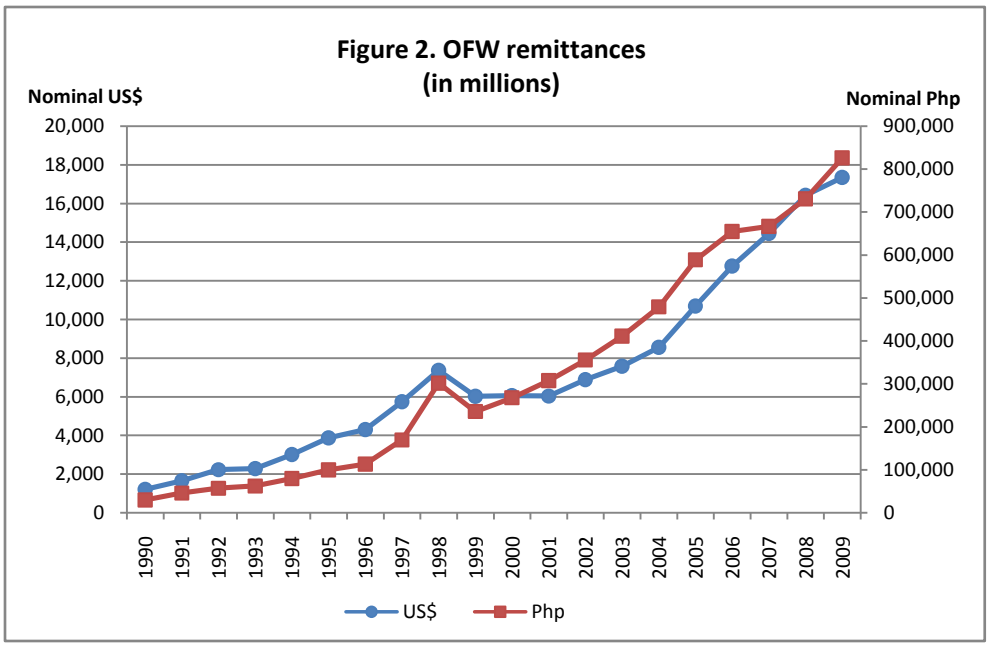
Note: Quarterly figures are year-on-year growth rates. Manufacturing is a component of Industry. PCE=personal consumption expenditures; GC=government consumption; CF=capital formation; X=exports; M=imports.

*Source: National Statistical Coordination Board.*

More can be learned from examining the components of GDP before and after the crisis. As expected, the deceleration of GDP is reflected in personal consumption expenditure (PCE), which contributed about three-fourths of GDP for the past 10 years. PCE growth dropped sharply from 5.8% in 2007 to 4.7% in 2008 and 3.7% in 2009, in spite of the inflow of OFW remittances. Contrary to the common view that the crisis would cause OFW remittances to fall sharply, remittances, whether measured in foreign currency (US dollars) or local currency (Philippine peso), continued to grow in 2008 and 2009, although at a much lower rate (Figure 2).



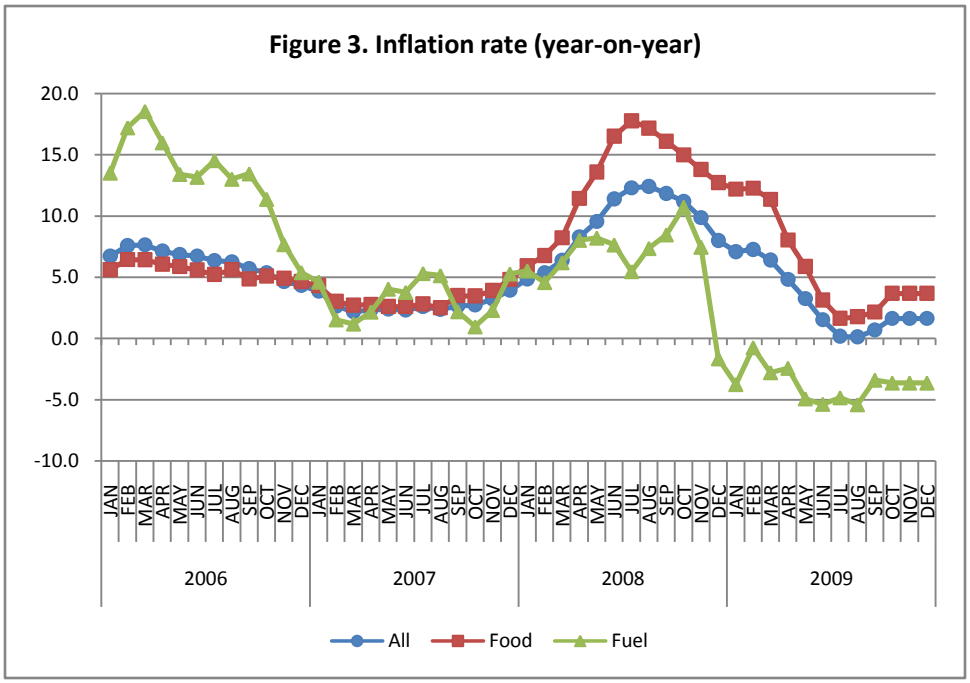

In foreign currency terms, remittances grew by 13.7% in 2008 and 5% in 2009. The average monthly inflow of about US$1.3 billion played a crucial role in maintaining a positive growth of the PCE throughout the 2007-2009 period.




The collapse of global demand and industrial production growth has resulted in a sharp drop in the country's exports of goods and services, especially electronics and semiconductors. While posting a robust growth of 5.4% in 2007, exports plunged in 2008 (-1.9%) and 2009 (-13.9%). Among the sectors, industry was the hardest hit, contracting by 2% in 2009—a reversal from a quite respectable growth of 6.8% in 2007 and 5.0% in 2008. Manufacturing was the major

contributor to this contraction; its output plunged by 5.2% in 2009, its worst performance since the Asian financial crisis of 1997/1998.

In previous episodes of financial and macroeconomic crises, the agriculture sector proved comparatively resilient to the shocks. Even during the Asian financial crisis of 1997/1998, the poor performance of the agriculture sector was related more to the widespread drought induced by the El Nino phenomenon than to the external shock (Balisacan and Edillon 2001; Datt and Hoogeveen 1999). The sector again did not contract as the GFC swept across the domestic economy, although its growth substantially decelerated from 4.8% in 2007 to 3.2% in 2008 and then sharply to 0.2% in 2009. The sharp drop in 2009 was due largely to the devastation in Luzon unleashed by three major typhoons in the second half of the year. Farm devastation caused agricultural output to shrink by 2.5% in the fourth quarter of 2009 (year-on-year basis).




Moreover, the GEC hit the country at a time when it was still reeling from the adverse effects of the sharp food price shocks in late 2007 and the first half of 2008. Owing to a confluence of several global supply and demand factors, the world price of rice, the country's staple, rose steeply from about US$300/mt in October 2007 to about US$800/mt in May 2008, causing panic in local rice markets.[3] Although the government intervened aggressively in the domestic market to cushion the impact of the shock, domestic rice prices rose by about 40% during the period. Because rice accounts for about 25% of food expenditures of the poorest 30% of the population, the price shock created a significant negative impact on the well-being of poor Filipinos,

[3] The rice crisis was a simple case of global demand outstripping global supply in a rather thin rice market. Among the factors contributing to the crisis were: declining stocks since 2006, especially year-end stocks in 2007; strong global import demand (rapid growth of household incomes in India, China, other LDCs); high prices of substitute food grains, such as wheat (partly the rippling effect of highly subsidized production of biofuel feedstocks in the US and elsewhere); rising cost of material inputs (fertilizer prices co-moving with petroleum prices); weak dollar, driving up dollar-priced commodities; and price speculation by big financial players searching for better returns than those from stocks or real estate.

including small rice farmers, most of whom are net buyers of rice for household consumption. For food as a whole, consumer prices rose by 3.3% in 2007, 12.9% in 2008, and 5.8% in 2009 (Figure 3). Based on the quarterly household survey of the Social Weather Stations, households experiencing hunger (expressed as a proportion of total households) rose during this period, reaching an unprecedented high of 23.7% in the last quarter of 2008 since SWS started monitoring the series in July 1998.[4] Surprisingly, beyond the aggregate data, not much is known about the differential effects of this shock on various population groups and on the food economy, including any ramifications caused by sharply rising fuel prices in the global market. Nor has there been a systematic assessment on the efficacy and income distribution effects of the government's response to the food crisis.

## 3. Assessing the impact of GEC on poverty

The channels by which the GEC affects household welfare can be quite complex, owing partly to many intervening factors, including initial conditions of infrastructure, institutions, and governance structures. Figure 4 shows that a global crisis affects households primarily through two channels. The first (direct) one involves the changes in employment status and incomes earned by household members in industries directly affected by the crisis (i.e., export-oriented industries and local firms supplying inputs to these industries) through the mediation of domestic input, output, and financial markets. The second (indirect) channel manifests through the effects of the crisis on macroeconomic aggregates (i.e., the implications of the fall in export earnings, direct foreign investments, government revenues from trade taxes, and remittances on certain macro variables, such as GDP growth, inflation, and exchange rate, including their impact on fiscal space and consequent spending on social programs). Household earnings from gainful activities and net transfers constitute the "full income" that constrains the level of consumption goods and services households can enjoy. This consumption, together with social services provided to them, leads to welfare outcomes of various dimensions (monetary, such as income and expenditure, and non-monetary, such as health, education, and housing conditions).

Ideally, in tracing and assessing the quantitative significance of transmission mechanisms described above, an economy-wide model with sufficiently high level of disaggregation to inform impacts and consequences across economic sectors and population groups has to be employed. The common practice is to use either a macroeconomic simulation model or a computable general equilibrium model of the economy. A particular strength of such models is that one is able to directly perform "what if" policy experiments (shocks) and assess the outcomes of interest in relation to those of a baseline scenario. For the present concern, such models permit the evaluation of the household welfare and economic effects of the crisis in relation to a counterfactual situation in which there is no crisis (business as usual).

Data and time constraints had not allowed the construction or estimation of economy-wide or macroeconomic models suitable for tracing (simulating) the GEC implications on employment, household incomes, income distribution, and various related economic and social indicators. Instead, the study adopted a somewhat eclectic approach to assessing the GEC impact on the economy and poverty. This approach involves applying decomposition techniques on time-series data to trace the GEC impact on GDP and its major components, constructing household panel data from nationally representative surveys to trace the changes in household welfare

[4] The question asked to survey respondents is: "In the last three months, did it happen even once that your family experienced hunger and not have anything to eat?" The data series is available at the website of SWS (www.sws.org.ph/). See also Mangahas (2009).

during the crisis, and linking the household panel data and macro data to simulate poverty impacts.

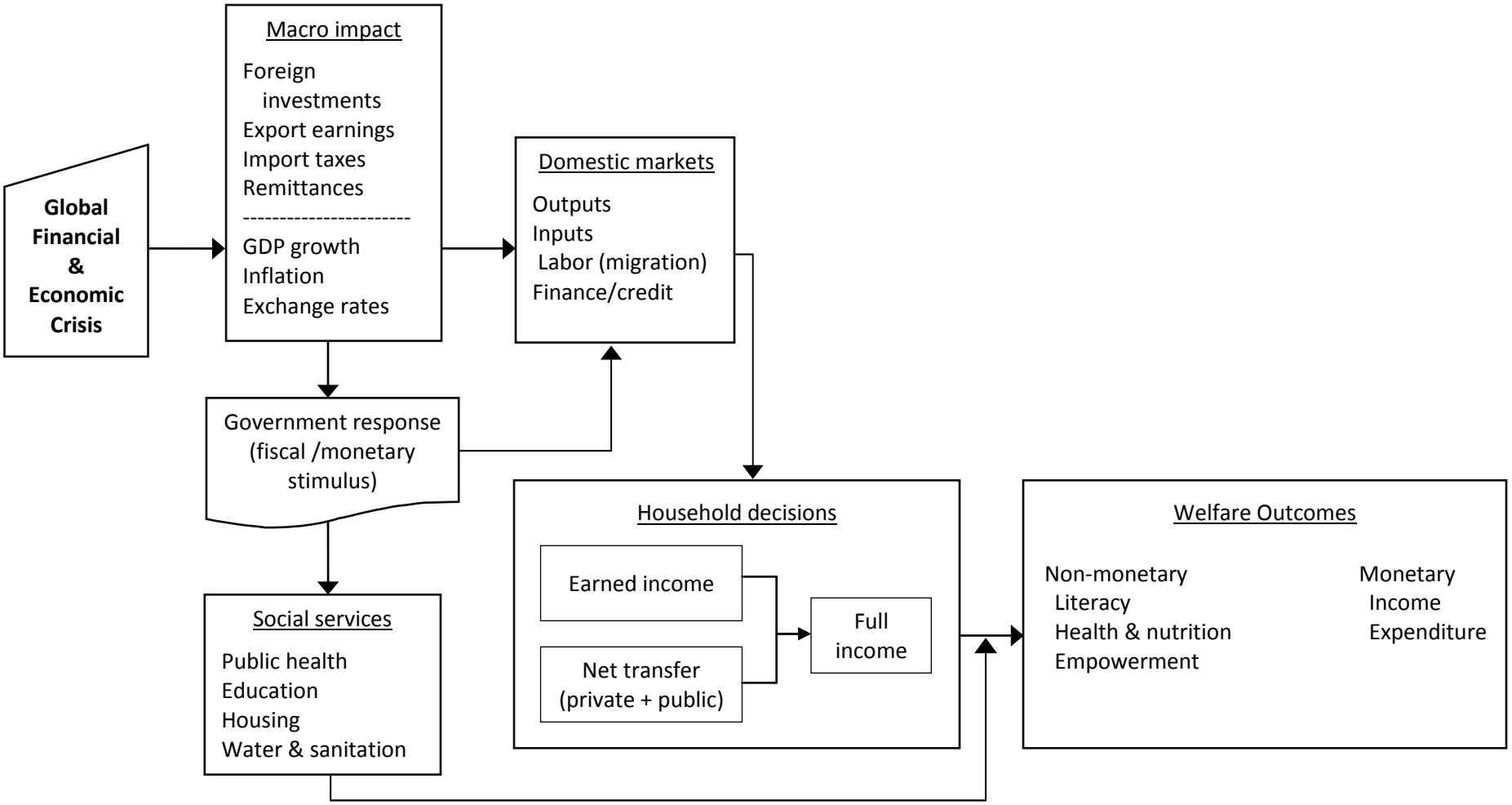



**Figure 4. Channels by which the global economic crisis affects household welfare.**

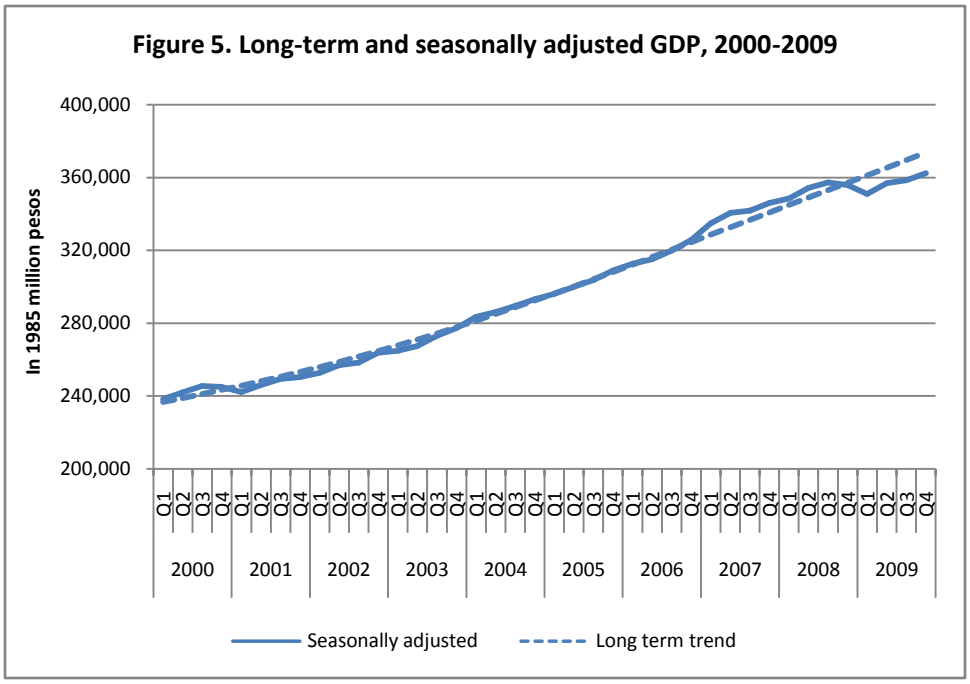
## 4. Impact on the economy

It is tempting to attribute the observed sharp slowdown of GDP and its components to the GEC. Surprisingly, this attribution is not uncommon, even among serious observers of the Philippine economy (see, e.g., Yap, Reyes, and Cuenca 2009). This is, however, wrong. One should instead ask: if the GEC did not occur, what would have been the performance of the Philippine economy? Would the GDP growth of 7.1% achieved in 2007 have continued in the succeeding years? In other words, was the growth sustainable? If not sustainable (i.e., the comparatively high growth rate was an aberration), the economy would be expected to slide back to its long-term growth path, with or without the shock. Indeed, many studies point out the critical structural and policy constraints preventing the economy from moving to a high-growth path as that tracked by the country's neighbors (Magnoli 2008; World Bank 2010; Canlas et al. 2009; Balisacan and Hill 2003, 2007). For one, national savings and investment rates are extremely low by the standards of the major East Asian countries. This has resulted in low infrastructure development, particularly transport and power, and poor provision of key social services, especially basic health and education. The country's governance structures have also created an environment of policy instability and engendered corruption and all forms of rent-seeking activities across branches and layers of the government.

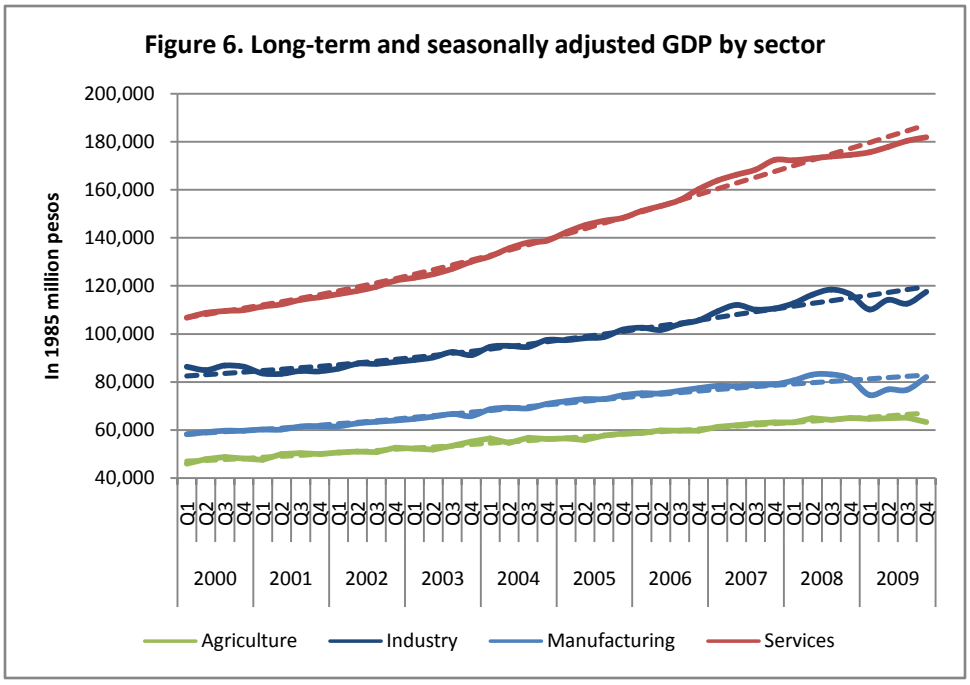
The challenge is to identify the potential (long-term) growth path of the economy based on information about its past performance. To do this, the study employed a decomposition technique that permits the identification of long-term (LT) trend, seasonally-adjusted (SA) trend, and random effects from the observed variable of interest. For the economic aggregates of interest to this paper, the LT trend can be roughly interpreted to reflect the economy's potential, given its resources, technologies, institutions, and policies. The SA trend, on the other hand, nets out any effects that seasonality of production and consumption may have on the same aggregate data.[5] For any given quarter of the year, the difference between the LT trend and the SA trend captures the impact of the GEC and the government's policy responses (say, fiscal stimulus package) on the shock. Given that there is a time lag between the shock and the impact of government's interventions aimed at containing the adverse effects of the crisis, the LT-SA gap during the early quarters of the crisis years (say, the last two quarters of 2008 and first quarter of 2009) may reflect the full impact of the crisis on the variables of interest. Otherwise, if the effects of the interventions are immediate, the gap would underestimate the impact of the crisis.

Figures 5-8 show the LT and ST trends of GDP and its components, from both demand and supply sides, based on quarterly data for the period 1991-2009. In these figures, the solid line represents the seasonally adjusted series while the dotted line represents the long term trend. Comparing the values of the seasonally-adjusted GDP and its long-term trend for the crisis period, one can see that the seasonally-adjusted GDP fell below its long-term trend beginning in the fourth quarter of 2008 up to the fourth quarter of 2009. The seasonally-adjusted GDP is lower than its long run trend by about 0.3% in the fourth quarter of 2008, 2.9% in first quarter of 2009, 2.3% in the second quarter, 3.0% in the third quarter, and 3.1% in the fourth quarter. Put differently, the crisis pushed down the GDP growth rate from its long-term trend (estimated to be about 4.7%) by 1.0 percentage point in 2008 and 3.8 percentage points in 2009.

[5] The seasonally adjusted series were generated using the U.S. Census Bureau's X12 seasonal adjustment program from within EViews Version 6.0 (Quantitative Micro Software).
The long term trend component of the time series is extracted using the Hodrick-Prescott (HP) filter. See Annex A for details of the estimation and data.



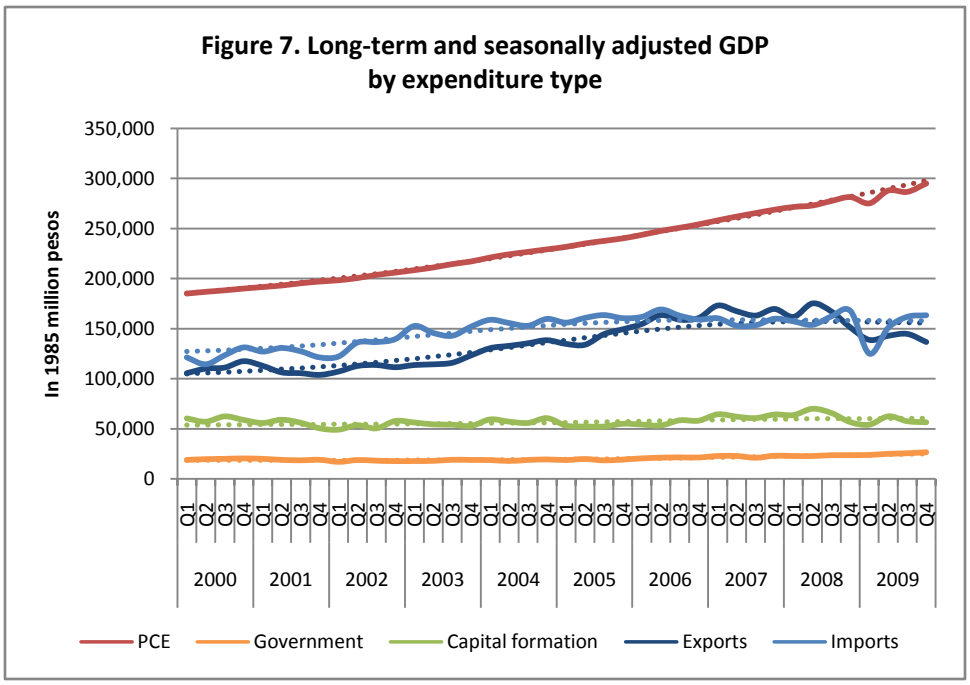

As expected, industry was the hardest hit by the crisis. SA output declined relative to its long-term trend in the four quarter of 2009: by 5.3% in the first quarter, 2.7% in the second quarter, 5.0% in the third quarter, and 1.8% in the fourth quarter. In terms of growth forgone, the industry's growth rate in 2009 was 6.0 percentage points lower than the sector's long-term growth potential. The decline in its manufacturing sub-sector was particularly sharp, hitting 7.7 percentage points.



For agriculture, SA output fell below LT output starting from first quarter of 2009 up to the fourth quarter of the same, that is, by 1.0% in the first quarter, 1.4% in the second quarter, 2% in the third quarter, and, 5.2% in the fourth quarter. The last quarter's big drop in the seasonally-adjusted AFF was largely due to the effects of the typhoons Ondoy and Pepeng.

The impact on industry started in the third quarter of 2008 when the sector's SA output declined 0.5% relative to its long-term trend. The subsequent quarterly declines were 1.5% in the fourth quarter of 2008, 2.2% in the first quarter of 2009, 2.3% in the second quarter, 2.3% in the third quarter, and 2.9% in the fourth quarter. In terms of growth forgone, the impact was a growth reduction of 2.5 percentage points in 2008 and 2.4 percentage points in 2009.

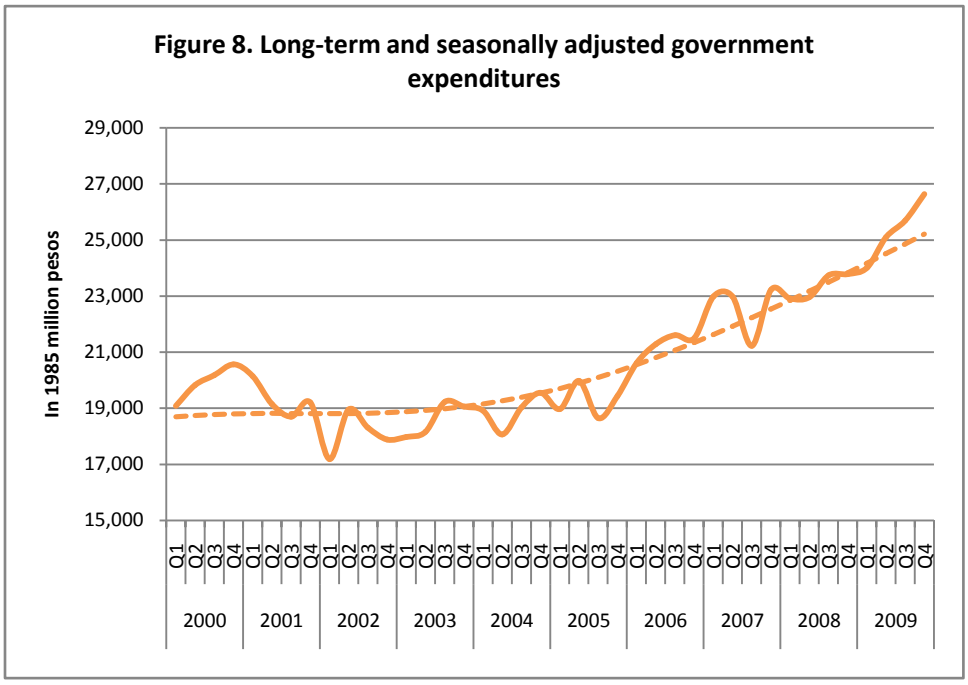
On the demand side of the national income accounts, personal consumption expenditures (PCE), the largest contributor to GDP growth, declined only modestly, relative to its long-term trend, although over a longer span of quarters. PCE fell below its long-term trend by 0.5% in the second quarter of 2008, 0.2% in the third quarter, and another 0.2% in the fourth quarter. In 2009, PCE declined by 3.8% in the first quarter, 0.6% % in the second quarter, 2.4% in the third quarter, and 0.9% in the fourth quarter, relative to the long-term trend. Expressed in terms of growth divergence, PCE growth dropped by 0.8 percentage point in 2008 and 1.7 percentage points in 2009 relative to its long-term growth trend. The drop was remarkably muted because remittances of OFWs did not slow down as sharply as expected at the onset of the crisis, as shown in section 2 above.




As shown in section 2, the government's push to stimulate the economy through pump-priming activities is reflected in the sharp increase in government expenditures as a proportion of GDP in 2009 (Figure 8). These activities pushed up the seasonally-adjusted GCE, relative to its long-term trend, in the last three quarters of 2009. The seasonally-adjusted GCE is higher than its long-term trend by 2.4% in the second quarter, 3.3% in the third quarter, and 5.5% in the fourth quarter. The relatively high figure in the fourth quarter is mainly due to the disbursement of

funds for relief and rehabilitation of areas affected by tropical storms Ondoy and Pepeng. Overall, while the growth of government expenditures in 2008 was less than its long-term trend; that in 2009 was significantly higher by 2.8 percentage points.

Moreover, fixed capital formation (FCF) and exports took the brunt of the crisis. Figure 7 shows that the seasonally-adjusted FCF declined, relative to its long-term trend, starting in the fourth quarter of 2008. The seasonally-adjusted FCF fell below its long-term trend by 6.1% in the fourth quarter of 2008. In the first quarter of 2009, the seasonally-adjusted FCF fell by a double-digit figure, at 10.7%, relative to its long-term trend. It went up by 3.5% during the second quarter before dropping again by 4.8% in the fourth quarter. The decline continued in the fourth quarter, by 6.7%. Expressed in growth terms, PCF grew close to its long-term pace in 2008 but dropped by 9.9% in 2009. For exports, the decline relative to the long-term trend was 3.8% in the fourth quarter of 2008. In 2009, SA exports declined by 12.1% in the first quarter, 9.0% in the second quarter, 7.5% in the third quarter, and 12.9% in the fourth quarter.




The movement of labor during the GEC can be gleaned from the Labor Force Surveys conducted quarterly by NSO. These surveys show no drastic changes in the employment figures, at least in so far as national averages are concerned (Table 2). Despite the noticeable growth in the labor force, unemployment rates did not increase relative to average rates in preceding years. Note, however, that underemployment rates were on the high side at the height of the crisis in 2009. ILO (2009) reported that the number of part-time workers (i.e., worked for less than 40 hours per week) shot up by more than two million between January and April 2009. Employment in manufacturing suffered the most, especially in electronics and garment sectors. Note, further, that the share of new entrants among those employed has been decreasing, from 2.4% before the GEC to 1.5% in 2008 and further down to 1.3% in 2009.

**Table 1. Employment shares by sector and status (in %)**

| Employment grouping | Average 2001-2003 | Average 2004-2007 | 2008 | 2009 |
|---|---|---|---|---|
| By sector of employment | | | | |
| Agriculture | 37.3 | 36.7 | 35.7 | 34.0 |
| Industry | 15.6 | 15.1 | 14.7 | 14.5 |
| Manufacturing | 9.6 | 9.3 | 8.4 | 8.3 |
| Services | 47.1 | 48.2 | 49.6 | 51.5 |
| By status of employment | | | | |
| Formal | | | | |
| Employer | 5.2 | 4.5 | 4.1 | 4.0 |
| Wage and salary worker | 44.0 | 45.8 | 46.7 | 47.8 |
| Informal | | | | |
| Self-employed | 32.6 | 32.1 | 31.4 | 30.5 |
| Wage and salary worker | 5.4 | 5.1 | 5.3 | 5.8 |
| Unpaid | 12.8 | 12.5 | 12.5 | 11.9 |
| *Labor force growth (in %)* | *3.1* | *1.3* | *3.2* | *3.1* |
| *Employment growth (in %)* | *2.8* | *1.6* | *2.6* | *2.7* |
| *New entrants (% of employed)* | *2.5* | *2.4* | *1.5* | *1.3* |
| *Unemployment rate* | *10.0* | *8.0* | *6.8* | *7.1* |
| *Underemployment rate* | *15.9* | *19.4* | *17.5* | *19.4* |
| *Total employment (in '000)* | | | *34,533* | *35,477* |

*Source: Labor Force Surveys (October rounds), National Statistics Office*

Trends in employment shares mirror the observation at the macro level discussed in the previous section. Industry's employment share declined only slightly during the crisis, though the decline was quite substantial (about 1 percentage point drop in 2008) for its manufacturing sub-sector. Agriculture's share continued its downward trend even during the crisis. In contrast, the employment share of industry rose during the crisis, absorbing what was shed off by the other two sectors. In 2009, industry accounted for 52% of those employed, a substantial rise from about 48% on average in 2004-2007.

Contrary to common claims, formal sector employment has been rising, not falling, even during the crisis.[6] The share of formal sector employment rose from about 50% on average in 2004-2007 to 51% in 2008 and to 52% in 2009. The bulk of the change came from wage and salary workers who represented about 46% of the employed in 2004-2007, 47% in 2008, and 48% in 2009. In contrast, the combined share of the self-employed and the unpaid family workers, who accounted for the bulk of the informal sector employment, declined from about 45% on average in 2004-2007 to 44% in 2008 and to 42% in 2009. The share of the informal wage workers

[6] Included here are employees from private establishments, government and government owned companies and corporations.

increased slightly during the crisis, but this sub-sector accounted for not more than 6% of total employment.[7]

In summary, while the country avoided recession, the impact of the GEC on the economy was nonetheless severe. The crisis pushed down GDP growth rate from its long-term potential (4.7% a year) by 1.0 percentage point in 2008 and 3.8 percentage points in 2009. From the supply side, the industry, particularly manufacturing, was hit hardest, effectively reducing the sector's output growth in 2009 by 6.0 percentage points relative to its long-term growth potential. From the demand side, the drop in PCE growth relative to long-term trend—by 0.8 percentage point in 2008 and 1.7 percentage points in 2009—was remarkably muted because remittances of OFWs did not slow down as sharply as expected at the onset of the crisis. Private capital formation and exports, however, took the brunt of the crisis. PCF grew close to its long-term pace in 2008 but dropped by 9.9% in 2009. Exports shrank by 1.9% in 2008 and 14.2% in 2009. While the growth of government expenditures in 2008 was less than its long-term trend, that in 2009 was significantly higher by 2.8 percentage points. In the next section, these results are used to inform the impact of the crisis on poverty across population groups and social divides.

Employment indicators showed no drastic changes during the crisis. Employment share in industry dropped noticeably starting in 2008, which mirrored the drop of output in the sector. Unemployment rate increased in 2009 from its level in the previous year but still at a lower rate than those posted before the crisis. There was no noticeable shift of employment from the formal to the informal sector as often commonly claimed in accounts of the crisis. Underemployment, however, were on the high side at the height of the crisis.

## 5. Impact on poverty across social divides

Little is known about the changes in the level and incidence of poverty in the Philippines during the GEC. Even less is known about the dynamics of poverty across population groups and social divides. Such understanding has been largely constrained by the absence of nationally representative, comparable household surveys on incomes and expenditures covering the pre-crisis and crisis periods. The latest data available for poverty comparison are from the 2006 Family Income and Expenditures Survey (FIES) of the National Statistics Office.[8] While the 2009 FIES has been conducted, the public-use file that will prove useful for poverty comparison is not yet available.

Ideally, in understanding the dynamics of poverty during a crisis, one has to have a household panel data, i.e., the same households interviewed repeatedly over time. Such data set will be even more useful in informing policy choices if it is also nationally representative. The effort to construct such a household panel data set and use it to examine the impact of the crisis across social divides is described below. As the effort yielded only panel data covering 2006, 2007, and 2008, results in section 4 were used to "augment" the data to "approximate" household welfare levels for 2009.

[7] Employees of family owned businesses including employees of private households.

[8] To be sure, the Social Weather Stations has a quarterly series on self-rated poverty covering the crisis period. However, because the sample size is relatively small, the data cannot be disaggregated into finer groupings suitable for understanding poverty dynamics across social divides.

### 5.1 Constructing the "augmented" panel data

The household surveys conducted by the National Statistics Office (NSO) use a master sample to draw respondents for the respective surveys. Since the NSO started implementing this sampling approach in 2003, about 20% of the total sample is kept in each survey for a period of time,[9] which allows panel analysis for a considerable number of households. Among these household surveys, two collect information on household welfare: the FIES and the Annual Poverty Indicators Survey (APIS). The FIES is conducted every three years and the APIS, every year in between FIES surveys. Another survey, the Labor Force Survey (LFS), coincidental to the FIES or APIS,[10] is also part of the panel. The LFS provides information on employment status of each household member. Data from the following surveys were obtained to form the panel data for the analysis:

- 2006 Family Income and Expenditures Survey
- 2007 January, July and 2008 July Labor Force Surveys
- 2007 and 2008 Annual Poverty Indicators Surveys

About 12,000 households were marked by NSO as part of the panel in 2006. Over three years after accounting for attrition, only 8,010 households composed the panel.[11] Information from these surveys provides the status of households prior to the crisis.

For the purposes of this paper, household income adjusted for family size is used as a proxy measure of individual welfare. This poses a problem, however, on the comparability of the FIES and APIS panel data, primarily because the administration of these two surveys differs in two aspects. First, FIES is collected in two rounds. The first round, conducted in July, covers the first semester (January to June) while the second round, conducted in January of the following year, covers the second semester (July to December). On the other hand, APIS is collected only once, every July, with the first semester as its reference period. Data collected in FIES for both rounds are tallied to come up with the annual estimates in contrast to the APIS' first semester estimates multiplied twice for the annual estimates.[12] Second, the questionnaire module for both income and expenditure in FIES is more extensive than the modules in APIS. To cite an example, in the APIS, survey respondents are asked about major aggregates only of entrepreneurial incomes, while in the FIES, they are asked a detailed listing of gross revenues and expenses for

[9] The duration depends on the sample rotation. The same household can be included in various surveys up to three years.

[10] The APIS is conducted every July, coinciding with the July round of the Labor Force Survey. The FIES is fielded twice and coincides with the LFS July round of the current year and January round of the following year, although NSO uses the January round in merged datasets.

[11] Household incomes from the panel sample are significantly the same with the incomes from the full sample (Wilcoxon two-sample test two-sided Pr > |Z| 0.5826). Furthermore, the Kruskal-Wallis test (Pr > Chi-Square 0.5826) shows that the distribution of the two samples are the same.

[12] Fuwa (2007) examined the direction of possible bias if only one survey round is used to estimate annual income (expenditure). Using the 2003 FIES, he found that the ratio of the second to the first visit household income in the NCR region was 0.939 (consumption) or 0.987 (income) on average. One pattern that appears to be systematic (observed both in expenditure and income) is that the ratio of the second to the first visit is lower among poorer (income or expenditure) quintiles and becomes increasingly higher among higher quintiles. For example, based on the 2003 NCR sample, the ratio of the second to the first visit consumption is 0.794 among the lowest quintile while the ratio is 0.983 among the highest quintile.

entrepreneurial activities. Evidently, comparing income or expenditure estimates from these two sources is inappropriate[13].

To make the income data in APIS comparable with those in FIES, the reported income data in the FIES panel were scaled downward by the extent of the "measurement bias" but done in such a way that the income distribution observed in the panel data is preserved. The process involves (i) estimating a Mincerian earnings function using the 2006 FIES panel data on the assumption that the income variables from these data are correctly measured, (ii) applying the estimated parameters of this function to the 2007 APIS panel data to generate predicted incomes that are quite comparable to FIES incomes for 2006, and (iii) scaling down the observed FIES income data to the extent consistent with growth estimates based on predicted incomes for 2006 and 2007.[14]

As noted above, the household panel data set does not cover 2009. In "augmenting" the panel to include this year, the study projected household incomes from the 2008 APIS using the growth estimates of GDP components derived in section 2 of this paper. That is, household incomes from various sources were assumed to grow at the same rates observed for the various production-side components of the national income accounts.

The nominal incomes in the panel data were adjusted for their real values (purchasing power) using household-specific consumer price indices. The variation in the price indices reflect varying consumption patterns across households of different income levels, family composition and characteristics, location, and preferences. In this study, the adjusted or real incomes represent a broad measure of household welfare.

For comparability of the poverty estimates based on the panel data with the "official" estimates based on the full FIES, the panel income data are calibrated in such a way that the poverty-incidence estimate from the panel data for 2006 is approximately equal to that from the full 2006 FIES data. All poverty estimates are based on official poverty lines for 2006. For consistency, these lines are held fixed in real terms. By construction, the resulting poverty estimates are not strictly comparable with officially published poverty estimates which are based on time-varying poverty lines (i.e., the welfare standard for poverty comparison varies from one survey year to another).[15]

### 5.2 Household income levels

Prior to the crisis, average per capita income was Php42,717 (Table 3). Modest growth (about 2%) occurred beginning 2007 and extended to the following year. Rural areas registered higher growth than the other areas, with 4.2% growth in 2007 and 2.4% in 2008. Growth in urban areas outside NCR has not been as robust, with barely 1% in 2008. Among income classes, the poor (1st and 2nd quintile) experienced higher growth than those in the upper classes (11% for the 1st quintile and 7% for the 2nd quintile in 2008). Note however that incomes declined for the poorest quintile in 2007. The bulk of growth occurred in the 3rd and 4th quintiles where most of the OFWs belong. In contrast, per capita incomes in the richest quintile stagnated in 2008. Households in agriculture and services experienced positive growth. However, those in the industry sector already experienced decline in their incomes even before the crisis. Similarly,

[13] Average per capita income based in 2007 APIS suggests a 9% drop from the average per capita income level based on FIES 2006.
[14] See Annex B of Balisacan et al. (2010) for details of the estimation procedure.
[15] See Balisacan (2010) for an assessment of approaches to poverty comparison in the Philippine context.

**Table 3. Average per capita income, in 2008 pesos**

| Location | 2006 | 2007 | 2008 | 2009 | 2009 counterfactual (No GFC) |
|---|---|---|---|---|---|
| Panel | 41,124 | 41,884 | 42,717 | 41,840 | 43,489 |
| By location | | | | | |
| Metro Manila | 86,226 | 84,123 | 87,359 | 85,948 | 89,382 |
| Urban – outside Metro Manila | 52,056 | 52,912 | 53,260 | 52,205 | 54,283 |
| Rural – outside Metro Manila | 27,956 | 29,131 | 29,831 | 29,137 | 30,267 |
| By quintile | | | | | |
| 1st – poorest | 9,111 | 9,304 | 10,336 | 10,003 | 10,397 |
| 2nd | 16,409 | 16,785 | 17,919 | 17,379 | 18,068 |
| 3rd | 25,026 | 26,032 | 26,931 | 26,216 | 27,254 |
| 4th | 40,950 | 42,225 | 43,040 | 42,025 | 43,703 |
| 5th – richest | 113,504 | 115,052 | 115,338 | 113,558 | 118,001 |
| By sector | | | | | |
| *Agriculture* | 23,880 | 24,110 | 25,334 | 24,765 | 25,694 |
| *Industry* | 37,897 | 40,879 | 40,190 | 38,398 | 40,322 |
| Manufacturing | 43,671 | 46,376 | 47,526 | 45,526 | 47,778 |
| Mining and quarrying | 20,696 | 28,129 | 21,330 | 20,085 | 21,184 |
| Electricity, gas and water | 64,407 | 73,176 | 61,744 | 58,826 | 61,917 |
| Construction | 32,270 | 34,743 | 33,796 | 32,219 | 33,841 |
| *Services* | 55,676 | 55,878 | 57,664 | 56,882 | 59,000 |
| Trade | 53,888 | 57,409 | 60,685 | 60,340 | 62,392 |
| Transportation & communication | 41,378 | 40,782 | 42,295 | 41,628 | 43,169 |
| Finance | 82,784 | 71,289 | 80,221 | 79,046 | 82,142 |
| Other services | 65,139 | 64,535 | 61,094 | 59,804 | 62,232 |
| By class of worker | | | | | |
| *Wage and salary workers* | 42,860 | 42,532 | 42,417 | 41,126 | 42,927 |
| Private household | 30,172 | 27,069 | 35,729 | 34,652 | 36,137 |
| Private establishment | 36,407 | 37,238 | 36,725 | 35,478 | 37,074 |
| Government | 73,161 | 69,740 | 67,755 | 66,209 | 68,947 |
| With pay (family owned | 51,609 | 59,234 | 71,695 | 71,112 | 73,682 |
| *Own account* | 34,086 | 35,502 | 37,698 | 37,263 | 38,560 |
| Self employed | 29,818 | 32,737 | 32,420 | 31,998 | 33,117 |
| Employer | 54,534 | 50,746 | 64,299 | 63,794 | 65,991 |
| *Unpaid family workers* | 42,572 | 41,657 | 37,804 | 37,476 | 38,729 |

Note: Figures for 2009 are based on growth rates from the seasonally- adjusted GDP series.
Figures are annual averages and in 2008 pesos.

*Source: 2006 Family and Income Expenditures Survey, 2007 and 2008 Annual Poverty Indicators Survey, NSO Income Accounts Quarterly Series, NSCB*

wage and salary workers and unpaid family workers experienced decline in 2008 in contrast to the own account workers' high income growth of 6.2%.

Estimated mean income declined by 2.1% in 2009. However, the levels across groups are still higher than 2007 figures. Certain exceptions can be named though, for instance, households in urban areas outside Metro Manila, which belong to the richest quintile. As expected, those that belong to the industry sector took a hit. Their income levels are lower in 2009 than in 2007 by about Php 2,500. The same is observed among wage and salary workers and substantially among unpaid family workers (about Php 4,200).

### 5.3 Impact on household welfare and poverty

To gauge the probable impact of the GEC on poverty, a simulation of welfare levels involving a counterfactual scenario in which the crisis did not occur was performed. In this scenario, it is assumed that growth rates of the components of National Income Accounts reported in section 2 follow their long-term trend.

If the crisis had not occurred, average per capita income in 2009 would have been Php 43,489, about Php1,650 more than the actual estimated income. This means a forgone income growth of almost 4%, which can be attributed as an aggregate impact of the crisis. The figure is slightly higher in urban centers than in rural areas. Coming from a high base, Metro Manila residents lost about Php 3,400, three times higher than what rural residents lost. Among income quintiles, the poorest quintile lost about 3.8% of its average income while the richer quintiles lost 4%. Since the richer households are typically urban dwellers, they lost more than the households in the poorest quintiles.

Those deriving incomes from the industry sector took the biggest hit, with about 4.8% missed growth. Incomes of workers belonging to agriculture and services could have grown more by 3.7%. Taking the biggest share of the working class, incomes of wage and salary workers could have been 4.2% higher than the estimated income in 2009. Incomes of own account workers had a lesser decline by about 1% compared to wage and salary workers. Incidence of poverty had significantly dropped from its level of 33% in 2006.[16] A 1.3 percentage point drop was observed in 2007 and a further 3.7 percentage point drop in 2008. Estimated incidence in 2009 is 1.6 percentage points higher than in 2008, and if the crisis did not occur, the incidence could have been down to 27.7%.

It appears that the substantial decline in poverty is also attributable to the improvement of income distribution between 2007 and 2008 as measured by the income Gini index. However, as noted in section 1 above, there are circumstantial evidence suggesting that the FIES – and, by implication, APIS, since both FIES and APIS share the same sampling frame – is inadequately covering wealthy households (World Bank 2009; Human Development Network 2009; Balisacan 2010). Moreover, Ducanes (2010) indicates that the FIES has been increasingly underestimating the flow of household remittances, especially among the high income groups. This has a potentially substantial impact on estimates of income inequality. Note, however, that if the wealthy households (or the incomes of wealthy households) have been underrepresented in the household surveys used in this study, such has little bearing on the

[16] As noted earlier in this section, the panel income data are calibrated in such a way that the estimate of poverty incidence for 2006 from the panel data is approximately equal to that from the full FIES. This is simply to ease comparability of the panel series with what is widely known about the level of poverty in 2006.

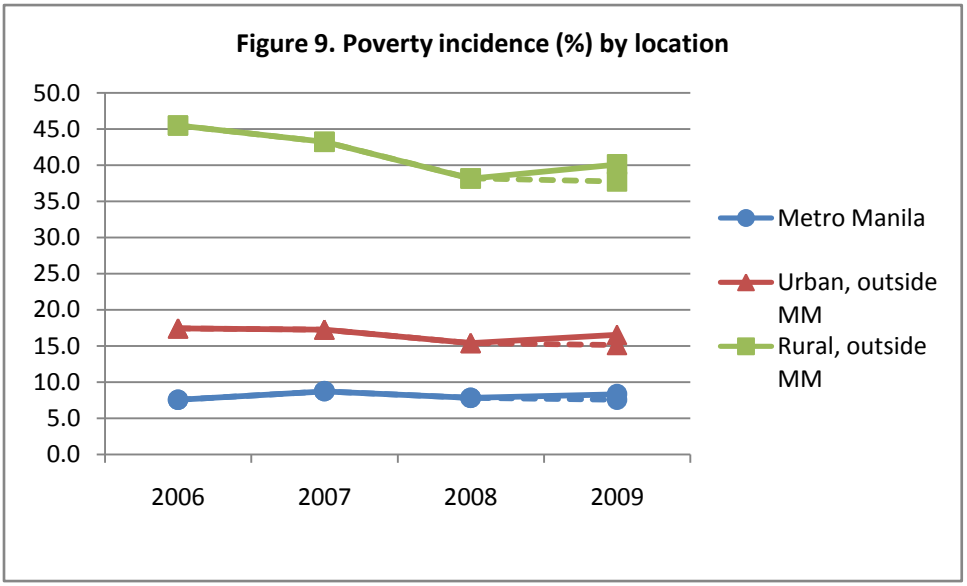
poverty estimates since the estimation used the actual unit record data (individual households). As indicated in Table 3, what caused the poverty decline between 2007 and 2008 was the much higher growth rates of per capita income of the bottom (poorest) two quintiles of the population (about 9%) than those of the top three quintiles (about 2%). Further, in agriculture, where about two-thirds of the poor are located, per capita real incomes rose by 5%, in contrast to a decline of 1.7% in industry and a slightly lower increase of 3.2% in services.

**Table 4. Poverty and income distribution**

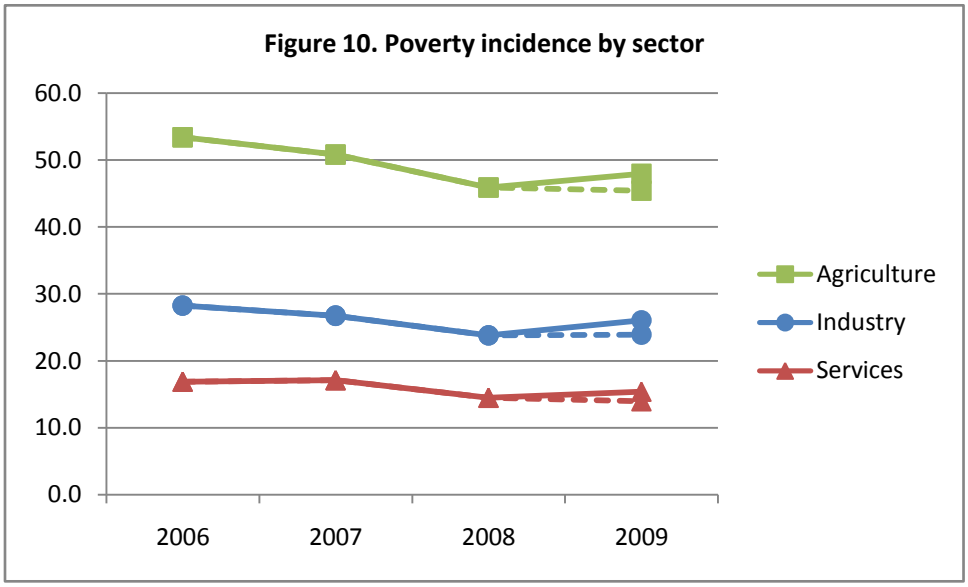
| Measure | 2006 | 2007 | 2008 | 2009 | 2009 counterfactual (No GFC) |
|---|---|---|---|---|---|
| *Poverty* | | | | | |
| Incidence | 33.0 | 31.8 | 28.1 | 29.7 | 27.7 |
| Magnitude | 28,733,827 | 28,176,909 | 25,412,494 | 27,360,524 | 25,575,635 |
| *Inequality* | | | | | |
| Gini | 0.494 | 0.494 | 0.481 | 0.485 | 0.484 |
| Share of poorest quintile , % | 4.7 | 4.4 | 4.8 | 4.8 | 4.8 |
| Share of richest quintile, % | 55.2 | 54.9 | 54.0 | 54.3 | 54.3 |

The decline of poverty in the rural areas is remarkable. It was decreasing at an annual rate of about 3.7 percentage points between 2006 and 2008. The crisis raised the level 2 percentage points higher than the previous year. As seen in Figure 9, the decline in urban areas was at a much slower pace of 1% on the average annually. Note though that Metro Manila posted a percentage point increase in poverty in 2007.

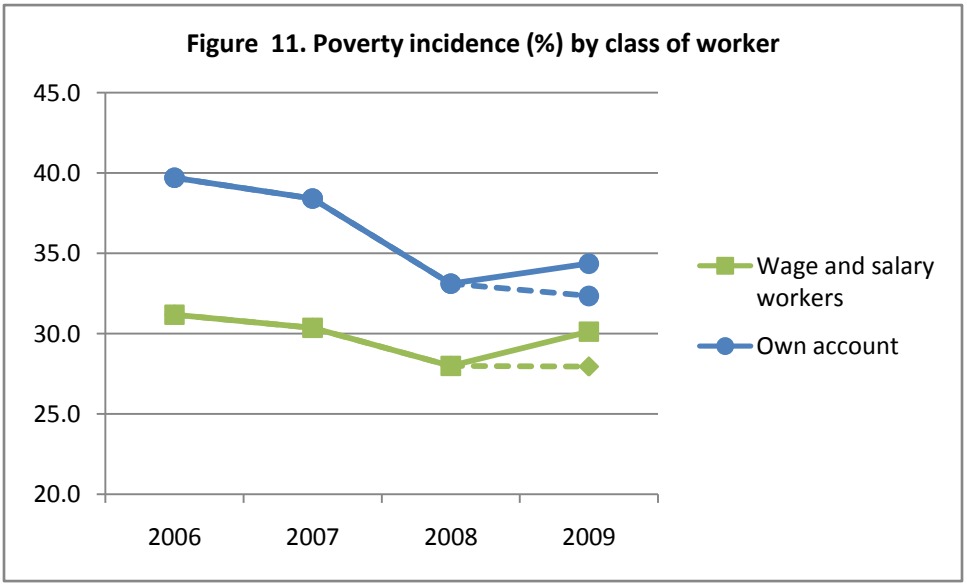
**Figure 9. Poverty incidence (%) by location**



Among the sectors, agriculture posted the biggest decline from 2006 to 2008 (about 7.5 percentage points), followed by industry (4.4 percentage points) (Figure 10). However, these two sectors took the brunt during the crisis, with at least 2.1 percentage point increase in poverty compared with only 0.9 percentage point.




Poverty among own account workers declined substantially in 2008 (5.3 percentage points) from its level in 2007 (Figure 11). Among wage and salary workers, a modest decrease of 1.6 percentage points annually since 2006 was similarly observed. The same class of worker experienced the biggest increase (2.1 percentage points) during the crisis.



### 5.4 Salient findings

The newly constructed panel data show that poverty has significantly decreased from 33% in 2006 to 29.7% in 2009. The growth of household incomes in 2007 and 2008 has favored the poor as their incomes have increased proportionately more than those for the richer households. Consequently, the poverty incidence dropped significantly among rural households as well as those in the agriculture sector. Living conditions of those employed at their own account (largely in agriculture) have improved more than wage and salary workers. The GEC may have cut the gains in reducing poverty over the past three years by pushing nearly 2 million more Filipinos to poverty.

## 6. Government's Response to the Crisis

The government responded to the GEC by launching several programs and interventions. Some of these were new programs, specifically intended to address the impact of the crisis, while others were existing ones but were expanded or intensified either in terms of area or beneficiaries.[17] This section focuses on the government's foremost response to the GEC through its so-called Economic Resiliency Plan (ERP).

With a total budget of PhP330 billion (US$7 billion) or an estimated 4% of GDP, the ERP aims to stimulate the economy through tax cuts, increased government spending, and public-private sector projects that can also prepare the country for the eventual upturn of the global economy. The ERP is a mixture of stimulus activities from off-budget and in-budget sources. Off- budget sources are those funded from resources of government-owned and controlled corporations. The in-budget sources are those identified by national government agencies from projects and programs already within their regular budget.

Components of the ERP include implementing budget interventions, accelerated spending for small infrastructure projects, expansion of social protection programs, job preservation and creation, and implementation of off-budget interventions.

Of the PhP330 billion budget, about PhP160 billion was allocated for the increase in the 2009 government budget with priority to infrastructure, agriculture, social protection, education, and health sectors; PhP20 billion for tax cuts for low and middle income earners and another PhP20 billion for corporate income taxes; PhP100 billion for large infrastructure projects particularly earmarked for the Department of Public Works and Highways (DPWH), Department of Transportation and Communications (DOTC), Department of Agriculture (DA), and Department of Education (DepEd); and PhP30 billion for additional benefits to members of social security institutions.

Of the earmarked budget for infrastructure-related projects, PhP160 billion was to be used to fund 4,000-5,000 small projects geared toward quick job creation in 2009. Award of contracts for long gestation projects was to be deferred while small community-scale projects that are labor-intensive and with high local value-added was to be scaled up. Infrastructure spending was to

[17] See Balisacan et al. (2010) for a comprehensive account of these programs.

be front-loaded in the first half of the year. After 2009, PhP100 billion of the budget will fund big-ticket items under Public-Private Partnerships.

The social protection programs to be expanded under the ERP include the following:

1. Conditional Cash Transfers (CCTs) Program of the Department of Social Welfare and Development (DSWD) for the poorest of the poor. The project received an additional PhP5 billion from the ERP to cover 321,000 more beneficiary households, where each household is to receive a maximum cash grant of PhP9,000 a year.
2. The PhilHealth indigent program. The ERP added PhP1 billion to PhilHealth, representing the full contribution of the national government to the national insurance program.
3. Training for Work Scholarships program. About PhP5.66 billion was to be added to this program to help equip more Filipinos with skills that can help them take advantage of opportunities for income generation. Through the ERP, the allocation for TESDA increased by PhP2 billion.
4. Department of Health (DOH) program for primary and secondary hospitals. The ERP added PhP1.97 billion to the DOH's budget to improve the facilities and manpower of primary and secondary hospitals.
5. Other programs and initiatives, such as Comprehensive Livelihood and Emergency Employment Program (CLEEP), Nurses Assigned in Rural Service (NARS) Project, Matching grants to local government units, and student loans.

Aside from the ERP, an Economic Stimulus Fund (ESF) was created by Congress in the FY 2009 General Appropriations Act. Amounting to PhP10.07 billion, the ESF was intended to supplement regular in-budget programs of several national government agencies. Projects supported by the ESF include scholarships, training programs, reintegration programs for displaced OFWs, construction of school buildings, medical assistance to remote areas, food production and DENR support for the protection of forests, marine and watershed areas and recycling of agriculture waste products.

As shown in section 4 of this paper, government spending indeed accelerated in 2009, with the growth of government expenditures (as a proportion of GDP) significantly higher by 2.8 percentage points than its long-term trend. Note, however, that the acceleration occurred mostly in the third and fourth quarters of 2009. The impact of the fiscal stimulus on GDP growth was thus likely to have spilled over to quarters beyond 2009. Analysis of past economic performance suggests that a positive shock (increase) in government spending at the current quarter has a significant impact on GDP gap (i.e., shifts the seasonally adjusted GDP above the long term trend) at the next quarter and all the way to the 4 to 9 quarters ahead.

As noted earlier, all government agencies at both the national and local levels were directed to implement emergency employment schemes in all regions. TESDA, in particular, was provided with substantial budget increases to implement technical-vocational training programs in all regions. Yet, as the results of the ADB-supported field survey show (see Balisacan et al. 2010), the menu of interventions was very limited and implementation was heavily top-down and unresponsive to local needs. The government's response did not seem to consider that the GEC negatively affected the regions in different ways and extents. That is, given the country's very high spatial diversity, a location-specific, targeted approach to addressing the GEC effects could have delivered better outcomes.

For example, domestic industries, particularly in the export sector, need assistance to increase their competitiveness primarily by lowering the cost of doing business in the country. This entails having a more conducive regulatory environment, cheaper power cost, less rigid labor-market conditions, and a more stable political environment. To be sure, these reforms are the necessary thrust of a strategy for industrial development, with or without the GEC. The GEC, however, accentuated the urgency of undertaking these reforms.

By and large, as the ADB field survey noted above shows, projects and activities supported by the ERP tended to be mere dole outs and did not build productive assets that would form the foundation for a faster but more inclusive recovery and growth. The government's impulse to spend on projects regardless of quality was doubtless made stronger by the fact that the May 2010 national and local elections were just months away.

Experiences elsewhere in Asia suggest that government's programs intended to cushion the impact of shocks, whether global or domestic in origin, are more effective if these are informed by lessons of what works and what does not and are mainstreamed in the country's poverty reduction strategy. For example, workfare programs, in which work requirements are imposed to screen the poor from the nonpoor and to reduce welfare dependency, have fairly good record in providing effective insurance in the wake of macroeconomic crisis and against the threat of famine. A notable feature of these programs is that the wage is not set too high. If designed well, these programs not only address short-term poverty but also build up productivity-enhancing physical assets required for long-term poverty reduction.

## 7. Conclusions and Implications

Even though the Philippine economy did not slide to recession during the global economic crisis, the impact of the crisis on the economy and the social sector was nonetheless severe — and may linger for many years to come. The crisis pushed down the GDP growth rate from its long-term trend (of about 4.7%) by 1.0 percentage point in 2008 and 3.8 percentage points in 2009.

On the supply side, the sector hit hardest was industry: growth rate in 2009 was 6.0 percentage points lower than its long-term growth potential. The decline was particularly sharp in the manufacturing sub-sector, hitting 7.7 percentage points lower than the long-term growth trend. On the demand side, personal consumption expenditure dropped by 0.8 percentage point in 2008 and 1.7 percentage points in 2009 relative to its long-term growth trend. The drop was remarkably muted because remittances of overseas Filipino workers did not slow down as sharply as expected at the onset of the crisis. Private capital formation and exports, however, took the brunt of the crisis.

Surprisingly, employment in 2008 grew at a pace close to its long-term trend and even slightly faster in 2009. Underemployment, however, was on the high side at the height of the crisis. Employment share in industry dropped noticeably starting in 2008, which mirrored the drop of output in the sector. However, contrary to common claims in accounts about the crisis, there was no noticeable shift of employment from the formal to the informal sector.

Average per capita income was on an upward trend, while poverty incidence (the proportion of the population deemed poor) was on a downward trend during the pre-crisis years of 2006-2008. If there was no GFC and the economy moved along its long-term growth path (business as usual), average household income would have increased by 1.8% between 2008 and 2009,

causing poverty to fall, rather than increase, from 28.1% to 27.7% during the same period. Given these estimates and current population growth projections, nearly 2 million Filipinos were pushed to poverty owing to the GFC.

The country's very high spatial diversity engendered varied contours of transmission of — and household responses to — external shocks across local economies and population divides. In contrast, government programs and projects intended to deal with the income and employment consequences of the crisis were heavily top-down and unresponsive to local needs. Moreover, the interventions tended to be mere dole outs and did not build productive assets that would form the foundation for a faster but more inclusive recovery and growth.

Poverty reduction remains a huge policy challenge for the Philippines. Not only is absolute poverty in the country high and widespread, but the pace of its reduction is also very slow compared with that of other Asian countries at broadly similar income levels. In part, the slow reduction has to do with the rather low rate of economic growth, especially after accounting for the country's rapid population growth. It is no longer debatable that high economic growth sustained over a long period is a *sine qua non* for rapid poverty reduction. Moving the country to a higher growth path resembling those of its neighbors thus has to be high in the development agenda. This will require seriously addressing the critical constraints to private investment and growth, namely, (i) tight fiscal situation due largely to weak revenue generation, (ii) inadequate infrastructure, particularly transport and electricity, and (iii) weak investor confidence owing to governance concerns, especially corruption and political instability.

At the same time, for economic growth to be inclusive, reform initiatives aimed at reducing the highly inequitable distribution of development opportunities need to receive much more serious attention than mere lip service. It is this high inequality—higher than in most Asian countries—that has greatly muted the impact of economic growth on poverty reduction. High priority should be placed on education, health, infrastructure, and productive assets such as land and credit. Toward this end, the various social protection and social safety net programs need to be comprehensively reviewed, with the aim of improving their governance. This would mean reducing leakage and administrative costs, eliminating redundancies and overlaps, exploiting synergies across programs, and promoting sustainability. For example, numerous assessments show that the rice subsidy program, which accounted for nearly 70% of the total government budget for social protection in 2008, has not only been very costly to society but also has failed miserably in achieving its objectives. Remarkably, there has not been a decision to reform the program vis-à-vis social protection objectives.

In contrast, the government's Conditional Cash Transfer (CCT) initiative under its Pantawid Pamilyang Pilipino Program (4Ps) appears effective as a vehicle for addressing short-term poverty and long-term human capital development. CCT programs are widely implemented in many developing countries, particularly in Latin America and, more recently, in Asia. Assessments of these programs show significant positive impacts on nutritional intakes, schooling performance, and reduction in poverty and inequality. Of all the government's current subsidy programs, the CCT initiative holds perhaps the most promise for breaking the vicious cycle of poverty and, hence, is a good candidate for upscaling toward a national anti-poverty program. Its potential is likely to be particularly high in areas where the provision of basic social services, such as schools and health facilities, is adequate and accessible. However, in areas where such provision is non-existent or highly inaccessible (as in many remote rural areas), CCT programs alone are likely to have far more limited effects. To be effective, they need to be complemented by programs addressing the supply-side constraints to access of social services and economic opportunities.

The next few years may see fiscal tightening after two years of pump-priming activities. The country's fiscal space is constrained by a huge public sector debt and weak capacity for revenue generation. In past episodes of macroeconomic adjustments, it was usually the basic infrastructure and social services, particularly education and health, that got the brunt of budgetary cuts. But the Philippines' political economy is such that though the poor form a numerically large group, they are in reality a weak lobby group in the balance of political power. The new administration in July 2010 must marshal political support for an inclusive growth and development agenda.

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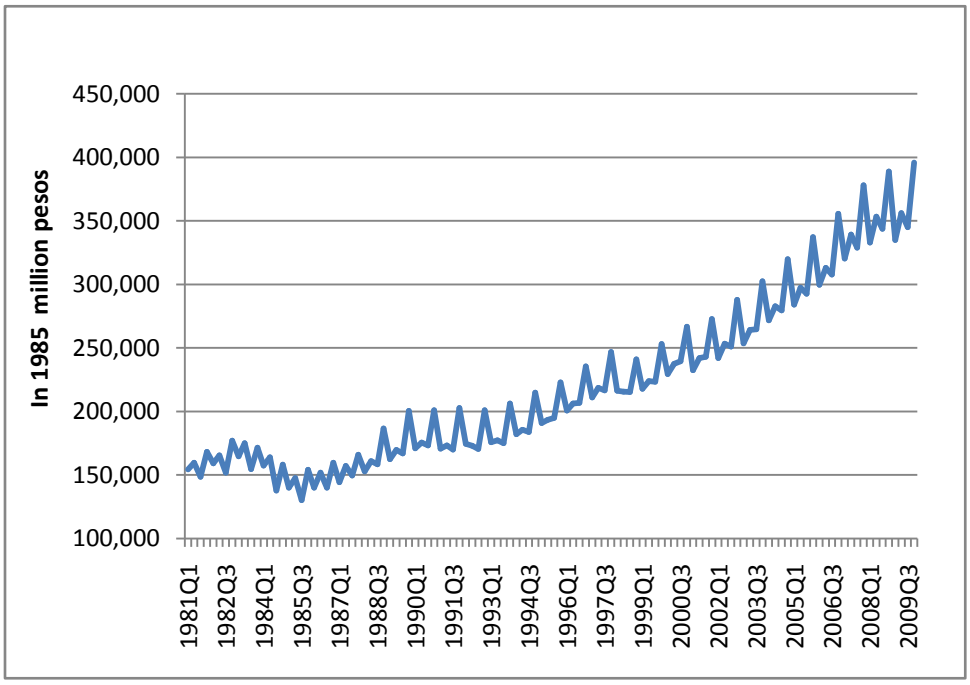
## Annex A
## Seasonally Adjusted and Long-term Trends of Quarterly GDP

The National Statistics Coordination Board publishes a quarterly time series of the gross domestic product (GDP). The series includes components by sector and by expenditure. The data used in this study cover the period 1981-2009, 116 data points over 29 years. The Philippines' GDP has been characterized as exhibiting a strong seasonality, peaking in the fourth quarter and subsiding in the first quarter, rising a bit during the second quarter and declining during the third quarter. Evidently, the data have to be adjusted for seasonality before further analysis can be done. The X-12 ARIMA procedure developed by the U.S. Census Bureau was used to extract the seasonally-adjusted series.




The seasonally-adjusted series can be further decomposed to extract a long-term trend component. This is done using the Hodrick-Prescott (HP) filter. The HP filter, first proposed by Hodrick and Prescott (1997), uses a smoothing method to obtain an estimate of the long-term trend component of a series. It computes the permanent component $TR_t$ of a series $y_t$ by minimizing the variance of $y_t$ around $TR_t$, subject to a penalty that constrains the second difference of $TR_t$.

That is, the HP filter chooses $TR_t$ to minimize:

$$\sum_{t=1}^{T}\left(y_t - TR_t\right)^2 + \lambda \sum_{t=2}^{T-1}\left(\left(TR_{t+1} - TR_t\right) - \left(TR_t - TR_{t-1}\right)\right)^2$$

where $\lambda$ is the penalty parameter that controls for the smoothness of the series. The default values for $\lambda$ is 1,600 for quarterly data. This parameter $\lambda$ controls for the smoothness of the

series, by controlling the ratio of the variance of the cyclical component and the variance of the series. The larger the λ, the more smoothly the $TR_t$ approaches the linear trend.

The long-term trend for each of the series (GDP and its components) is extracted for the analysis. Following are the computed annual growth rates based on the actual and the long-term trend (labeled as counterfactual).

**Table A1. Annual growth rates (%)**

| Component | Actual | | Counterfactual | |
|---|---|---|---|---|
| | 2008 | 2009 | 2008 | 2009 |
| GDP | 3.84 | 0.92 | 4.87 | 4.71 |
| *By sector* | | | | |
| Agriculture | 3.22 | 0.06 | 3.51 | 3.46 |
| Industry | 4.95 | -1.99 | 4.25 | 4.06 |
| Manufacturing | 4.31 | -5.13 | 2.88 | 2.63 |
| Services | 3.33 | 3.18 | 5.82 | 5.63 |
| *By expenditure* | | | | |
| Personal consumption | 4.67 | 3.82 | 5.46 | 5.57 |
| Government | 3.23 | 8.54 | 5.71 | 5.78 |
| Capital formation | 1.68 | -9.89 | 1.38 | 0.57 |
| Exports | -1.89 | -14.18 | 0.95 | -0.63 |
| Imports | 2.39 | -5.79 | -0.24 | -0.33 |