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MILLENNIUM CHALLENGE CORPORATION
UNITED STATES OF AMERICA

Partnership For Growth: Philippines

Constraints Analysis

Joint USG-GPH Technical Team
6/2/2011

I. Executive Summary

The *Partnership for Growth (PFG)* is a joint endeavor of the Government of the Philippines (GPH) and the United States Government (USG) to achieve and sustain broad-based economic growth. This document, the Philippines Constraints Analysis (CA), sets forth the results of an effort aimed at diagnosing the most important factors inhibiting economic growth in the Philippines. A small team of economists from both the GPH and USG undertook this work beginning in late February with a series of roundtable discussions and working sessions in Manila. The methodological approach for the CA draws on the "growth diagnostics" framework of Ricardo Hausmann, Dani Rodrik, and Andrés Velasco,[1] and the team collected, reviewed, and weighed a wide range of data and evidence in conducting the analysis.

The CA is not intended to dictate specific projects to be funded, but rather to prioritize constraints to growth based on available evidence. The findings of this report, in turn, should help inform further deliberations under the auspices of PFG to draw up Joint Country Action Plans designed to relax the identified constraints and thereby stimulate economic growth in the Philippines.

The CA's main finding is that **Governance** and **Fiscal Space** are currently *the binding constraints to growth in the Philippines.* To elaborate:

1. **Governance** – Poor governance in the Philippines is a far-reaching constraint having numerous manifestations. This analysis disaggregates the aspects of governance that are binding on growth into three dimensions:[2] *Regulatory Quality*, *Control of Corruption*, and *Political Stability and Absence of Violence*.

    - *Regulatory Quality*
        - A weak regulatory environment caused by poor governance has played a key role in deterring public and private investment in the country.
        - Restrictions on foreign investment limit access to the Philippines market and therefore suppress business creation and labor demand across the economy.
        - Regulatory inconsistency, poor policy implementation and enforcement, and regulatory capture also inhibit business entry and activity.
    - *Control of Corruption*
        - Corruption appears throughout most of the recent growth literature focused on the Philippines as a major impediment to substantial improvements in the country's economic performance.
        - While taxation rates within the Philippines are high, government revenue as a percentage of GDP is quite low (ADB 2007b:35). This gap between taxation rates and government revenue is caused by shortcomings in both tax policy and administration (Vicente 2006).
        - The 2010-2011 Global Competitiveness Report noted that inefficient infrastructure was cited as the third most problematic constraint discouraging investment within the Philippines. De Dios (2004) has noted

[1] Hausmann, Rodrik, and Velasco (2005).

[2] The terminology is from Kaufmann, Kraay, and Mastruzzi (2009).

that favoritism in awarding contracts has necessitated multiple costly government bail-outs or renegotiations of failed projects in recent years. The high degree of favoritism in the awarding and management of government contracts has limited the effectiveness of infrastructure investment.
    - Favoritism and bribe seeking within the Philippines government has both dissuaded foreign investment and crippled the government's ability to improve the country's infrastructure, making corruption a binding constraint to growth.
- *Political Stability and Absence of Violence*
    - The political stability of the Philippines as measured by the WGI Indicators (Kaufmann, Kraay, and Mastruzzi 2009) has been on a downward trend from the already low level of 1996, and has been stagnant or declining for the past 5 years.
    - Political stability is often linked with low FDI and lack of property rights (Heliwell 1994). It has also been shown that FDI rates and political stability are negatively and significantly correlated within the Philippines (De Dios 2008:17), implying that the decrease in political stability has further depressed foreign investment.

2. **Fiscal Space** – As a primary binding constraint to growth, this specifically refers to a *reduced fiscal space*. That is, public revenues available from taxation, borrowings in the local and global capital markets, and loans from multilateral/bilateral sources are insufficient to meet the requisite provision of public goods (e.g., infrastructure) and services (e.g., education) to complement—and thus make more attractive—private investment. Misallocation and lack of budget transparency in government appropriations also highlight the costs imposed by ineffective expenditure management. The consequence of these problems is a reduced fiscal space which, in turn, deters private investment and inhibits growth.

    - Low levels of government revenue are primarily caused by inefficiencies in the Bureau of Internal Revenue and Bureau of Commerce along with favoritism in the tax laws. Tax evasion, tax laws that unduly benefit the politically powerful, and a narrow tax base significantly constrain government revenues.
    - Due to poor governance, public projects in the Philippines are often inefficient. The Philippines Government noted in the early 2000s that "potential leakages in public and private transactions amount to 74 billion pesos" (Llanto and Gonzalez 2007:2).

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II. Introduction

A. Partnership for Growth and the Philippines

The Partnership for Growth (PFG) is a joint endeavor of the Government of the Philippines (GPH) and the United States Government (USG) to achieve and sustain broad-based economic growth. Following US President Barack Obama's Presidential Policy Directive on Global Development, the PFG builds on the solid partnership between the Philippines and the United States to undertake joint actions to address the most critical constraints to economic growth and attain development progress. A core principle of the PFG is country partnership and ownership with the US Government supporting Philippine development efforts. The implementation of PFG's objectives of catalytic policy change and institutional reform will contribute to transformative economic change, based on mutual commitment and accountability. Based on joint analysis, joint planning, and joint problem solving, the Partnership will address the most binding constraints to growth. The PFG will be consistent with and in support of the 2011-2016 Philippine Development Plan and the social agenda of the Aquino administration. Broadly, this effort is aimed at improving access to international markets, increasing domestic resource mobilization, and stimulating domestic and foreign direct investment in the Philippines. Higher levels of capital formation will generate jobs, raise incomes, and reduce poverty in the Philippines, thereby enabling the country to participate more fully in the global economy.

As a first step towards implementing the PFG, the government of the Philippines and the government of the United States established a joint USG-GPH Technical Team to identify binding constraints to growth in the Philippines. Accordingly, this team undertook a diagnostic study of various growth constraints, the results of which are set forth in the present document. This report is intended, in turn, to help inform and motivate a joint plan of action to address the identified growth constraints.

As USG-GPH partners in the United States and the Philippines move forward in designing and executing an action plan based on this document, technical teams will continue to collaborate on establishing evidence-based monitoring and evaluation frameworks to track PFG progress using various performance indicators tailored to the particular interventions identified.

B. Analysis of Constraints to Growth

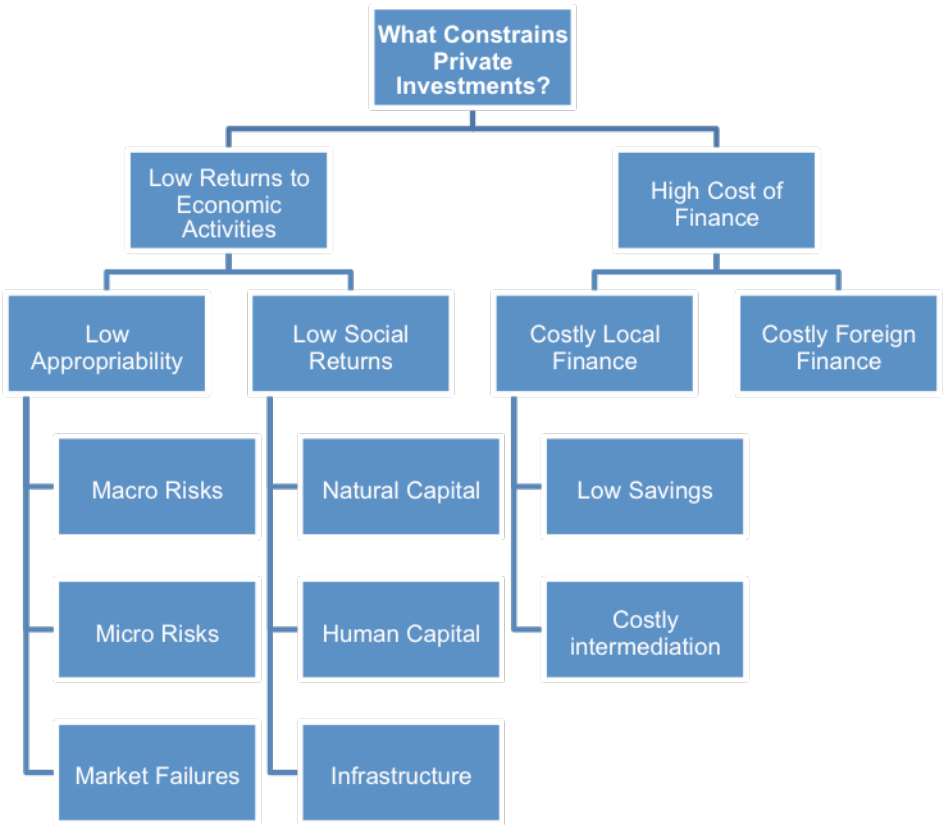
1. Approach and Methodology

The purpose of the Constraints Analysis (CA) is to identify the root causes that deter households and firms from making investments of their financial resources, time, and effort that would significantly increase their incomes. The CA is not intended to dictate specific projects to be funded, but rather to provide a framework that will help focus the PFG on appropriate programs that will ease those constraints and stimulate economic growth. A successful CA will constitute a solid foundation for the formation of a partnership and development strategy between the Philippines and the United States that addresses the Philippines' priorities and promotes economic growth.

Successfully undertaking a CA involves posing and answering a sequence of diagnostic questions that highlight the root causes of constraints to investment. Figure 1 below presents a hierarchy to

organize and motivate the questions driving the CA based on the organizing framework presented by Hausmann, Rodrik, and Velasco.[3] Answering those questions involves (1) selecting and formulating the diagnostic questions in a sensible way for the Philippines, (2) researching and marshalling key evidence and data that shed light on these questions, and (3) answering the questions given the balance of such evidence.[4]

Figure 1: Constraints Analysis organizing framework



2. Key Sources

In the Philippines and elsewhere, the question of identifying and overcoming constraints to economic growth has been posed implicitly in the course of development planning for many years, and explicitly at least since Hausmann, Rodrik, and Velasco's 2005 manuscript, "Growth Diagnostics." The joint USG-GPH Technical Team ("CA team") approaches the task of identifying the most binding constraints to growth in this context, and aims to build on, update, and where possible refine relevant prior work.

The first systematic application of Hausmann, Rodrik, and Velasco's growth diagnostics methodology to the Philippines was the Asian Development Bank's 2007 report, *Philippines: Critical*

[3]Hausmann, Rodrik, and Velasco (2005).
[4]Millennium Challenge Corporation (2009).

Development Constraints (Asian Development Bank 2007a, hereinafter "ADB 2007a"). This study identified *four critical constraints to growth*:[5]

1. tight fiscal situation
2. inadequate infrastructure, particularly in electricity and transport
3. weak investor confidence due to governance concerns, in particular, corruption and political instability
4. inability to address market failures leading to a small and narrow industrial base

As a point of departure for the present work, the CA team refined these four constraints in the following respects:

- As the formulation above suggests, the "small industrial base" noted in the fourth constraint is best viewed as an *outcome* of more fundamental constraints and problems. The task of the present CA should be to dig deeper and identify, analyze, and weigh the root-cause constraints that *underlie* such outcomes, rather than simply stop with the identification of such outcomes.
- The ADB study (ADB 2007a:23-24) found that "[h]uman capital is not a critical constraint under the current industry structure…[b]ut human capital may be scarce in emerging industries." Since conditions may be evolving with respect to this constraint, the CA team wished also to look anew at the evidence regarding human capital-related growth constraints.

Other constraints, particularly those articulated in the growth diagnostics framework (see Figure 1 above), e.g., "*High cost of finance* and "*Natural capital*" were also considered by the CA team. Regarding the cost of finance, recent evidence (e.g., IMF 2011a:18–21) did not suggest that the conditions described in the ADB (2007a) had changed appreciably in the interim. Accordingly, the team felt justified in choosing not to subject the candidate constraint of the cost of finance to more detailed analysis.

As with ADB (2007a), an earlier draft version of the Philippines CA report chose to not specifically analyze *natural capital* as a candidate binding constraint. Some commenters on the draft CA report argued in favor of inclusion of natural capital within the scope of this investigation. After some reconsideration and reflection, the CA team stands by its decision to exclude this potential constraint from further investigation for the following reasons:

1. The Philippines performed relatively well on the 2010 Environmental Performance Index,[6] ranking fiftieth overall, eighth among Asia-Pacific nations, and second among the ASEAN-6 (American Chamber of Commerce in the Philippines 2010). Commenters cited economic losses associated with environmental and resource degradation estimated (however roughly) at about 0.1% of Philippine GDP.[7] Based on this relatively modest level of losses, the team believes that—even given examination of further evidence—this issue would

[5]In looking at "development constraints," this study embraced a somewhat broader focus than growth. For purposes of the PFG CA, we focus on analysis of constraints to economic growth in ADB (2007a).

[6]"The 2010 Environmental Performance Index (EPI) ranks 163 countries on 25 performance indicators tracked across ten policy categories covering both environmental public health and ecosystem vitality." See Yale University and Columbia University (2010).

[7]As of 1996, the most recent data available.

unlikely rise to a level that would rival other constraints already demonstrated in ADB (2007a) and other more recent work to be serious problems in terms of growth foregone.
2. Time constraints for the CA were severe, and accordingly, the CA team needed to concentrate its analytical resources on those candidate constraints that prior knowledge and analysis suggested were likely to be most critical.
3. The issue of natural capital was not highlighted relative to other candidate constraints by a wide range of public- and private-sector interlocutors during ten days of meetings in Manila during a kickoff mission for this analysis.
4. Data limitations would likely seriously limit the extent of further evidence-based analysis that would be feasible, particularly analysis disaggregated by sector and geographic area. While perhaps not essential to undertake the high-level comparative analysis in the CA, such disaggregation would take on increased importance as the PFG effort began to identify and conceptualize appropriate interventions.

With the refinements discussed above, the CA team began its work, intending to focus most of its analytical attention and resources on the candidate constraints of *fiscal space*, *infrastructure* (emphasizing electricity and transport), *aspects of governance*, and *human capital*. Focusing attention on the first three of these constraints is consistent with Habito's (2010:10) observation with respect to the constraints identified in ADB (2007a) that, "[t]here is little to suggest that these constraints have eased in subsequent years…more recent analyses by the World Bank affirm these same constraints to Philippine economic growth."

While they do not constitute growth diagnostic studies with the breadth and depth of ADB (2007a), several other analyses of Philippine growth and potential obstacles to better economic performance were of cross-cutting importance in undertaking this work: American Chamber of Commerce in the Philippines (2010), Bocchi (2008), Habito (2010), and World Bank (2010b). Beyond these sources, the CA team drew on a wide range of other references (listed in the report's final section) in producing this work.

C. Context of this analysis

Apart from work by academics and donor agencies, analysis and planning aimed at improved economic performance has also been a focus within the GPH. These functions are discharged, in particular, by the National Economic and Development Authority (NEDA),[8] the country's social and economic development planning and policy coordinating body. The most recent national development plan for the Philippines, the Medium Term Philippines Development Plan (MTPDP) for 2011-2016, was released by the GPH in early 2011. This plan identifies the factors in the fiscal, infrastructure, governance, social, and environmental sectors that require the most attention to encourage Philippine growth.

The full MTPDP report can be found at http://www.neda7.net.ph/contents/view/624, but to set the stage for the present report, we review briefly here a selection of MTPDP content. The sections of the MTPDP 2011-2016 most likely to intersect with this constraints analysis are Chapters 1, 4, 6, and 7 which cover, respectively, Macroeconomic Policy, Infrastructure, Governance, and Social Development.

[8]See http://www.neda.gov.ph/.

Primary macroeconomic reform in the MTPDP includes:

1. Revenue reform in the form of tax administration and taxation policy reform
    a. Establish a comprehensive tax registry
    b. Maintain a transparent and productive tax audit system
    c. Formulate transparent and consistent tax rulings
    d. Rationalize fiscal incentives to do away with redundant incentives.
2. Expenditure reform
    a. Passing the Fiscal Reform Bill and Government Rationalization Program to minimize waste and strengthen fiscal discipline
    b. Procurement reform to better manage the bidding process of government contracts.

Infrastructure reform within the MTPDP includes:

1. Encouraging public private partnerships
2. Improving project development and implementation through increased monitoring of project development and an improved bidding process for implementation
3. Improve the regulatory environment of the infrastructure sector
4. Focus on improving infrastructure quality in the transportation and energy sectors.

Good Governance reform within the MTPDP includes:

1. Ensure effective, efficient, transparent, accountable, and economic delivery of public services through a variety of methods, including improving access to public service and professionalizing the bureaucracy
2. Curb corruption by strengthening anticorruption regulations and campaigns, increasing the resolution rate of corruption cases, and streamlining the reporting of corruption
3. Enhance citizen's access to information through a government-wide focus on public disclosure.

Social Development reforms relevant to human capital development within the MTPDP includes:

1. Make every Filipino functionally literate both through school and non-school modalities
2. Achieve higher level of productivity, international competitiveness, industry relevance and social responsiveness in the development of both middle-level manpower skills and high-level professions.

While the CA team acknowledges the many worthwhile initiatives within the scope of the MTPDP, the PFG effort, however, has a somewhat sharper, specialized focus. As discussed above, it aims via the CA to identify and prioritize the *binding constraints to growth* that can be meaningfully addressed by collaborative action between the GPH and the USG. This focused scope will mean that the growth constraints prioritized in the PFG process will likely correspond to a select subset of MTPDP initiatives. This subset, in turn, can constitute the substantive foundation of a dialog on PFG programming.

As suggested in section II.A above, the CA is only one analytical step embedded in a larger planning process aimed at producing a Joint Country Action Plan (JCAP). These Plans will reflect commitments of both governments over a five-year period. Once the CA is reviewed, discussed and accepted by both governments, a series of analytical and consultative steps are envisioned to lay the ground work for the JCAP:

1. Selecting constraints to be targeted by the USG and PFG country government
2. Conducting sector-specific analyses and consultations with other governmental and non-governmental stakeholders
3. Identifying instruments to address the selected constraints to growth

4. Developing the Joint Country Action Plan.

The remainder of this report is structured as follows. We next present a narrative of recent growth history for the Philippines. Subsequent sections then present the prioritization process of the various candidate constraints, and a detailed discussion and analysis of each constraint, presenting available data and evidence that supports the prioritization. The final section contains all references cited herein.

III. Historical Growth Narrative for the Philippines

This section documents Philippine economic growth performance over the period 1950-2010. We organize our thinking about such performance through the lens of growth models ranging from those with exogenous saving rates (see, e.g., Solow 1956; Swan 1956) to more recent ones that are referred to as belonging to endogenous growth theory (see, e.g., Romer 1986; Lucas 1988).

Output growth performance is described in the aggregate using time-series data on real GDP (or gross domestic product adjusted for inflation). Growth is also characterized by sector (e.g., agriculture, industry, and services) by looking at the contribution of each to GDP. Moreover, from the expenditure components of GDP, the contribution of investment or capital accumulation to output growth is examined, given the importance accorded to investment in models of economic growth.[9]

The choice of variables to describe growth, whether in aggregate or by sector, underscores at the most fundamental level the role played by both supply and demand factors in growth analysis. Output performance by sector provides insight in view of the development problem that the Philippines faced when it embarked on an industrialization drive after obtaining political independence from the USA in 1946. The challenge was to transform an economy that was largely engaged in traditional agriculture to one that would be considered industrializing. The transformation involves the reallocation of resources from low-productivity pursuits to high-productivity ones. The strategy involves raising agricultural productivity. Industry and services must then grow at a sufficiently fast pace to enable the non-agricultural sector to absorb workers released from agriculture.

Meanwhile, the role of investment has been evolving in an attempt to account for cross-country differences in per capita income across time, emphasizing under endogenous growth how actual production and consumption choices of families, firms, and governments help overcome diminishing returns to every unit of additional capital, and generate long-run growth in the process. For example, investments in human capital (e.g., education and training), specialized intermediate goods (say, microchips, spare parts, and components), and public investments that complement private production (such as infrastructure) contribute to sustained growth of real per capita income in the long run.

To lend empirical content to growth theory, sources-of-growth accounting models decompose output growth into growth of the factors of production (namely, labor and capital), and a residual that is referred to as total factor productivity (TFP).[10] TFP is at times referred to as technological progress; it has many components, including investments in R&D and in scientific manpower. Growth decomposition analysis generally shows that TFP accounts for a great part of output growth in the long run as Denison (1962) and Jorgenson and Griliches (1967) have demonstrated. Changes in TFP over time have implications for whether the Philippine economy stands a good chance of moving on to a high-growth path. Alternatively, TFP may suggest deeper factors that must be worked on to enhance growth in the long run.

[9]See, for example, Robert Solow (1956) and Trevor Swan (1956).

[10]The works of Edward Denison (1962), and Dale Jorgensen and Zvi Griliches (1967) are illustrative.

To obtain further insights about the binding constraints to growth in the Philippines, this section will also describe the per capita income level of the Philippines and its average annual growth rate over a given period of time in comparison with lower- and upper-middle-income countries in Southeast Asia, such as Indonesia, Thailand, and Malaysia. What did the Philippines fail to do, policy-wise, that caused it to miss "making a miracle" (see Lucas 1993)? This requires an investigation of factors that matter for growth and how the Philippines compares to the other countries that it trails in terms of per capita income levels and growth rates.

The source of basic data for level and growth of GDP in the Philippines, whether real or nominal, is the *National Income Accounts of the Philippines* (NIA) that is released quarterly by the National Statistical Coordination Board (NSCB).[11] A compilation of time-series data on the national income also appears in the *Philippine Statistical Yearbook* (NSCB). Multilateral organizations like the Asian Development Bank (ADB) and the World Bank (WB) likewise publish similar time-series data. The ADB issues annually the Asian *Development Outlook* (ADO) and the *Key Indicators for Asia and the Pacific (*KIAP). The WB has its annual publications entitled the *World Development Report* (WDR) and *World Development Indicators* (WDI).

GDP growth

Over the period 1950 to 1999, the Philippine real GDP posted a growth rate that averaged 4.3 percent each year. For the period 2001-2010, real GDP grew an average annual rate of 4.7 percent. The NSCB introduced new methodologies and data sources in estimating the NIA during the decade; it has not been able to link the series from 2000-2010 to the 1946-1999 series.[12]

The Philippines adopted an import substitution strategy following its attainment of political independence from the US in 1946 (see, e.g., Bautista 1983; Canlas 1988: 130-147). Under this scheme, manufactured products that were imported from the developed countries like the US started to be manufactured locally either by domestic firms or by foreign firms that set up manufacturing in the Philippines. The products were sold solely in the local markets and were protected from competing imports through high tariff walls and/or quantitative restrictions on imports. At that time, the main exports of the Philippines consisted of agricultural crops like sugar and coconut products, along with some minerals and precious metals. These export products were major sources of foreign exchange, much of which was absorbed by the import-substituting industries to fund their imports of capital equipment, raw materials, and other intermediate products. Faced with a tight foreign-exchange constraint under a fixed exchange-rate regime, the Central Bank frequently faced serious balance-of-payments (BOP) difficulties, resulting in periodic liquidity crises and collapse of the fixed exchange rate.

The early stage of import substitution yielded a real GDP growth each year of about 6.4 percent in 1951-1960.[13] In 1961-1970, import substitution started to lose steam, and real GDP growth slowed to an annual rate of about 4.9 percent.

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[11] The National Statistical Coordination Board (NSCB) announced its rebasing of the National Income Accounts (NIA) in May 2011. The base year is now 2001. The figures reported here are still based on the NIA with 1985 as the base year as time is lacking to incorporate the rebased NIA figures in this report.

[12] See note on page 3-8 of the *2010 Philippine Statistical Yearbook.* The NSCB, for instance, introduced measures of output for the informal manufacturing sector and for information technology, though it has not been able to do so for NIA measures before 2000.

[13] See Table 2.3 of ADB (2007:7).

In 1972, then-President Ferdinand Marcos imposed martial law and ruled by letters of instruction and presidential decrees. The decade was marked by oil-price shocks in 1974 and 1979. To ward off the expected slowing down of the economy from the oil-price shocks, the economic managers who were both the fiscal and monetary authorities mounted countercyclical measures. Those measures led to large and persistent deficits in the government budget and in the current account of the BOP. In any event, the economy's real GDP growth rate increased to about 5.9 percent each year over the period 1971-1980.

However, the large and recurring twin deficits culminated in a BOP crisis in 1983. The government defaulted on its foreign loans and was forced to tap a standby loan arrangement from the International Monetary Fund (IMF) to overcome its liquidity crisis. It had to submit to policy conditionalities of the IMF, a financial programming scheme that led to tight fiscal and monetary policies. The economy did not react neutrally to the tightening. The economy contracted in 1984-1985, the first downturn in the postwar economic history of the Philippines.

In 1986, Pres. Marcos fled the country, and Corazon Aquino became the President of the Republic. Her administration restored democratic political institutions, and started a structural policy program anchored on liberalization, privatization, and democratization. The economy responded positively to those measures; it recovered in 1986 and gained strength. However, a debt hangover, natural disasters, and attempted coups d'état against the government hampered her development agenda. Over the period 1981-1990, the economy grew only at an annual rate of 1.8 percent.

Pres. Fidel Ramos took over as head of state in 1992. His administration accelerated the policy reform process started by Pres. Aquino. Real GDP grew at an annual rate of 3.1 percent, despite a crippling electricity crisis from 1992-1994, a drought, and the Asian financial crisis of 1997. It is also important to note that during the time of Pres. Ramos, the national government posted a surplus in 1995-1997 on a tax effort[14] that averaged 16.7 percent each year over the same period. That tax effort has not been matched up to this point.

In 1998, under then Pres. Joseph E. Estrada, the budget deficit of the national government re-appeared. He was ousted in 2001 and was replaced by Gloria Macapagal Arroyo who served as president until 2010. The budget deficit persisted. A reformed value-added tax was enacted in 2007, which reduced the deficit to 0.2 percent of GDP. The deficit, however, again ballooned to 3.9 percent of GDP in 2009 in the aftermath of the global financial crisis that caused a major slowdown in the growth of real GDP to a mere one percent of GDP. Over the period 2001-2010, real GDP grew at approximately 4.7 percent each year; it must be noted, however, that this growth rate cannot be compared with those of previous decades because of a delinked series (see footnote 12 above).

Over the period 1980-1999, the population growth rate was about 2.3 percent each year. Per capita GDP thus grew at about two percent per annum. At this growth rate, real GDP per person is expected to double in 35 years. The implication is that standards of living of each Filipino increased at an exceedingly slow pace. For the period 2000-2009, the population growth rate remained at about two percent corresponding to a per capita real GDP growth rate of 2.5 percent. Per capita GDP doubles in 27 years at this growth rate.

[14] *Tax effort* for a given year is defined as tax revenue expressed as a percentage of GDP for that year.

GDP growth by sector

In 1960, the share of agricultural output to GDP was about 30 percent. That of industry was 32 percent, and for services, about 38 percent. In 2010, after six decades, the shares are as follows: agriculture, 18 percent; industry, 36 percent; and services, 46 percent.[15]

In the course of economic development, the share of agricultural output to GDP normally declines. Resources are shifted from low-productivity pursuits in agriculture to high-productivity activities in industry and services, with industry absorbing ahead of services much of both labor and capital released from agriculture. The Philippines appears to have skipped that stage as services tended to absorb much of the resources released from agriculture in the early stage of the economic transformation. Some high-paying jobs in manufacturing got extinguished and are only slowly being replaced by similarly high-wage jobs in services.

At this juncture, productivity in agriculture is still low. While its share to GDP is only about 18 percent, the share of agricultural employment to total is more than 20 percent. Far too many workers are still dependent on agriculture doing subsistence work therein. It is no wonder then why the poverty incidence is largely concentrated in rural agricultural areas.

Fortunately, however, some of the emerging sectors in services have relatively high valued added, such as those in finance and business process outsourcing. In manufacturing, there is off-shoring of specialized intermediate products, in which producers in developed countries set up manufacturing of microchips, spare parts and components in countries like the Philippines. These emerging sectors are proving themselves to be the new drivers of growth.

Capital Accumulation

Over the period 1951-2000, the investment share to GDP averaged 21.7 percent . In the decade 1951-1960, the share was 18.4 percent; 1961-1970, 20.7 percent; 1971-1980, 25.2 percent; 1981-1990, 21.3 percent; 1991-2000, 23 percent; and 2001-2010, 19.7 percent.[16] Evidently, these rates of capital accumulation were not sufficient to put the economy on a high- growth path.

To the extent private investment in physical capital involves learning-by-doing, the Philippines is not tapping fully into the possible ability of investment to deliver increasing returns, given these low investment shares. The increasing returns stem from the observation that investing involves knowledge that spills over to firms outside of the one doing the investing. Use of new technologies by one firm, for instance, does not diminish the quantity available to all the other firms in the industry.

The magnitude of public capital accumulation may be inferred initially from the share of government spending to GDP.[17] The same Table 2.5 of ADB (2007: 8) shows the following shares of

[15]For some of the issues and challenges in each of the sectors, see Cristina David (2003) for agriculture; Hal Hill (2003) for industry; and Joy Abrenica and Gilbert Llanto (2003) for services.

[16]See Table 2.5 of ADB (2007: 8).

[17] These figures are taken from the NIA published by the NSCB; they constitute government spending on final goods and services for a given year. The figures on government spending's share to GDP are larger using the Budget Expenditure Source of Financing (BESF) figures from the Department of Budget and Management (DBM) as the BESF includes, for instance, income transfers and social security payments.

government spending: 1951-1960, 7.3 percent; 1961-1970, 7.1 percent; 1971-1980, 8.7 percent; 1981-1990, 7.6 percent; 1991-2000, 8 percent; and 2001-2006, 6.8 percent. It is useful to note that the decade that showed the highest share of private investment to GDP is associated with the highest share of government spending to GDP, namely, 1971-1980. This shows some support for the notion that public capital tends to complement private capital.

Using figures from the *2010 Philippine Statistical Yearbook*, we note the low levels of spending for selected infrastructure. In communications, roads, and other transport, for instance, the share of government spending was 11.7 percent in 2009; this declined to 9.8 percent in 2010. In power and energy, the share of government spending for the same years were 0.9 percent and 0.3 percent, respectively.[18] These quantities are not at all supportive of high growth rates, and may well explain why private investment is also inadequate. The distribution of infrastructure spending is only not limited; it also tends to be unequal, with adverse effects on regional growth (see Llanto 2007: 316-344).

Total factor Productivity

The large contribution of total factor productivity (TFP) to aggregate economic growth is widely recognized. It is affected by several factors like technological advancement, learning-by-doing, realization of scale economies, and even social capital accumulation (see Prescott, 1998; Lagos, 2006).

The poor record of TFP in the Philippines has been noted (see Table 2.10 of ADB 2007a: 10; Cham and Canlas 2008: 1-13). TFP growth in the Philippines has either been low or negative from 1980 to 2000, averaging –0.37 percent each year. From 2001 to 2006, TFP growth improved to an average of 2.41 percent per annum (see Cham and Canlas 2008: 12). This improving trend is essential if the Philippines wants to improve profoundly its growth performance, moving forward.

Per capita income growth in a comparative setting

The Philippines at this point is considered a lower-middle-income country, with a per capita GDP of US$ 1,215 in 2009. The figure is taken from the World Bank's *World Development Indicators.* The Philippines is slightly ahead of Indonesia, but it trails Thailand and Malaysia. Table 2.2 of ADB (2007a: 6) shows average growth rates of per capita GDP each year for various decades. The picture is clear: the Philippines has for several years lagged in this growth department.

[18]See Table 15.9 of (NSCB 2010:15-15).

IV. Discussion, Analysis, and Prioritization of Candidate Constraints to Growth

A. Prioritization

Our findings are that **Fiscal Space** and **Governance** are the primary constraints to growth in the Philippines. Further analysis of these two constraints can be found below.

Governance – Poor governance in the Philippines is a far-reaching constraint having numerous manifestations. This analysis disaggregates governance into three dimensions: Regulatory Quality, Corruption, and Political Stability and Absence of Violence.

1. Regulatory Quality
    a. A weak regulatory environment caused by poor governance has played a key role in deterring public and private investment in the country. Nye (2011b:18-19) suggests that poor governance combined with constitutional restrictions on foreign investment that facilitate monopolistic or oligopolistic control of certain sectors of the economy[19] represents a formidable constraint to economic growth.
    b. Restrictions on foreign investment limit access to the Philippines market and therefore suppress business creation and labor demand across the economy. This is reflected in the high degree of outmigration that the Philippines suffers (De la Cruz 2007): Lack of investment and employment at home has forced many workers to seek employment outside of the country.
    c. Regulatory inconsistency, poor policy implementation and enforcement, and regulatory capture also inhibit business entry and activity. Bocchi (2008) and Aldaba (2008) highlight the deleterious effects of rent-creating regulations and policies.

2. Corruption
    a. Corruption appears throughout most of the recent growth literature focused on the Philippines as a major impediment to substantial improvements in the country's economic performance. The 2010 Corruption Perceptions Index (CPI)[20] rated the Philippines at a CPI of 2.4, which ranks the country 134th out of 178 countries.
    b. Corruption is prevalent throughout the country; two notable areas in which corruption has deleterious effects are in government revenue and infrastructure. While taxation rates within the Philippines are high government revenue as a percentage of GDP is quite low (ADB 2007a:35). This gap between taxation rates and government revenue is caused in part by shortcomings in tax administration (Vicente 2006).
    c. The infrastructure within the Philippines, especially transportation infrastructure, has persistently limited investment. The 2010-2011 Global Competitiveness Report noted that inefficient infrastructure was the third most problematic constraint discouraging investment within the Philippines. Transportation infrastructure can

[19] See Reyes (2010).
[20] See http://www.transparency.org/policy_research/surveys_indices/cpi/2010.

easily be improved through government investment; efforts to date, however, have had limited impact. De Dios (2004) has noted that favoritism in administering contracts has necessitated multiple costly government bail-outs or renegotiations of failed projects in recent years. The high degree of favoritism in the awarding and management of government contracts has limited the effectiveness of infrastructure investment.

d. A high degree of favoritism and bribe seeking within the Philippines government has both dissuaded foreign investment and crippled the government's ability to improve the country's infrastructure, making corruption a binding constraint to growth.

3. Political Stability and Absence of Violence
    a. The political stability of the Philippines as measured by the WGI Indicators (Kaufmann, Kraay, and Mastruzzi 2009) has been on a downward trend from the already low level of 1996, and has been stagnant or declining for the past 5 years. As of 2009, the most recent year for which data is available, the Philippines was *lowest-ranked* among comparable neighbors, and distinctly below the next lowest country, Thailand.
    b. Political Stability is often linked with low FDI and lack of property rights (Heliwell 1994). De Dios (2008:17) has found that FDI rates and Political Stability are negatively and significantly correlated within the Philippines, implying that the drop in Political Stability has further depressed foreign investment. An adverse shock in foreign investment can lead to fewer businesses within the Philippines, less competition, and therefore a lower demand for workers within the economy.

Fiscal Space – Low levels of government revenue coupled with inefficiencies in public expenditures have led to reduced fiscal space being a binding constraint to growth.

1. Low levels of government revenue are primarily caused by inefficiencies in the Bureau of Internal Revenue and Bureau of Commerce along with favoritism in the tax laws. Tax evasion and tax laws that unduly benefit the politically powerful significantly constrain government revenue. A Social Weather Stations Survey has found that the Philippines populace has very low confidence in the "sincerity" of these two departments in combating corruption. Low revenue not only increases the deficit and thereby raises risk premiums for the Philippines, but also limits the amount of public investment the government can provide. In addition, the Philippine Congress has in recent years been legislating tax-revenue-eroding measures, such as increasing the allowable tax exemptions for personal income without legislating accompanying tax-enhancement measures that have been proposed, such as the indexing of excise taxes on cigarettes and alcoholic beverages to inflation.
2. Due to poor governance, public projects in the Philippines are often inefficient. The Philippines Government noted in the early 2000s that "potential leakages in public and private transactions amount to 74 billion pesos" (Llanto and Gonzalez 2007:2), aggravating the constrained fiscal space.

As suggested above, governance weaknesses are manifested, in turn, across a range of specific settings discussed below. This is consistent with Habito's (2010:vii) observation that

> [t]ight government finances result from poor tax administration, widespread tax evasion, and smuggling. Politicization of the budget process impairs the quality and impact of public expenditures.

> Lack of infrastructure is in turn a direct result of this. Weak investor confidence results from policy reversals and poor policy implementation and/or enforcement, which undermine the predictability of the policy and regulatory environment. Cumbersome government procedures and requirements significantly raise transaction costs for business, further negating the investment climate. Over-centralized decision-making leads to ill-conceived interventions, often unresponsive to actual local needs. Regulatory capture fosters monopolistic tendencies that lead to narrow benefits and higher costs in key industries, thereby undermining competitiveness in downstream economic activities….

B. Fiscal Space

This section opens up an inquiry into how aspects of government behavior in the Philippines—including government spending on goods and services, taxation, and public-debt management—affect economic growth. In short, this is about fiscal policy and growth.

When the government spends on pure public goods in the sense of being non-rival and non-excludable,[21] it pushes the production frontier outward. Spending on human capital, such as, education and training, as well as on public capital like infrastructure, is illustrative of government expenditure that supports growth. One can add to productive government spending the efforts to establish a legal and judicial system that is conducive to contractual performance and credible adjudication of any contractual dispute that may emerge. Such governance is needed to bring about mutually-beneficial exchanges in a market system guided by a decentralized price system.[22] Spending on public goods that complements private production is pro-growth.[23]

To raise funds to support purchases of goods and services, the government taxes. It has non-tax sources of revenues, such as the fees and charges the government levies for front-line services, but taxes contribute the largest fraction of government revenues. Taxes, however, tend to distort some aspects of economic behavior. For example, taxing personal income discourages people from putting in additional hours of work. Taxing capital, meanwhile, dampens investment and may force capital to move elsewhere. The distortionary effects are often referred to as deadweight losses, a phrase that suggests the adverse effects on growth of taxation. And so in designing taxes, efficiency considerations (i.e., minimizing deadweight losses) are key. In addition, fiscal authorities are also concerned about the burden or equity aspects of taxes.

When government decides to finance new spending by issuing debt rather than by taxing, that means it incurs a deficit in the government budget. When government borrows to finance the deficit, the public debt grows and the government absorbs resources that otherwise the private sector can use for investment and consumption purposes, a phenomenon called "crowding out." Continuous borrowing by the government further fattens the public debt and, consequently, debt servicing. Interest payments and amortization of principal then crowd out other spending items in

[21]In the public-finance tradition, non-rival and non-excludable (and without congestion) mean mainly that one person's use of a particular public good does not diminish the amount available to others, thereby providing no incentive for people to reveal the true value they assign to such good. Free riding is preferred. Pricing either fails or is unreliable, and government steps in by taxing and spending so that the public good is provided.

[22]The presence of transaction costs in using markets necessitates some form of governance (see Arrow 1970; and Williamson 2010).

[23]Barro (1990, 1991) has undertaken theoretical and empirical studies that capture the links between fiscal variables and per capita output growth.

the government budget, the so-called discretionary items, such as those for education, health, and infrastructure. In this way, deficit financing is expected to be non-neutral for growth. In the case of the Philippines, little is left in the budget for discretionary spending items after allocating amounts to mandatory items like debt servicing and social security payments.

In the following sections, we review some stylized facts on the fiscal side that matter for economic growth in the sense described above.[24] We draw heavily from Canlas *et. al.* (2011).[25]

Government Spending

Between 2001 and 2009, annual general government final consumption expenditure as a percentage of GDP averaged about 10.65 percent.[26] The small share of government spending to GDP has been at the expense of spending for human capital and infrastructure, to cite some spending items that are material to growth. Using figures from the DBM's *Budget Expenditure Sources of Financing* (BESF), the average annual ratio of actual government spending to GDP is 18.4 percent for 2001-2009. This is larger than the one taken from the NIA since it includes government spending such as income transfers, which are not included in the NIA unless they represent final goods and services in the relevant time period.[27]

Two important items of government spending are first, education and training, and second, health, both of which are generally considered investments in human capital. Education and training enable Filipino workers to acquire skills that are highly valued in the workplace. Life-long education and training is critical in enabling workers to master the production techniques that constantly emerge in a small open economy like the Philippines. Health care investments protect people from illnesses, thereby minimizing absenteeism in the workplace and the duration of unemployment spells. Human capital interacts with physical capital to overcome any tendency towards diminishing marginal productivity of labor and capital. The importance of education, for instance, to growth may be gleaned from rate-of-return studies of various levels of education: primary, secondary, and tertiary (see, e.g., Gerochi 2001).

Over the period from 2007 to 2009, the share of government spending on education based on basic data from the Department of Budget and Management (DBM) averaged 14.4 percent each year of the total expenditure program of the national government. For health, the expenditure share for the same period was a mere 1.5 percent per year. All figures originally taken from the *2009 Philippine Statistical Yearbook* published by the NSCB have been adjusted in line with the recent BESF.

[24]For an antecedent work, see ADB (2007).

[25]"Technical Assessments of Economic Growth and Democracy," Working Paper submitted to USAID Manila, April 2011.

[26]This aggregate includes all current outlays on purchases of goods and services (including wages and salaries). It also includes most expenditure on national defense and security, but excludes government military expenditures that are part of public investment (See Table 2.8, Government consumption expenditure, in ADB 2010a:317). This figure compares unfavorably with the analogous statistics for fast-growing middle-income economies in Southeast Asia such as Thailand (11.8%) and Malaysia (12.6%) (ADB 2010a:317).

[27] The DBM reports a three-year rolling BESF in its website, with the ending year based on the proposed National Expenditure Plan (NEP), which is not actual government spending yet, but the one proposed by the Chief Executive in the annual submission of the national government budget to Congress.

The national government has failed to increase in real terms the budgetary allocation for these investments in human capital. These inadequacies generally hamper the attainment of inclusive growth, a point that has not gone unnoticed.[28]

Another vital government spending is on infrastructure that enhances private production. In combination with human and private physical capital, infrastructure investments facilitate the distribution of goods and enable individuals and households to access social and cultural facilities that raise living standards. Llanto (2007) provides some regression evidence that shows a positive relationship between infrastructure spending and growth.

The ADB (2007) has noted that the most binding infrastructure constraints to growth are roads and transport, and electric power. Another look at government spending by economic services from DBM data appearing in the NSCB statistical yearbook shows that from 2007 to 2009, the share of national government spending on roads and transport was only 11.3 percent per year, while on power and electricity, the share was only 0.5 percent each year for the same period.

All the above is dwarfed by the share of the interest payment on the public debt, which averaged 21.1 percent each year from 2007 to 2009. The need to finance the recurrent budget deficits of the national government in the past has caused a ballooning of the public debt. This turns on the revenue-raising capacity of the national government, particularly, taxation.

Taxation

Taxes constitute the largest proportion of total government revenues. Although the GPH has introduced a *Comprehensive Tax Reform Law* (CTRL) and fine-tuned this over time, the tax effort—total tax collection as a ratio of GDP—has remained low, averaging 14.6 percent annually over the period 2000-2010, based on figures from the Department of Finance. After the passage of the *Reformed Value-Added Tax Law* (RVAT) in 2006, the tax effort went up to 14.3 percent from 12.9 percent in the previous year, but this was eroded again in 2007, declining to 14 percent in 2007 from tax revenue-eroding measures that Congress passed. Given the drastic slow down of the economy in 2009 in the aftermath of the global financial crisis, the tax effort dropped further down to 12.8 percent, and rose slightly to 12.9 percent in 2010.

It may be useful to look at the tax effort in some of the countries in Southeast Asia to see what is possible. All figures are taken from the ADB Indicators. Over the period 2003-2010, tax effort in the Philippines averaged 13.3 percent each year. This figure is higher than Indonesia's 12.1 percent, but lower than Malaysia's 15.1 percent and Thailand's 15.7 percent.

The tax effort must no doubt be raised, but to do so, at least two tasks are called for. One is to improve the tax collection machinery of the Bureau of Internal Revenue (BIR) for internal taxes and that of the Bureau of Customs (BOC) for border taxes. At this stage, both the BIR and BOC have weak tax collection machineries, arising mainly from ineffective governance in tax collection. Fighting corruption is urgent in these two agencies responsible for the collection of tax and customs duties. The second major task is to design tax-enhancement measures and broaden the tax base

[28]See, for example, Rosario Manasan (2008), *Policy Study on the National and Local Government Expenditures for Millennium Development Goals, 2000-2005*, Philippines Institute for Development Studies. Meanwhile, the recent World Bank's *Public Expenditure Review 2011* notes the persistence of the tight fiscal constraint and emphasizes the importance of fiscal policy reforms.

(e.g., by reducing exemptions and holidays, and improving indexation) in accordance with efficiency and equity criteria.

Further detailed analysis would be required to identify the specific root causes of the shortcomings of the tax collection system. For instance, it is unclear *which* of the following—or other—underlying factors are primarily responsible for the problems identified: (i) inadequate leadership or management in the revenue agencies' bureaucracies that lack the skills to carry out their core missions of the agency; (ii) inadequate incentives for the revenue agencies to enforce the tax laws because of bribery or other corrupt practices in the agencies themselves or at higher levels within the government, or (iii) cultural factors that lead to tax laws being widely flouted or ignored by much of society with few repercussions.

A weak tax effort and failure to control wasteful spending—such as net lending to deficit-ridden government corporations that often ends up as subsidies to these corporations—have yielded recurring deficits in the national government budget.

After posting a surplus in its fiscal position from 1995 to 1997, the budget deficit reappeared in 1998 in the aftermath of the 1997 Asian financial crisis. Using figures from the ADB's *Key Indicators*, it is seen that the fiscal deficit as a share of the GDP persisted in the first decade of the 21st century. It peaked at 5.3 percent of GDP in 2002 and began to decline thereafter. In 2007, following a record growth rate in real GDP, a near fiscal balance was achieved at about 0.2 percent of GDP. But a global financial crisis intervened in 2008, resulting in a flat economy in 2009. The budget deficit rose to 3.9 percent of GDP in 2009.

It is useful to note that large deficit-to-GDP ratios are associated with a weak economy. The automatic stabilizers in the tax system—rising collection during good times and falling during bad times—account largely for the correlation.

Financing these deficits enlarges the public debt. In consequence, interest payments on the public debt absorbed about 21 percent of the cash budget of the national government in 2009.[29] The situation is inimical to growth since it may crowd out private investment and consumption. When government borrows to finance its deficit, it absorbs resources that may otherwise be used by the private sector for investments. And when interest rates rise, households tend to postpone current consumption for later.

When the tax effort is weak and budget deficits persist, pressure to raise taxes further mount. And if the socio-economic environment is marked by high income inequality, political pressure to tax and redistribute likewise mounts. This adversely affects growth as the uncertainty about taxation is heightened. The expectation that the government is going to tax in the future becomes self-fulfilling, thereby dampening the incentive to invest.

Managing the Public Debt

The fiscal roots of an economic downturn that persisted for two years are illustrated by the 1984-1985 recession. After the two oil-price shocks in the 1970s, the government engaged in large deficit financing as a countercyclical measure. That move expanded the public debt and led to a foreign-

[29] See the *2010 Philippine Statistical Yearbook*, National Statistical Coordination Board (NSCB).

debt crisis in 1983. The fiscal shocks were compounded by monetary shocks as the central bank accommodated the deficits with money creation.

The government faced a liquidity crisis in 1983 and had to run to the International Monetary Fund (IMF) for a standby credit arrangement. Special drawing rights (SDRs) were made available to the Philippines, but it had to submit to IMF policy conditionalities involving tight fiscal and monetary policies. The economy did not react neutrally to the tightening. Real GDP receded 11 percent in 1984-1985, the first recession in the postwar economic history of the Philippines. It was during this period that Thailand overtook the Philippines in terms of the per capita GDP level.

The administration of President Benigno Aquino, Jr. has announced its commitment to a deficit-reduction program. This program aims to reduce the government budget deficit to 2 percent of GDP in 2013, to be maintained up to 2016, from its 2009 level of 3.9 percent.

This program is not being pursued as an end in itself. Deficit reduction tends to reduce the interest rate for new government borrowings. As the deficit goes down, the risk premium on government bonds goes down.

Deficit reduction need not impair Filipinos' living standards. This can be done with a responsible deficit-reduction program. For instance, deficit reduction should not be at the cost of running down investments in human capital. Neither should it result in a diminution of infrastructure support to businesses and families.

Summing up

The existence of a reduced fiscal space is seen as a binding constraint on growth. Government spending matters for growth especially spending for human capital and public capital like infrastructure. The GPH has in the recent past failed to increase spending for these items, particularly in relation to the levels attained by neighboring countries like Thailand, Malaysia and Indonesia, a situation that constrains the Philippines from traversing a high-growth path.

Low government revenue due to bribe seeking and a narrow tax base along with ineffective expenditures caused in part by favoritism in government contracting further inhibits growth.[30] Protectionist regulation designed to uphold entrenched domestic business further damages the economy through dissuading foreign investment and market entry.

A deficit reduction program is indicated but it must be a responsible one. Core values in education, health, and infrastructure must be protected.

C. Infrastructure

1. Electricity

The significant and sustained shortfalls in supply that have afflicted the Philippines' electricity sector from time to time have exacted a large toll on the economy. The 1991-93 electricity crisis, for example, lasted some three years and by some estimates, cost the country two percentage points of

[30]This is elaborated further in section, IV.E.2., Control of Corruption, beginning on page 65.

foregone economic growth (Wallace 2010:1). One industry observer has forecast that in 2011, Luzon will have a power deficit (required capacity less dependable capacity) of 600MW.[31] The ADB broadly concurs, noting that power shortages are expected by 2012 in the Luzon and Visayas grids as demand growth continues at an estimated 6% per annum through 2014 (ADB 2009:3). Insufficient capacity (lagging development of new power plants and upgrades to transmission lines) to generate and deliver electricity is the main proximate cause of these impending bottlenecks.

Expansion of generation capacity has been hampered, in turn, by slow implementation of, and internal contradictions in, the Electric Power Industry Reform Act (EPIRA) (Habito 2010:11). Lagging and incomplete implementation of these reforms under EPIRA perpetuates high costs, low service quality and reliability, and low levels of private investment (USAID/Philippines 2011:3). These adverse market outcomes are due, to varying extents, to the following underlying problems:

- Weak regulatory capacity, regulatory uncertainty[32]
- Concentration of ownership on part of both buyers and sellers in some regional markets
- Vertical integration of generation and distribution
- Barriers to entry for generation
- Small geographic markets due to transmission constraints, island grids
- Expensive, remote, and unreliable off-grid diesel generation
- Potentially inefficient wholesale market rules
- Absence of forward markets
- Potential anticompetitive behavior in wholesale market

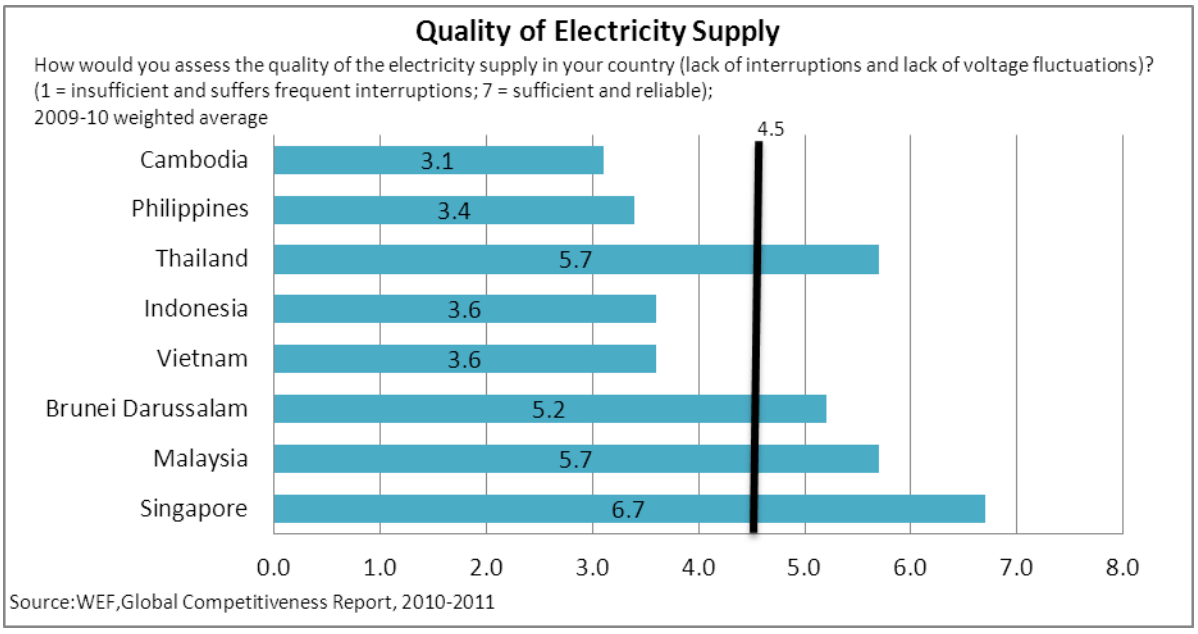
Though many of the above issues are interrelated, the first set of problems—**weak regulatory capacity and regulatory uncertainty**—are arguably at root of all of the other issues noted. Accordingly, we view these as likely root-cause constraints afflicting the Philippine electricity sector. Below, we review qualitative and quantitative aspects of the sector, and draw comparisons to experience and performance of other countries in the region.

The World Economic Forum's Global Competitiveness Report 2010-11 is the most recent cross-national survey available that also addresses multiple issues affecting business and private investment. Figure 2 below reports results for a World Economic Forum Global Competitiveness Survey question about the quality of electricity supply.

[31]"[U]nless supply is added to the Luzon grid soon, Metro Manila is headed towards daily rotating blackouts by 2011" (Wallace 2010:1).

[32]As one example, the Government's renegotiation of independent power producers' contracts in 2002 lowered the confidence of future investors in the predictability of the legal and commercial environment for power generation investments (Wallace 2010:6). Further, Wallace argues that the costs due to consequent deficiencies in power generation outweigh any likely savings in lower contract prices arising from the contract renegotiation.

Figure 2



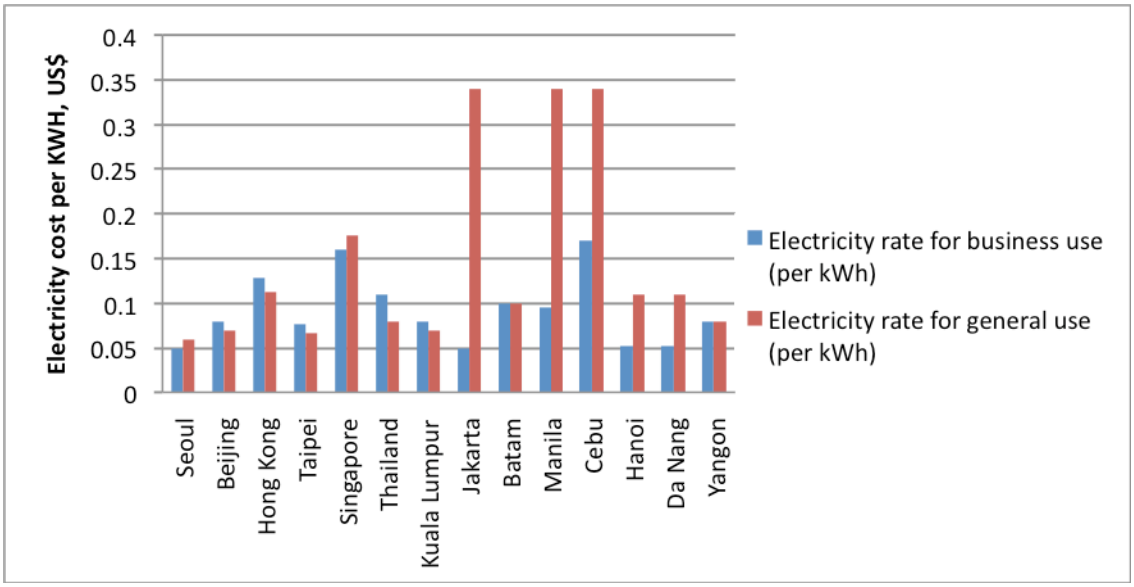
Only Cambodia has a worse score on this question than does the Philippines, which lies nearly one full point below the average of 4.5 for this group of countries. Globally, the Philippines ranked 101 out of 139 countries (i.e., at the 27th percentile).

A few years earlier, an investment climate and productivity survey conducted in 2003 (ADB 2005a:33)[33] found that electricity was a concern for 33% of firms surveyed.[34] Losses of production due to power failures amounted to 8% on average; this figure was higher than indicated by comparable surveys in Indonesia (where the frequency of power failures was reportedly similar). Small firms were found to experience proportionally larger losses than large firms due to power failures. The magnitudes of such losses are likely related to the reported prevalence of access (whether owned or shared) to backup power generators: 24% for small firms versus 55% for large firms. Considering the distribution of backup generators by sector, about half of electronics firms possess generators compared with 31% of food and food processing, 29% of textile firms, and 25% of garments firms. We lack cross-country comparative data to provide benchmarks for assessing whether these generator ownership rates are particularly high. These do seem high on their face, however, and in particular, are evidence of firms' (costly) behavior aimed at overcoming important bottlenecks and risks. This situation supports the contention that electricity is a constraint to these firms' business operations.

[33]This investment climate and productivity survey comprised a random sample of 800 establishments in the food and food processing garments, textiles, and electronics industries operating in major industrial centers of the Philippines.

[34]This compares to 18% of firms expressing concern about transportation infrastructure and 10% about telecommunications.

Figure 3: Electricity use for businesses and general use for fourteen Asian cities.



Source: World Bank World Development Indicators (2010)

Figure 3 depicts electricity costs per kWh for business and general use in fourteen Asian cities. At a cost of US$0.095/kWh for businesses Manila is only slightly above the average cost of US$.091. However at US$0.34/KWH for general use, Manila has costs for non-business uses substantially higher than the fourteen-city average of US$0.1468.

Table 1 below indicates the number of procedures, time, and costs associated with obtaining a permanent electricity connection and supply for a standardized warehouse. The Philippines rates distinctly better than regional averages with respect to all of these criteria, such that the time and cost associated with securing a connection do not appear to be problematic in the Philippines.

Table 1

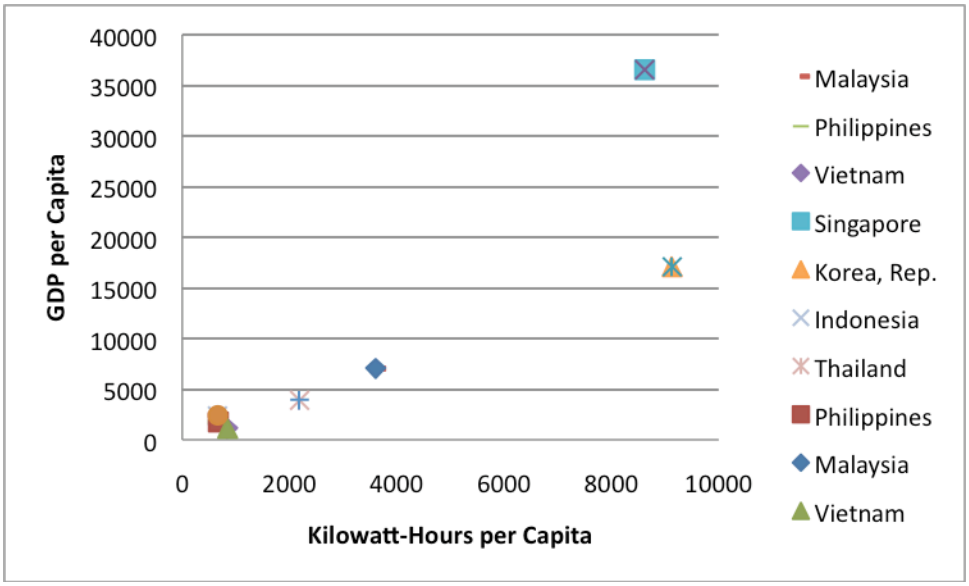
Getting electricity indicators

Procedures, time and cost to obtain an electricity connection

Economy	Procedures (number)	Time (days)	Cost (% of income per capita)
Philippines	**5.0**	**63.0**	**479.2**
Cambodia	4.0	183.0	3581.5
Indonesia	7.0	108.0	1350.0
Lao PDR	5.0	134.0	2734.3
Malaysia	6.0	51.0	55.8
P.R. China	5.0	132.0	755.2
Thailand	4.0	35.0	86.3
Vietnam	5.0	142.0	1536.0
AVERAGE	*5.1*	*106.0*	*1322.3*

Source: World Bank (2010:31-32)

Figure 4: Comparison of Energy per capita and GDP per capita

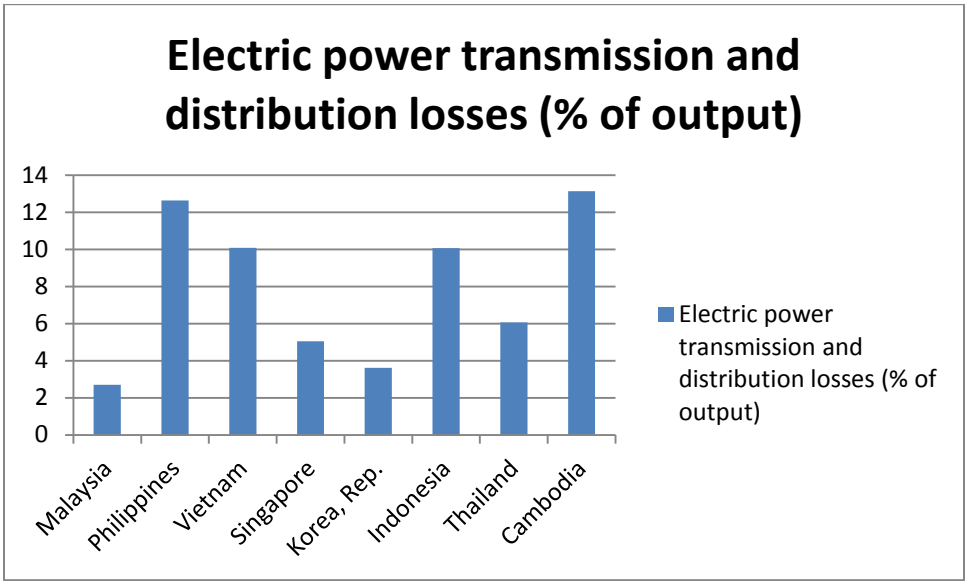


Source: World Bank World Development Indicators (2010)

Figure 4 shows 2010 data of GDP per capita and electricity use per capita in kilowatts per hour. We see that while the Philippines does score low, the proportions are not very different from those in Indonesia and Vietnam.

Figure 5 below shows that overall transmission losses for the Philippines are significantly above the regional average.

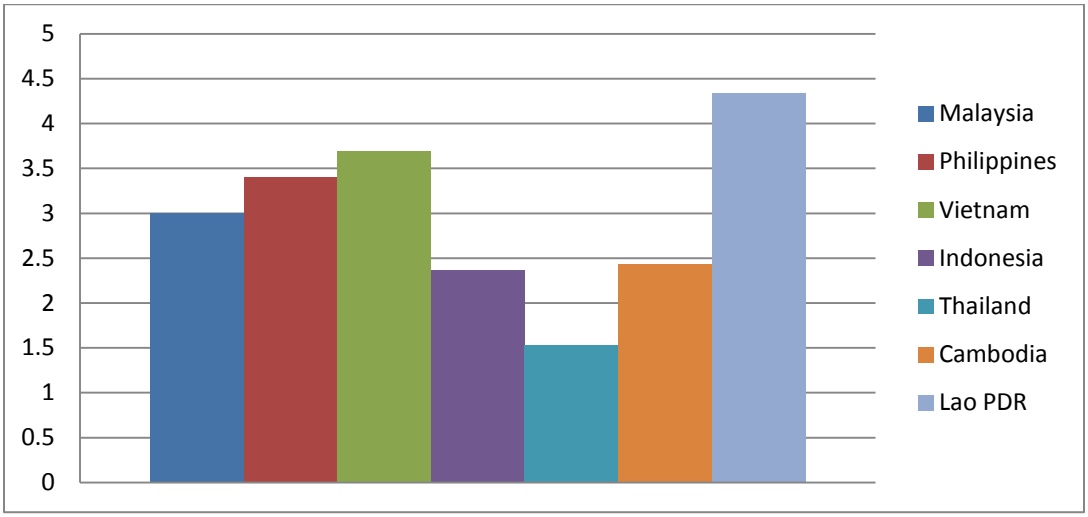
Figure 5: Electric power transmission and distribution losses (% of output)



Source: World Bank World Development Indicators (2010)

Losses in value by businesses due to power outages in the Philippines are also well above the losses in the Philippines neighbors (see Figure 6).

Figure 6: Value lost by businesses due to electrical outages (percentage of sales)



Source: World Bank World Development Indicators (2010)

If electricity was a constraint to growth. we would expect to see high shadow prices of energy cost and significant losses due to power outages; however, we see from Figure 3, Table 1, and Figure 6 that

- the *costs* to businesses—both financially and in time and trouble—of establishing an electricity connection,
- the *per-kWh cost* of electricity (at least in Manila), and
- the value lost due to power outages

are at or below the corresponding average figures for the comparators considered (though electricity cost to businesses in Cebu is the highest among those cities surveyed). These facts suggest, on balance, that electricity is not a binding constraint. At the same time, *quality of service* (see, e.g., Figure 2) is substantially below regional comparators which, in contrast, is evidence that suggests a significant constraint.

How important a consideration is quality and cost of electricity to the development of the Philippine economy? From Figure 4, we see that the Philippines exhibits only average energy intensivity among comparator countries; moreover, the fraction of GDP accounted for by manufacturing (typically more energy and electricity intensive than other segments of the economy) is historically modest and was only 20% in 2009 (World Development Indicators). The fact of low energy intensivity needs to be interpreted carefully as it *may* be a manifestation of the principle that "agents less intensive in a binding constraint should be more likely to survive and thrive" (or, "we find camels, and not hippos, in the desert"), after Hausmann, Klinger, and Wagner (2008:43-44). More energy-intensive manufacturing firms, so the story goes, would have been less likely in the first place to choose the Philippines as a venue to do business, given problems with poor-quality electricity supply. Given the many factors that influence firms' decision making on location and production decisions, however, we should be extremely cautious about drawing conclusions based on one select consideration.

So, electricity is but one factor of production even for an electricity-intensive enterprise, and such enterprises comprise a relatively small fraction of Philippine GDP. Given the reach and gravity of the other constraints discussed here, it is difficult to make the case that the electricity sector currently constitutes a binding constraint on investment and growth. A reform agenda *within* the sector would anyway begin with reforms aimed at improvements in quality, transparency, and certainty of regulatory outcomes as a first step toward improving sector performance. Such a reform program might be one individual component of a broader suite of governance reforms.

2. Transport

The archipelagic character of the Philippines' geography makes the efficient provision of transport infrastructure essential. Transporting goods and people across the country's islands requires effective and cost-efficient inter-modal operations with air, sea, and road transport systems. Efficient transport infrastructure facilitates access to markets and resources, and enhances productivity through better linkages across the supply chain. The ability to attract foreign investments and boost international competitiveness depends on the adequacy and quality of transport infrastructure. The lack of reliable and efficient transport infrastructure limits internal and external commercial links, increases business costs, deters investment expansion, and constrains economic growth.

Table 2: Infrastructure Ranking in the Global Competitiveness Report 2010-2011

Countries	Overall Infrastructure Ranking	Quality of overall infrastructure	Quality of roads	Quality of railroad infra	Quality of port infra	Quality of air transport infra
China	50	72	53	27	67	79
India	86	91	90	23	83	71
Indonesia	82	90	84	56	96	69
Korea	18	12	14	10	25	22
Malaysia	30	27	21	20	19	29
Philippines	**104**	**113**	**114**	**97**	**131**	**112**
Thailand	35	46	36	57	43	28
Vietnam	83	123	117	59	97	88

Source: World Economic Forum, 'The Global Competitiveness Report, 2010-2011. Note: Ranking out of 139 countries.

The low quality of services in transport infrastructure has emerged as a key impediment to growth and has constrained efforts to enhance the country's economic competitiveness (ADB 2007a:25). In 2011, a competitiveness ranking done at the World Economic Forum on basic infrastructure placed the Philippines, compared to neighboring countries, at the bottom of most of the categories (see Table 2). Based on the 2010-2011 World Economic Forum's Global Competitiveness report, Philippines ranked 104th behind Indonesia and Vietnam. Improving infrastructure quality will improve the country's environment for investment and long-term economic growth. Clarete and Brucal (2010) estimated that total inward FDI flows into the Philippines would increase by approximately 88 percent if the country's road infrastructure level were equivalent to Thailand or

Singapore. If road conditions were brought to the level of Indonesia, the resulting gross capital formation would be 36 percent higher.

Efforts to promote tourism and attract more foreign tourists—which the government projects to double from the 3 million visitors it attracts annually—is also constrained by access issues to tourist destinations. Around 98 percent of visitors to the country enter by air. The more than 8 million overseas Filipino workers (OFWs), whose remittances help sustain consumption in the Philippines, also increasingly rely on airline options. While destination infrastructure has somewhat improved, there is still the need to upgrade a number of airports and seaports, improve road networks, and address inter-modal (air, sea, and land) transport connections. Exports of high-value commodities (72 percent of total export earnings) are also moved by air. Similarly, agricultural productivity depends on farm-to-market roads and lower shipping costs. Inter-island shipping facilitates 98% of domestic inter-island trade—roughly 80 million metric tons of cargoes annually including fishery products. Ports are important for long-distance logistical needs and moving agricultural products and other goods from the farms in Mindanao to Visayas and Luzon.

Logistics performance is comparable with the rest of the region (see Table 3: Logistical Performance Index ranking, 2010). The Philippines' performance and quality of its transport network as measured by the World Bank's Logistics Performance Index (LPI) improved from a score of 2.69 in 2007 to 3.14 in 2010. The country ranks 44th (out of 155 countries) in the World Bank's Logistical Performance Index (LPI) improving from its 65th place in 2007. The Philippines lags behind Thailand and Malaysia in trade logistics performance but ranks better than Vietnam and Indonesia. The quality of the country's trade- and transport-related infrastructure is at about the same level as Vietnam and Indonesia but still lies behind that in Thailand and Malaysia. However, 100 percent of respondents to the LPI survey, which include logistics professionals and companies, rated the quality of roads and rail infrastructure as low/very low while 50 percent rated the quality of airports as low/very low.

Table 3: Logistical Performance Index ranking, 2010

Country	LPI	Customs	Infra	International shipments	Logistics competence	Tracking & tracing	Timeli-ness
Malaysia	3.44	3.11	3.5	3.5	3.34	3.32	3.86
Thailand	3.29	3.02	3.16	3.27	3.16	3.41	3.73
Philippines	3.14	2.67	2.57	3.4	2.95	3.29	3.83
Vietnam	2.96	2.68	2.56	3.04	2.89	3.1	3.44
Indonesia	2.76	2.43	2.54	2.82	2.47	2.77	3.46

Source: World Bank's Logistical Performance Index (LPI).

The Philippines is underinvesting in transport infrastructure. After peaking at 1.8 percent of GDP in 2000, the budget allocation for road infrastructure has been on the decline to around 0.9 percent in 2010. This trend follows the regional pattern as the Philippines along with Malaysia and Thailand continued to exhibit significant contraction in transport investment during the period of 2006-09 (see Figure 7). Public spending for transport infrastructure is around 97 billion pesos in 2010 or about 38 percent of total infrastructure spending, down from a peak of nearly 60 percent in 1989. In 2009, public spending by the national government accounted for about 80 percent of total spending in transport infrastructure. Trends in public spending in transport infrastructure are proportional to the government's revenue performance. The World Bank's most recent Public

Expenditure Review noted that the overall quality and condition of the country's national roads reflects underfunding of the road sector. It also noted inefficiencies in the allocation of public funds in the transport sector.

Figure 7

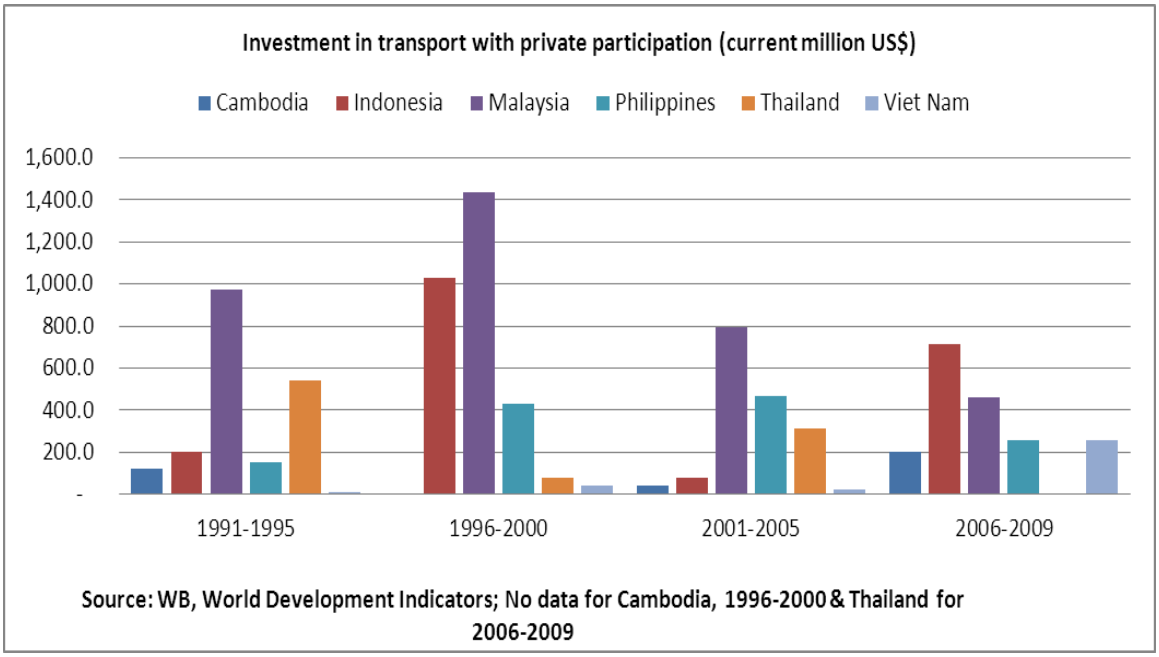


Table 4: Composition of public investment in infrastructure, 2010

Transport	97,175,253
Water	2,559,772
Telecommunications	-
School Building	7,864,950
Flood Control	9,973,045
Energy	18,549,812
Others	118,781,067
Total Infrastructure Outlays	254,903,899

Source: Department of Budget and Management

Table 5: Sources of investment in transport infrastructure (in thousands of pesos)

	2007	2008	2009
National	55,899,156	68,916,440	42,333,674
Local	1,889,464	1,093,409	867,902
GOCC	10,028,217	9,739,826	4,932,223
Private*		14,009,499	4,573,171
Total	67,816,837	93,759,174	52,706,970

Source: Department of Budget and Management

Funds available for road maintenance are likewise deficient. Maintenance of national roads is partly financed by a Special Road Support Fund (SRSF) taken from the Motor Vehicles User Charge (MVUC) and allocations from general appropriations. These funds only cover around half of the over 19 billion pesos needed in annual estimated maintenance costs. Not all of the available funds go to road maintenance, however, and such funds are often realigned or redirected to other activities, such as for cleaning and beautification.

Transport infrastructure development is highly concentrated. The National Capital Region has the highest road density with 7.3 kilometers of road per square kilometer while the second highest, Northern Mindanao, only has 1.2 kilometers (Llanto 2010). There are seven limited-access toll roads operating or under construction in the country, all located in Central Luzon. The international seaports in Manila continue to have the lion's share of traffic and add to the burden of an already congested road network in the metropolis. The Manila airports have the largest share of international air traffic. Intercity rail outside of the capital region is virtually non-existent. Rail extensions to the north connecting Manila to Clark, Pampanga and to the south connecting to Bicol are under development. This concentration leads to high levels of congestion in Metro Manila and underinvestment in the rural sector.

Quality of road infrastructure is generally poor. While road density is on a par with the rest of the region, road conditions are below quality standards with only 23.8% of the total road network (local and national) being paved roads, far lower than in Thailand (82%), Malaysia (75%), Indonesia (48%), and even Vietnam (35%). The quality of municipal and provincial roads is poor with only 34 percent and 25 percent paved, respectively. Barangay roads are particularly bad with only 7 percent paved. It would seem from these data that investing in road infrastructure at the local (provincial, municipal, and barangay levels) would be more beneficial than investing at the national road network. A World Bank study noted that poor road conditions leads to vehicle operating costs and intercity freight rates in the Philippines that are over 50% higher than those in Indonesia and Thailand. The World Bank also estimated that basic vehicle running costs for cars on the road increased by 136 percent from 1999 to 2005. A 2000 study by the National Center for Transportation Studies estimated losses due to congestion in Metro Manila alone were around P100 billion or 4.6% of GDP (World Bank 2009a). An overall improvement in the quality of the country's road network, as estimated by the World Bank, would result in a net benefit of 0.3 percent of GDP in 2009, the benefits accruing from reduced vehicle operating costs but not including savings in travel time and reduced risk of accidents.

Table 6: Road Network Conditions by Administrative Classification, 2009

Classification	Length (km)	Paved Road Ratio
National Roads	29,369	0.70
Provincial Roads	31,284	0.25
City Roads	7,052	0.77
Municipal Roads	15,803	0.34
Barangay Roads	121,989	0.07
TOTAL	205, 497	0.23

Source: DPWH (2009). Road Infrastructure Development in the Philippines

The quality of national rail systems is generally poor and heavily subsidized. The national railway system mostly operates a passenger service and is heavily dependent on government subsidies for its operations. Lack of rolling stock, insufficient capacity, low ridership, an inefficient ticketing system and rundown stations continue to plague the Philippine National Railways. Passenger traffic on the three light rail systems in Metro Manila already exceeds the maximum capacity leading to congestion in several terminals.

Table 7: Capacity utilization in major international airports, 2010

Airport	Passenger (int'l and dom)	Capacity (int'l and dom)	Utilization
Manila (NAIA)	25,720,000	27,500,000	93.53%
Clark (DMIA)	654,229	2,000,000	32.71%
Cebu	6,345,920	4,500,000	141.02%
Davao	2,679,777	2,000,000	133.99%
Laoag	180,010	1,000,000	18.00%

Source: Civil Aeronautics Board

Current airport infrastructure falls below international standards. While the number of airports is comparable with the rest of the region, only 32 percent have paved runways and only four of these have runways are more than 3000 meters in length. Most airports fall well below the standards of modern, international-standard airports. Few airports are equipped for night operations, most need navigational and safety improvements, and most do not have sufficient runway space. The U.S. Department of Transportation's Federal Aviation Administration (FAA) lowered the Philippines' safety rating from Category 1 to Category 2 which means that the country falls below minimum international standards set by the International Civil Association Organization (ICAO) in such areas as technical expertise, trained personnel, record-keeping, and inspection procedures.

Traffic at the country's major international airports is nearing levels at which congestion occurs. A JICA study concluded that the country's airport capacity is inadequate to meet the projected increase in air traffic. The international airports in Cebu and Davao have already exceeded their maximum capacity. Passenger traffic at the country's premier international gateway, the Ninoy Aquino International Airport (NAIA) in Manila, already exceeds terminal capacities, particularly for two of its three terminals. Daytime flight traffic is also already above acceptable limits. The 20-year-old NAIA has little room for expansion given its limited runway capacity, and is expected to reach full capacity by 2015. While a new passenger terminal has been added, its use has not been optimized. A cargo terminal has yet to be built. The former Clark Air Base north of Manila,

covering 2,400 hectares with a 3,200-meter long runway and associated taxiways, has the potential to be an alternative international gateway. However, there are no efficient transport connections to Clark, which 64 kilometers away from Manila, except through the North Luzon Expressway (NLEX).

Table 8: Manila international airport terminal, 2010

Terminal	Terminal capacity (millions)	Passengers (millions)	Utilization (%)
1	4.5	7.3	162
2	7.5	8.9	119
3	13	8.1	62
Domestic	2.5	1.42	57
Total	**27.5**	**25.72**	**94**

Source: NAIA.

Manila sea ports are likewise congested. The International Port in Manila (MICT and South Harbor) are already experiencing congestion. More than 6000 foreign containers (TEUs) transit daily through MICT and South Harbor (roughly 2.8 million TEUs annually), not counting the non-containerized (break-bulk) cargoes. Passenger and cargo traffic is heavily clustered in the Manila ports contributing to extreme congestion, traffic and industrial concentration in Metro Manila. Competition among port operators is limited, especially in foreign containerized cargoes. Currently, the bulk of traffic is managed through the Manila International Container Terminal operated by International Container Terminal Services, Inc (ICTSI) which also manages the Subic and Cagayan de Oro ports. The only other major player is Asian Terminals Inc (ATI) which runs South Harbor in Manila and the Batangas Port.

The Philippines has almost doubled its port capacity but several ports are underutilized. Outside of the main international ports in Manila, the Philippines possesses three major international seaports, i.e., Batangas port, Subic Port and Mindanao International Container Port in Cagayan de Oro. However, they all remain underutilized with few ship calls and a low volume of cargo. Subic, for example, was completed in 2006 at a cost of $215-million. Today, its annual volume is a little over 21,000 TEUs (Twenty-footer Equivalent Unit) which represents only small percentage of the 600,000 TEU capacity of the new port. The Batangas port has the capacity to handle 400,000 TEUs but actual traffic is only 28,000. Used properly, each of the new ports has the potential to reduce costs and improve competitiveness.

Table 9: Container traffic by port

International Port	Annual Capacity (TEUs)	Actual Traffic (TEUs)
Manila (MICT, South Harbor)	2,320,000	2,874,807 (2009)
Subic Terminals 1 and 2	600,000	21,623 (2009)
Batangas International Port	400,000	28,000 (2010)
Mindanao Container Terminal (Cagayan de Oro)	270,000	118,664 (2009)

Source: Philippine Ports Authority

Domestic transshipment costs remain high. According to a JICA report, for instance, current shipping services are not suitable for the transport of agricultural products from Mindanao to Manila because of unstable service frequency, long transit time due to the slow speed of vessels

assigned, and limited berth capacity of the North Terminal of the Manila port. Compared to domestic shipping charges in Indonesia, the Philippines is 250% higher on a per-nautical-mile basis. Customs charges, terminal fees, stevedoring costs, and other documentary cost add up to the high port charges. This is partly due to the fact that the Philippine Ports Authority (PPA), the regulatory body that oversees the country's ports, relies on charging cargo handling rates to generate revenue and support its operating costs as well as investments in the development of new ports. Consequently, cargo handling rates remain high and have increased almost annually.

Table 10: Costs to Export, by Item by Country

Cost Item	Philippines	Thailand	Indonesia	Vietnam
Inland transport	$85.00	$100.00	$168.00	$130.00
Terminal Handling Charge	95.87	74.00	95.00	60.00
Cargo handling charge	51.54	37.00	33.75	79.00
Wharfage	5.82	21.74	0.0	1.60
Documentation	42.00	16.00	45.00	12.50
Customs Clearance	45.00	72.00	23.13	50.00
Miscellaneous	40.00	37.00	12.50	1.88
Total	**365.23**	**357.74**	**377.38**	**334.98**

Source: Center for Research and Communication estimates.

RO-RO provides considerable cost savings compared to conventional inter-island shipping. The development of the Philippine Nautical Highway system, using roll-on/roll-off (RORO) vessels, have somewhat reduced inter-island transport costs and transit times of goods, and the frequency of deliveries has increased. The introduction of RORO has essentially eliminated cargo handling charges, wharfage fees and cost of loading and unloading of cargo. An ADB 2010 study assessed the use of RORO transport, and found that it has reduced transport costs by as much as 68 percent. A study done by the Center for Research and Communication (2006) found that the cost of transporting goods via RORO generated cost savings of approximately 40% compared to conventional shipping. Cost reductions are not in transport costs per se, but in the structural change of the commodity flow (Kobune). Suppliers can reduce the number of distribution centers and this leads to the further reduction of the cost of distribution by reducing the number of warehouses and volume of stock. The RORO network has also increased passenger traffic particularly for those unable to afford air travel and conventional long-haul transport. Today, there are 183 RORO routes being served by 45 RORO shipping companies operating more than 186 vessels. However, port facilities needed to accommodate RORO vessels are minimal compared to traditional ports, and access roads to RORO ports need to be upgraded. Also, RORO vessels can only accommodate small volumes, with larger cargoes still dependent on long-haul shipping.

Private sector participation is needed to bridge financing gap. Fiscal constraints limit the ability of government to meet the financing needed to address infrastructure deficiencies. Lack of public financing necessitates the participation of the private sector in transport infrastructure development. The Philippines has a framework in place to enable private participation in infrastructure development. The Build-Operate-Transfer (BOT) Law (Republic Act No. 7718, as amended in 1994), provides the public-private partnership (PPP) framework for private sector participation in infrastructure projects. The BOT Law has been instrumental in increasing investments in infrastructure such as power, telecommunications, airports and utilities. The Aquino administration government has made public-private partnerships (PPP) a flagship program and it is a major feature of the 2011-2016 Medium-Term Philippine Development Plan.

However, there are deficiencies in the BOT Law as well as other related policies on PPP that need to be addressed to effectively stimulate private sector investments. For one, there has been a preference for unsolicited bids in the past that are often not very transparent and marred with controversies. Unsolicited bids often go unchallenged due to the prescribed timelines not being sufficient to facilitate compliance, and also to the high cost of coming up with a competing proposal. Without effective competition, the government is unable to verify the best price and quality of the proposed project. In several cases where infrastructure projects followed the unsolicited route, these projects resulted in significant delays and cost overruns (e.g. NAIA Terminal 3, MRT Line 3, and the protracted Laiban Dam, to name a few). Several projects have not reached financial closure, construction, or viable operation, and a number have resulted in costly renegotiations and even government bailouts. There is need to provide clearer rules for unsolicited bids under the BOT Law and guidelines for joint ventures.

Pursuing the solicited and competitive route to PPP project requires technical capacity to put together a credible proposal and prepare tender documents. However, the government lacks the technical and financial capability for project identification, design and preparation, and for managing the negotiating process with project proponents. Limited technical capacity to plan and prepare documents for potential BOT and PPP projects has resulted in delays in project implementation and sometimes outright cancellation.

There is no integrated planning for transport infrastructure. In the 2009 study of the Philippines' national transport infrastructure, the World Bank concluded that there is no integrated system for planning, budgeting, building and operating transport infrastructure. Coordination between line agencies and between national and local government is poor, and there is no system of inter-modal transport infrastructure. Transparency and accountability systems are weak, as regulatory and operational responsibilities for the provision of transport services are not separate. The Civil Aviation Authority of the Philippines (CAAP), the Light Rail Transit Authority (LRTA), and the Philippine Ports Authority (PPA) are each both *regulators* and *operators* of national airports, metro light rail, and national ports, respectively. The regulation and decision-making in these transport sectors are often influenced by the parochial vested interests of these institutions. The responsibility of different implementing agencies overlap, and, even when institutional responsibility is clearly defined, implementing agencies—particularly at the local level—lack the knowledge and resources to perform their functions effectively.

Coordination is also needed to resolve right of way acquisition (ROWA) issues that are major impediments to development of transport infrastructure. Many vital infrastructure projects require right of way acquisition (or ROWA) for their complete implementation, particularly road and toll projects. Commuter rail development, light rail development, the development of a national railroad network, and land-side expansion of Manila's port terminals also confront ROW problems. Transport projects vexed by ROWA problems often result to prolonged negotiations and delays in the implementation of infrastructure projects. These delays in many cases run for years and even decades for some projects. The economic consequences of these delays are manifested in (a) higher actual project costs and (b) opportunity costs—i.e., non-utilization of the infrastructure projects that could have positively contributed to economic growth and development. Infrastructure projects are often advertised, bid out, and awarded prior to clearing of right of way. In the case of the Tarlac-La Union-Pangasinan Expressway (TPLEx) Project the necessary ROW had not been acquired even after the toll concession agreement was signed in 2008. The project was delayed by almost two years even after substantial ROW was acquired. The implementation of the third section of the SLEX Rehabilitation and Extension Project (Calamba, Laguna to Sto. Tomas, Batangas),

awarded in 2006, was likewise delayed by more than two years because of unresolved ROWA and relocation problems.

The government often resorts to expropriation to resolve ROWA cases. The problem is that the expropriation process proceeds at snail's pace due to judicial delays in the determination of just compensation and in the issuance of writs of possession (WOP). Judicial delays in the titling of acquired properties and in the issuance of writs of possession lead to slow expropriation of these ROWA. The slow implementation of resettlement of informal settlers and in providing and administering relocation sites, which is the responsibility of local governments, also contributes to the delays. Differences in the valuation of property and determination of just compensation and the lack of public funds for relocations are also factors. With the government implementing thousands of infrastructure projects every year, estimates of ROWA cases easily run up to at least 10,000 cases, the majority of which remained unresolved.

Governance issues afflict the transport infrastructure sector. As is characteristic of natural monopolies and highly regulated utilities, transport infrastructure is prone to rent-seeking because of the large rents that it generates. The high cost of infrastructure projects and level of investment risks also make them vulnerable to corruption, collusion, and fraud. Infrastructure planning and implementation is heavily politicized and is often subject to interference by political leaders and their patrons. For instance, the World Bank observed that legislators, district engineers, and local contractors have significant influence over the selection and procurement of road projects. Budgetary allocation for transport infrastructure is often subjected to congressional insertions that are not aligned with the government's overall infrastructure plan. The Priority Development Assistance Funds (PDAF), which is major source of funds for the construction and maintenance of local roads and bridges, is beset with irregularities and inefficiencies. Budgetary decisions often lack transparency and are marred by conflicts of interest. About 75 percent of respondents to the logistics performance index survey cited solicitation of side payments as a source of major delay. According to the 2009 survey of enterprises on corruption by the Social Weather Station (SWS), around 20 percent of the cost of public contracts is diverted to pay bribes, up from 15 percent in 2005. In the SWS surveys, the Department of Public Works and Highways has consistently placed in the top 3 most corrupt institutions in the country. Addressing these governance weaknesses will be crucial in ensuring investor confidence and pursuing efficiency in public spending in transport infrastructure development.

The ADB 2007 constraints study concluded that the provision of transport infrastructure is a binding constraint to economic growth. However, infrastructure constraints are rooted in the lack of public financing and various institutional weaknesses. Public financing for the construction and maintenance of provincial, municipal and barangay roads, particularly outside of the National Capital Region, depends on the national government to improve its revenue performance. Poor planning, budgeting and implementation contribute to low quality infrastructure, underutilized facilities, geographical concentrations, and poor inter-modal connections. Moreover, the combination of regulatory and operational functions in one agency, the lack of transparency and competition in obtaining private sector participation, and the lack of coordination among and across the different agencies and levels of government inhibit the rational development of the country's infrastructure system. Private financing for large-scale transport infrastructure projects like toll roads, railroads, airports and seaports is, in principle, adequately available. However, simplifying the institutional maze and related legal obstacles to infrastructure development could improve the climate for investments in transport infrastructure.

The high degree of corruption in the planning and implementation of transportation programs coupled with inefficient regulatory fragmentation within the transportation sector inhibit growth within the Philippines. However, these weaknesses of the sector are seen as the effects of the root cause, binding constraint of *poor governance,* rather than as constraints themselves.

D. Human capital

Numerous studies have focused on the role of human capital in long-run economic growth since the endogenous growth theory's better explanation of observed cross-country growth patterns compared to that of the neoclassical growth model. Romer's (1986) theoretical framework highlights externalities in the accumulation of knowledge that raises the overall factor productivity, while Lucas (1988) models externalities in human capital accumulation as a source of permanent, long-run economic growth.

Formal education is widely accepted as an important mechanism for knowledge and skills accumulation or human capital formation in general. However, despite human capital development's perceived importance to economic growth, empirical evidence provides inconclusive or mixed results due to econometric problems. Some of these modeling issues include how to best measure human capital, specification of regression equations and methods used, sample and time period selection, and direction of causality[35].

Notwithstanding empirical challenges, there is wide recognition of the complementarity between human capital and other factors in enhancing productivity and ultimately achieving higher and sustained economic growth. This section presents a re-assessment of the human capital dimension in order to determine if it is a binding constraint to broad-based growth in the Philippines. To accomplish this, we begin by benchmarking the Philippines' performance in human capital investment against that of comparator countries, and examine various education and labor market outcomes.

Philippines exhibits low public spending on education similar to most of its regional peers and spent the least on per-student basis across all education levels. On average, Philippines (along with Indonesia and Singapore) invested only about 3% of its national resources in education in the previous decade of 2000-2010. Only Malaysia, Thailand, and Vietnam managed to invest more than the group average of about 4%. On a per-student basis, Philippines spent the least on all education levels and ranked at the bottom in terms of per-student spending on tertiary education in contrast to most of its Asian neighbors. This low public spending on education in the Philippines especially on the tertiary level poses a concern given increasing enrollment trend from 19% in 1994-95 to 31% in 2005-2006 in state universities and colleges (SUCs) compared to declining enrollment from 25.6% in 1994-95 to 15% in 2005-2006 in private, sectarian higher educational institutions. The subsequent result of higher student-teacher ratios may have negative implications for the quality provision of educational services. Further, as documented in 2010 WB Philippine Skills report, "only 30% of families in the country can truly afford higher education for their children when choosing public institutions, and only 10% can afford private higher education." Indeed, investment in college education is becoming more and more out of reach for most Filipino families even with the government's financial assistance scheme administered by the Commission

[35]For a survey of literature on the link between education and growth in East Asia, see Permani (2009).

on Higher Education, that proved to be limited with less than 3% of the tertiary student population covered in 2005-06 and the maximum amount of assistance falling short to cover even the cost of tuition.

Figure 8

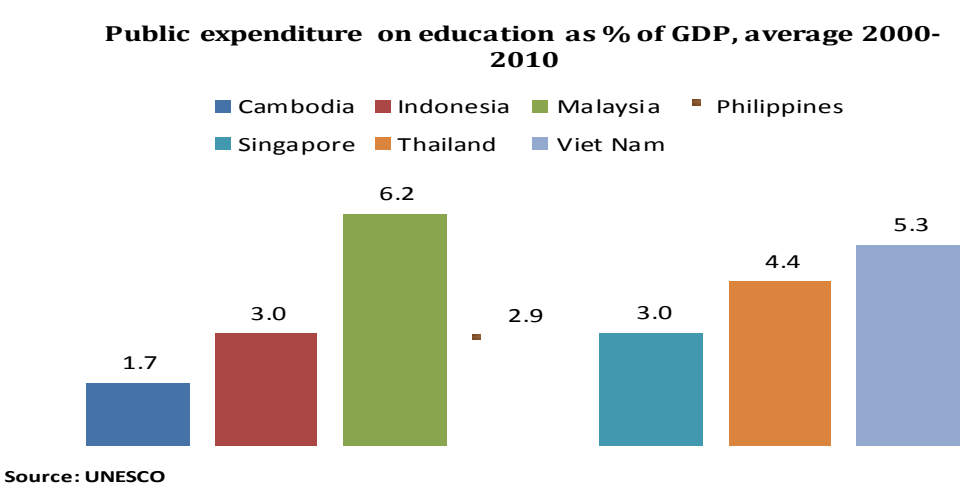


Table 11

Average Expenditure per student, 2000-2010 (% of GDP per capita)			
Countries	**Primary**	**Secondary**	**Tertiary**
Cambodia	6.06	6.36	43.74
Indonesia	15.74	13.93	16.15
Malaysia	14.59	21.31	79.31
Philippines	11.06	9.79	13.86
Singapore	8.95	13.62	26.86
Thailand	17.63	17.99	28.80
Vietnam	19.69	17.26	61.67
Source: WB, World Development Indicators			

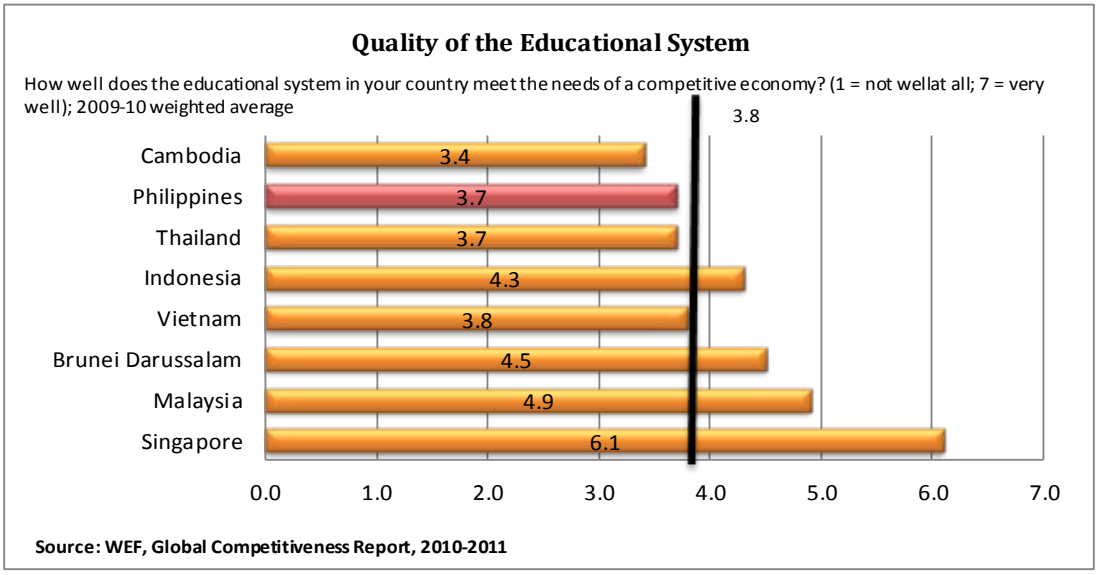
While the perceived quality of the educational system is not closely associated with the level of spending on education for some Asian countries, this association obtains for the Philippines. Despite Singapore and Indonesia's low spending on education as a fraction of their national resources, based on the 2010 WEF's Global Competitiveness Report,[36] the quality of their educational systems were ranked above the mean score in terms of their responsiveness to countries' needs to be competitive. In contrast, Philippines' low spending on education, slightly below the weighted average, may have compromised the quality of its educational system.

[36]For information on WEF's GCI data treatment and score computation, see the 2010 Global Competitiveness Report, pages 59-65.

Philippines, along with Cambodia and Thailand, ranked below the mean score in survey respondents' assessment of the quality of the educational system.

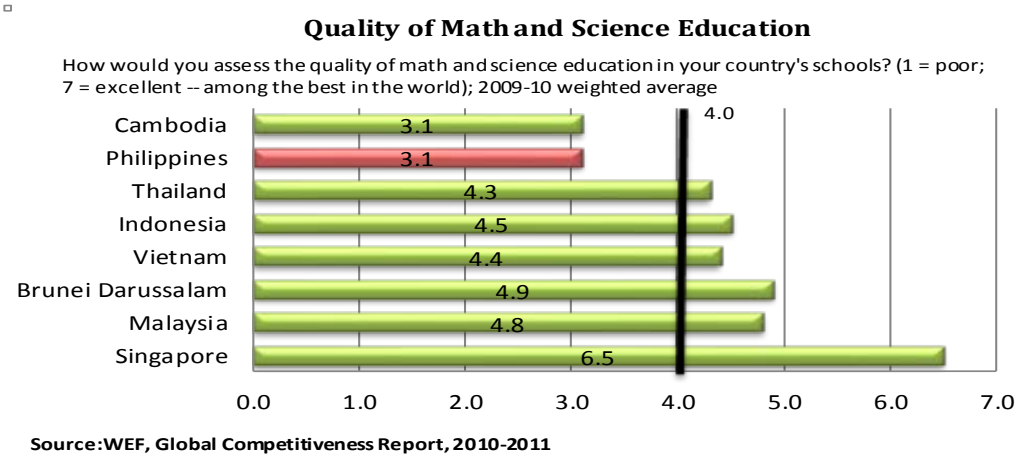
As documented in the 2010 WB Philippine Skills report, examining the quality of educational input indicators clearly points to deficient quality of teachers. Across both public and private higher educational institutions, most faculty members do not have advanced degrees, i.e., in 2004-05, only 31% has Master's degrees and only 9% had doctoral degrees. In terms of internal efficiency indicators such as graduation rates, the 2010 WB report noted that it remains an open question if the higher graduation rates in the Philippines reflected higher-quality graduates, or instead a lowering of graduation requirements or standards. It further articulated that the best test of quality of higher education is its relevance to labor market needs.

Figure 9



Philippines may not be well positioned to compete in today's "knowledge-based" global economy. In terms of fields of study deemed necessary to compete in today's "knowledge-based" economic order, Philippines—along with Cambodia—ranked at the bottom; these were the only two ASEAN countries to score below the mean of 4.0 on the WEF's 2010 Global Competitiveness Report's assessment of the quality of math and science education. This perception may influence the low capacity for innovation in the Philippines as it also ranked below the mean on the perception survey among the private sector respondents on how their companies obtain technology in the Philippines, i.e., not by conducting basic research or creating new products and processes, but rather by technology licensing. Further, as documented in the 2010 WB's Philippine Skills Report, the overall pass rates for professional board certifications have been declining from about 41% in 1985 to 32% in 2005.

Figure 10



Source:WEF, Global Competitiveness Report, 2010-2011

Despite a high level of "nominal" education in the Philippines, the high level of unemployment among even the educated may be attributed to several factors. As shown in Table 12, although overall unemployment rate increased from 6.8% in 2008 to 7.1% the following year, the pool of unemployed workers are not those with very little or no schooling. As noted in the 2010 WB and 2011 Philippine Education reports, the high rate of unemployment among higher education graduates may be voluntary as college graduates tend to wait longer to find high-paying formal sector jobs due, perhaps, to high reservation wages of these graduates. The 2010 WB Philippine Skills report also argued that the explanation can be traced to the poor quality of education, i.e., "more than half of graduates end up not being able to practice the profession they were trained for and either they chose not to work or do not finally get hired due to skills mismatch" (p.73).

Table 12

Unemployment Rates by Education Level		
Educational Level	**October 2009 (in %)**	**October 2008 (in %)**
No Grade Completed	**2.15**	**1.98**
Elementary	**3.00**	**2.93**
Not Completed	**2.57**	**2.71**
Completed	**3.42**	**3.14**
High School	**8.53**	**7.84**
Not Completed	**6.73**	**6.27**
Completed	**9.44**	**8.64**
College	**9.74**	**9.99**
Not Completed	**10.92**	**11.37**
Completed	**8.61**	**8.75**
Total	**7.12**	**6.81**

Source: Philippine National Statistics Office,Oct 2009 & 2008 series, Labor Force Survey

In the 2007 Asian Development Outlook report, it was noted that Asian countries are producing educated workers faster than their economies can provide jobs. In most occupations examined, Filipino workers are found to be the most educated which, to some extent, suggests that education

is being acquired for reasons independent of job requirements or the needs of the current structure of the economy.

Similarly, in the Arangkada report (American Chamber of Commerce in the Philippines 2010), business leaders articulated that creating new jobs and training workers with skills needed in existing and emerging industries are the two most serious challenges for the Philippine economy in the coming decades. There is also growing awareness not only among the private sector but among education officials as well of the need to better align or match the education and training curricula to job requirements. The business community highlighted the increasingly poor quality and inadequate skills of workers in the area of math, science, logical thinking, engineering, and even command of the English language.[37] In effect, the human capital problem in the Philippines seems not to be about the availability or quantity of educated workers, but rather the *quality* of those workers in terms of their having the skills required to adequately meet the demands of emerging "knowledge-based" employment opportunities in the service sub-sectors of the economy.

The Arangkada report's conclusion notwithstanding, the evidence on lack of qualified workers as a binding constraint is actively debated. The World Economic Forum (2011) Global Competitiveness Report found that an "*inadequately educated workforce*" was only the *eighth* most problematic factor for doing business (cited by 2.3% of businesses surveyed), well below the more frequent responses of

1. Corruption (22.7% of businesses surveyed)
2. Inefficient government bureaucracy (18.3%)
3. Inadequate supply of infrastructure (15.4%)
4. Policy instability (11.8%)
5. Tax regulations (9.2%)
6. Tax rates (5.1%)
7. Restrictive labor regulations (4.0%)

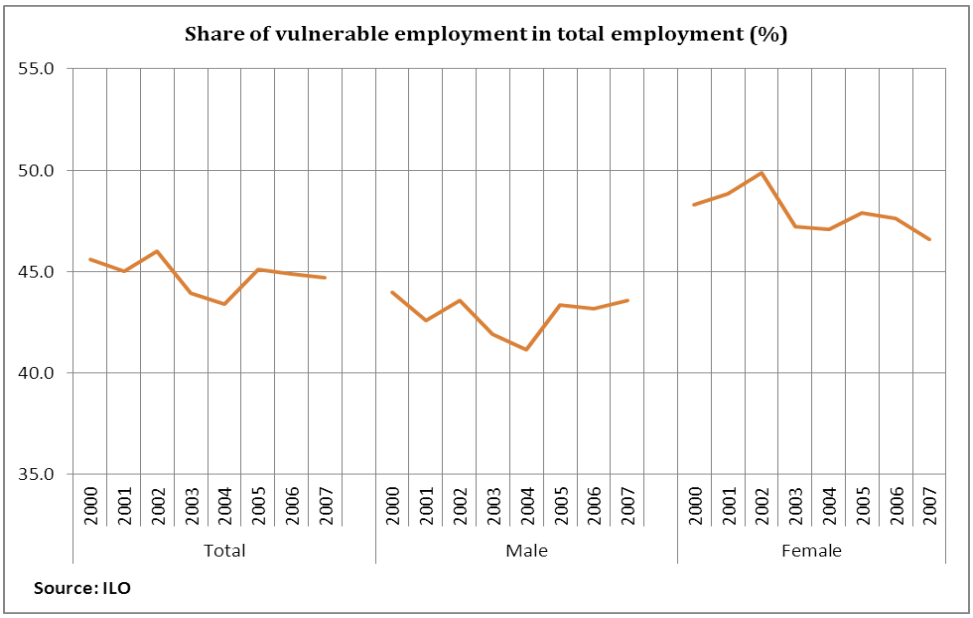
While finding qualified workers may be difficult, it does not appear to be pivotal in discouraging investment and business entry in the Philippines.

The effect of human capital on total factor productivity (TFP) growth is apparent in cross-country analysis as well as in the specific case of the Philippines. The IMF's 2011 "Selected Issues" paper (IMF 2011) finds in cross-country panel regressions that TFP growth is correlated with human capital. Cororaton (2005) noted that various studies on TFP conducted in the Philippines point to the same general conclusion of negative TFP growth. In Cororaton's study, he estimated the contribution of the quality of labor in explaining TFP. The study articulated that in spite of "increasing share of skilled labor to total, loosely defined as those who have at least finished high school, its contribution to TFP growth to have declined over time." He further articulated that this finding could imply a number of things, among the critical ones including "deterioration in the quality of education necessary for productivity improvement; deterioration in the marginal productivity of workers with higher education and in the efficiency of education itself; and brain drain due to the surge in the number of Filipinos working abroad." He also highlighted the noticeable movements of labor from agriculture to the service sector and found efficiency improvements from the movement of labor out of agriculture, generating spillover effects.

[37]The decline in English proficiency was attributed to the 1974 Bilingual (English-Tagalog program) education policy (2007 Asian Development Outlook, chapter on Education and Structural Change, p. 323).

Filipino women are getting the short end of the employment stick. Low formal sector employment opportunities in the Philippines have also pushed Filipinas to become "vulnerably employed".[38] As can be seen in Figure 11, Filipino women are considered to be in a more precarious work arrangement than men as the share of women in vulnerable employment to total employment exceeds those of men over the period from 2000 to 2007. Moreover, Filipinas are more likely to find overseas employment than men which can translate to further vulnerability to foreign working conditions. This situation, moreover, strains domestic family bond relationships due to absence of working mothers or daughters. In 2009, there were about 175,296 Filipino women deployed as new hires or about 53% of total new hires.[39]

Figure 11



Technical training and manpower development facilitated by the Philippine government may be seen as a lifeline for workers who need skills upgrading and improvement to satisfy industries' job requirements, but results have been insufficient to address the skills gap associated with emerging industries. In 1994, the Technical Education and Skills Development Authority or TESDA[40] was created to mobilize and encourage the full participation of industry, labor, local government units, and technical-vocational institutions (both public and private) in skills development for Philippine workers. TESDA conducts assessment and certification of technical-vocational graduates' competencies to ensure meeting the industry competency standards. However, the overall certification rates have been declining with a certification rate of 82% in 2001 to around 50% and 62% in 2005 and 2006, respectively. In the WB's 2010 Philippine Skills report, it was documented that certification rates are particularly low for technologically advanced sectors such as information technology. Further, the report noted deficiencies in the quality of facilities, available fields of study, and linkages with industry for school-based and privately run-technical and vocational education training programs.

[38]ILO defined vulnerable employment as those self-employed and contributing family workers who have no formal work arrangements or access to benefits or social protection.

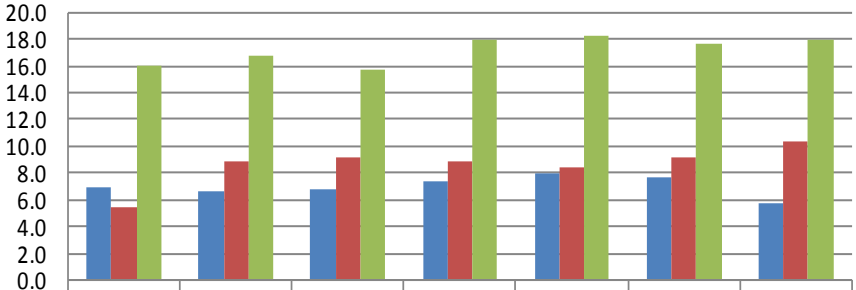
[39]See Philippine Overseas Employment Statistics at www.poea.gov.

[40]For a brief history of TESDA, see www.tesda.gov.ph.

Returns to education with high school degrees are increasing, while returns to elementary and college/post graduate degree holders are declining or fairly stable. Based on the WB's 2010 Philippine Skills report, returns to education[41] increase with additional years of schooling as expected Differences in the average rate of return to education, moreover, are large, i.e., about an 18% return to tertiary education compared with 10% and 6% returns to secondary and elementary education, respectively, in 2006. Returns to elementary education exhibit a declining trend from 2001-2006, a reversal of the increased trend from 1991-1997. Conversely, rates of return to High School education exhibit an increasing trend from 2001-2006 compared to fairly stable returns during 1991-1997 while returns to post-secondary degree holders tend to be fairly stable from 1997 to 2006. As Figure 12 notes, the economic returns to college level education have been stagnant for the past decade. The Asian Development Outlook (ADB 2007b) reports returns to human capital by country. While the Philippines enjoys higher returns from human capital than Indonesia, these are also well below India and roughly on a par with Thailand. Interpreting these returns as the shadow price on a potential constraint, the international comparison suggests that these are at an ordinary rather than an elevated level. But these returns to education on the national or aggregate level may mask varying demand-supply situations at the sectoral level.

Figure 12

Returns to Education, Selected Years



	1988	1991	1994	1997	2001	2004	2006
Elementary completed	6.9	6.6	6.8	7.3	8.0	7.6	5.8
High School Graduate	5.4	8.9	9.1	8.8	8.4	9.1	10.3
Degree/Postgraduate	16.0	16.7	15.7	18.0	18.2	17.6	17.9

Source:Phil. LFS, various years; WB Philippine Skills Report, 2010

The structural transformation towards a more-service oriented economy caused not only an increase in the demand for higher-level skills in the service sector, but also a higher wage premium. In terms of the skill intensity required by the different sectors of the Philippine economy, given the transformation towards a more-service oriented type of economy and the fact that more than half of the employed workforce can be found in the service sector, the returns for service workers are higher than those for industry and agriculture. As can be seen in Table 13,

[41]Rates of return calculated from education coefficients as estimated from a simple Mincer-type log(hourly wage) model, with age, age squared, gender dummy, and indicator variables for educational level, and with no schooling as the omitted group. These rates of return do not capture the quality of education or unobserved ability of individuals.

higher returns accrue to higher-skilled workers across all sectors, and those employed in the service sector enjoy the highest premia. These trends in the empirical estimates to returns on education are consistent with the increased demand for educated workers and deindustrialization. As noted in the WB's 2010 Philippine Skills report, over the last two decades, Filipino workers have become increasingly educated with growing skills demand from the service sector. The report noted that "while the distribution of fields of study seems to be fairly diversified in the Philippines with adequate focus on business, finance and engineering skills, the low ratio of pass rates at professional examinations for business accounting, law, and some engineering fields may help explain why the demand for high level skills in service sub-sectors of trade, finance, insurance, business services, real estate and transport and communications continues to rise." Further, it was noted in the same report that wage premia for skilled workers were 3 to 4 times higher than those of unskilled workers in industries such as financial intermediation, information technology, call centers, and real estate.

Table 13

Rates of Return by Sector: 1988-2006							
Level of Education	**Returns to Additional Year of Schooling**						
	1988	**1991**	**1994**	**1997**	**2001**	**2004**	**2006**
Agricultural Sector							
Elementary completed	7.3	5.1	6.0	5.1	6.4	4.9	5.7
High School Graduate	-0.5	5.0	2.3	3.7	2.1	3.1	2.1
Degree/Postgraduate	10.9	9.8	8.6	9.8	16.0	13.0	17.7
Industrial Sector							
Elementary completed	8.6	10.5	6.3	5.3	4.9	4.4	3.4
High School Graduate	8.8	7.9	9.6	8.9	6.3	6.8	7.6
Degree/Postgraduate	14.6	13.4	12.2	14.6	12.8	11.6	12.2
Services Sector							
Elementary completed	4.6	6.9	6.6	7.4	4.3	5.6	4.1
High School Graduate	5.1	8.1	9.3	7.8	7.8	9.2	10.8
Degree/Postgraduate	15.7	17.1	16.8	18.5	18.5	18.2	18.2
Source: Philippines LFS/FIES various years; WB, Philippine Skills Report, 2010.							

The employment-intensive Business Process Outsourcing (BPO) industry faces challenges in recruiting an adequate supply of qualified workers. The very promising BPO industry in the Philippines[42] is driven primarily by customer care call centers, software development and animation, medical transcription, and back-office business services such as accounting, finance, and human resource management. The BPO industry's contribution to Philippine's growth was estimated to average an additional 0.2 percentage points of GDP growth during Q1 2004 to Q2 2007.[43] However, the sustained and very optimistic projected growth of this industry[44] may be

[42]Philippines was awarded the 2009 Offshoring Destination of the Year Award given by the National Outsourcing Association (UK), according to the BPO Services Association Unlimited –Philippines.

[43]Philippines National Statistical Coordination Board (NSCB) estimated the contribution of BPO using the Philippines System of National Accounts under the Gross-Value Added of Private Services on the production side and Exports of Services on the expenditure side; refer to "Understanding the BPO Industry in the Philippines" Factsheet posted on www.nscb.gov.ph.

derailed by the lack of available skilled human resources to fill growing job opportunities in the industry.

As noted in the 2010 WB Philippine Skills report, employer perception surveys on the quality of graduates vary across sectors and also education levels by sector, and point to less favorable opinions on secondary and higher education graduates in services. A significant share of secondary and university graduates are considered to be "poor." It further articulated that "these findings can explain some of the difficulties faced in the service sector to find the right skills for the job, including the significant time to fill some managerial, professional and sales positions" (p. 55). The high-level skills demand requirement for the industry includes higher educational attainment beyond high school, high proficiency in English, and additional skills / technical training.[45] As previously noted, most private businesses have already expressed difficulty in hiring qualified workers. Moreover, it cannot be discounted that even with the pool of unemployed with tertiary education, the job demands and work environment in the BPO sector may prove to be not too appealing to some job-seekers or to those thinking of a career change. Most BPO jobs—especially the call centers—require three shifts to serve customers on different time zones. Night shifts are often linked to occupational safety and health problems such as sleep deprivation and fatigue, high-stress-inducing factors such as harassment from irate clients, and monotony of work, to name a few.

The supply of skilled workers employable in the industrial and service sub-sectors may be leaking out to overseas employment. In terms of outmigration of workers, according to 2009 data on new deployment of overseas workers, the professional, technical, and related workers group that includes engineers, nurses, and accountants (among others) constitutes roughly 14% of new hires employed overseas. Although approximately 86% of the roughly 354,000 workers were employed in low-skilled occupation groups overseas, the possibility that some of these workers were compelled to accept jobs requiring skills below their acquired skills level cannot be dismissed. On average, 400,000 higher education graduates enter the Philippine work force each year, while (in 2006) only about 80,000 professional or associate-professional new jobs were added (De la Cruz 2007). As the unemployment rate is not increasing rapidly among the educated, this would imply that the remaining graduates are either heading abroad for work, or accepting lower education jobs. This misallocation of skills to job requirements translates to a waste of human capital and to labor market inefficiencies. As articulated in the 2010 WB Philippine Skills report, universities were judged by employers to be "weak in their labor market relevance, industry linkage and ability to adapt to labor market needs."

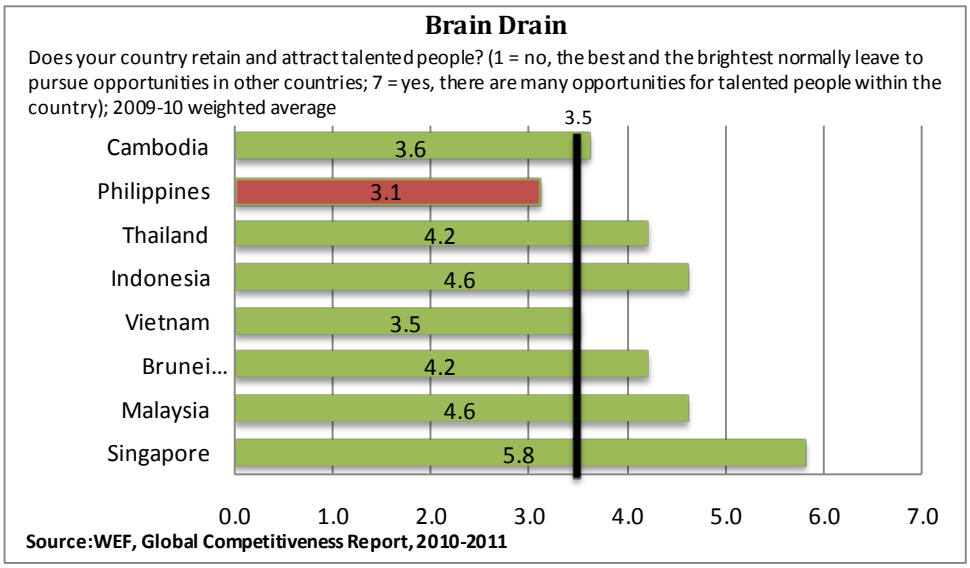
[44]According to the Business Processing Association of the Philippines (BPAP) in its Roadmap 2010, BPAP projected to double its global market share from 5% in 2006 to 10% in 2010 and earn about $13 billion in revenue and employ about one million people by the end of 2010.

[45]Habito (2010) noted several strategies to address the manpower constraints in the BPO industry; see Appendix 1, pages 50-51.

Table 14

New Deployment of Overseas Workers by Occupational Group, 2009		
Occupational Group	**Newly Hired Worker**	**Percent of Total**
Administrative and Managerial Workers	1,290	0.4%
Agricultural, Animal Husbandry and Forestry Workers, Fishermen and Hunters	1,349	0.4%
Clerical and Related Workers	15,403	4.4%
Production and Related Workers, Equipment Operators an	117,609	33.2%
Professional Technical and Related Workers	47,886	13.5%
Sales Workers	8,348	2.4%
Service Workers	138,222	39.1%
Other	23,610	6.7%
Total New Deployment	353,717	100.0%
Source: Data from the Philippines Overseas Employment Administration.		

Figure 13

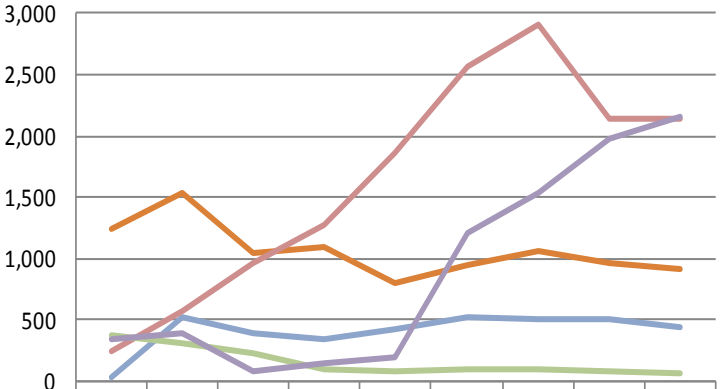


A shortage of qualified, high-skilled Filipino workers needed by most service-sub sector industry groups leads to increased hiring of foreign nationals to fill the gap. As noted in WB's Philippine Skills report, firms' surveys point to evidence of growing needs for upgraded, high-skill requirements in most service sub-sectors such as trade and tourism, finance, transport and communication, and business services. However, employers have expressed difficulty in filling managerial, professional and skilled production and non-production workers; accordingly, many may have resorted to hiring foreign nationals to fill the gap. As shown in Figure 14, from 2001 to 2007, there have been a growing number of foreign nationals employed in most service-related industry groups. Other service sub-industry groups such as financial intermediation, and real

estate, renting, and business activities registered their biggest increase in hiring of foreign nationals during the period 2005-2006.

Figure 14

Number of Aliens (Foreign Nationals) Employed by Industry



	2001	2002	2003	2004	2005	2006	2007	2008	2009
WHOLESALE AND RETAIL TRADE	1,231	1,530	1,046	1,095	790	946	1,064	957	904
HOTEL AND RESTAURANT	22	517	392	342	421	517	502	499	444
TRANSPORT, STORAGE AND COMMUNICATION	238	575	966	1,267	1,858	2,564	2,906	2,147	2,134
FINANCIAL INTERMEDIATION	375	307	220	92	80	100	95	83	67
REAL ESTATE, RENTING AND BUSINESS ACTIVITIES	343	394	77	147	186	1,206	1,540	1,978	2,150

Source: Bureau of Local Employment, Phil. Dept. of Labor & Employment

Based on this assessment of available data and evidence, human capital, while a critical constraint to some growth and emerging industries in the service sector, does not, on balance, appear to be a binding constraint to growth in the Philippines. While high economic returns were estimated to accrue more to educated workers, especially in the service sector, returns to higher education at the national level have been fairly stagnant for many years. Furthermore, the high unemployment of educated workers coupled with the willingness of educated workers to accept lower education jobs implies that the supply of educated workers currently outstrips demand. Skills shortages—specifically in the service sector—do appear to limit growth to some degree and this is reflected in the Arangkada 2010 Report's observation that a lack of qualified workers is one of the key difficulties for businesses. This may have also contributed to the unemployment problem among even educated job seekers as there is a mismatch between skills required by some industries and the available skills from job seekers as noted in the 2010 WB Philippine Skills report. The evidence on this point is mixed, however, since World Economic Forum (2011) survey data indicates that a lack of educated workers is not a highly problematic constraint. As the service sector and the Philippines economy continues to grow, the lack of qualified workers may indeed become a constraint to sustained growth. At this time, however, the high unemployment among educated workers coupled with the possibility that some of these educated workers accept lower education jobs or choose to seek employment overseas implies that

currently, human capital does not appear to be a binding constraint. Nonetheless, human capital development should continue to be considered a prerequisite for economic growth. Both labor and education policy reforms are needed to address the root causes of skills mismatch and productive job creation, while fiscal reforms should help bring about increases in public spending to support continued human capital formation.

E. Governance

1. Regulatory Quality

This section focuses on regulatory quality in the Philippines. It seeks to document the extent to which the current state of economic governance[46] in the Philippines remains a binding constraint on growth and investment in the country.

Improved governance could provide a lasting contribution to growth. A recent IMF study[47] discussing the medium term growth prospects for the Philippines suggests that improved governance (i.e., institutional quality) in the country, through its positive impact on total factor productivity (TFP), could help provide a lasting contribution to growth. Long-run growth derives from improved TFP. It does not stem solely from increases in the factors of production like labor and capital, which are bound by diminishing rates of return. TFP depends on innovating new techniques of production, and on physical capital that embodies technological progress, such as computers. Social capital is equally vital to TFP, most of which is good governance and ethical behavior. For proxy measurements of TFP's institutional quality, the IMF study uses an index of governance that reports on perceptions of corruption.

Poor governance deters investment. Most experts focusing on economic performance in the Philippines claim that poor governance, in its many manifestations, has played a key role in deterring higher levels of public and private investment in the country.[48] For example, poor governance in the Philippines manifests itself in weak regulatory environments, regulatory uncertainty, "regulatory capture" by local elite conglomerates, contractual uncertainty, reduced fiscal space, and reduced competitiveness leading to market failures evident in the country's limited industrial base. Nye (2011a: 18-19) suggests that poor governance combined with constitutional restrictions on foreign investment that facilitate monopolistic or oligopolistic control of certain sectors of the economy[49] represent a more formidable constraint to economic growth in the Philippines than inadequate infrastructure or a low tax effort.

The Role of Institutions/Governance and Growth

Institutional quality has an impact on growth. In his discussion on constraints to growth in the Philippines, De Dios (2011: 1) argues that the role of institutions (i.e., "a system of rules, beliefs,

[46]"Economic governance" as a term has become more widely used to discuss multiple facets of governance that pertain to the economic architecture of an entity. The 2009 Nobel Prize-winning economist Elinor Ostrom analyzed the economic governance of common-pool resources (CPR), while her co-winner of the 2009 Nobel Prize in Economics, Oliver Williamson, detailed economic governance issues pertaining to firms.

[47]IMF Country Report No. 11/58 (IMF: 2011).

[48]See Canlas, Khan, Zhuang (ADB: 2007) and Habito (ADB: 2010).

[49]See Reyes (2010).

norms and organizations": governance) plays a key part in a country's growth performance, since institutions affect all intrinsic behavior and actions undertaken by political leaders and the general citizenry. In terms of political economy, policy formulation is of second-order importance, since the prevailing behavior of institutions and politics determines the degree to which public policies are actually implemented, if at all.

The overarching reach of weak institutions affects investments in a cross-cutting manner. De Dios (2011: 1) expands upon the growth diagnostics framework,[50] indicating that fraudulent institutional performance (i.e. poor governance) goes beyond simply deterring investment by raising the transactions costs of private investors through corruption, since it pervades, in a cross-cutting fashion, all the branches of the growth-diagnostic framework. He notes that there is a powerfully negative impact on public investment decisions when these are distorted by poor governance due to corruption, limited agendas, or poorly-trained bureaucracies. The suboptimal public investment provision then deters private investment looking for complementary public goods and services. Additionally, according to De Dios (2011:3), weak governance allows for the encroachment of special interests into the formulation of regulations, who seek special accommodations such as restrictions of entry into selected sectors of the economy that limit investment and competition, thereby fomenting monopolistic tendencies. De Dios determines that governance issues, such as corruption, represent a first-order cause preventing investment and economic growth in the Philippines.

No single institutional model fits all countries. Booth (2011:s6) reviews the resurrection of institutional theory in the 1990s and its now-central role in helping to explain per capita income growth. Still, according to Booth, it remains inconclusive exactly what form institutions need to take to deliver sustainable market-based economic growth. For example, he notes (2011:s7) that applying the institutional mold of highly industrialized nations to poorer countries is baseless given the different development context.

Institutional change is not self-generating. Booth (2011:s8) indicates that institutional development arises from a complex process of social change and political battles that lead to behavioral modifications within societies. He claims that institutions change as a result of politics (i.e. institutional change is not self-generating). This leads to the conclusion that for governance to improve and thereby help accelerate economic growth, politically savvy interventions are required that are context-sensitive. Booth (2011:s11) points out, though, that institutional change occurs slowly and, to a large extent, endogenously. Still, this endogenous change requires action (i.e., "political battles") in the governance realm as suggested by Booth. It also implies changing the mindsets, behaviors, and values of all participants in governance (i.e., government, civil society, and the private sector), but particularly those of political leaders, while concomitantly encouraging greater citizen participation in demanding improvements in public sector accountability and transparency.

The Philippines growth constraints are tied to poor governance. According to Habito (2010:vii), the four "critical development constraints" to growth in the Philippines as identified in the study[51] are all fundamentally tied to different facets of poor governance: inadequate fiscal

[50]Hausmann, Rodrik, and Vélasco (2005).

[51]Canlas *et al* (ADB: 2007): Inadequate infrastructure, narrow fiscal space, reduced and limited industrial base, and low investor confidence.

management; ongoing policy reversals and poor policy implementation; excessively centralized decision-making; and regulatory capture that engenders monopolistic tendencies.

Erratic growth performance in the Philippines is due to poor governance. Generally, as discussed by Canlas, et al (ADB 2007a) and others, the Philippines has experienced erratic annual growth over the past five decades primarily due to poor economic governance. Growth has been uneven and of poor quality (i.e., increasing incidence of poverty despite growth). Consequently, by improving governance, one would expect improvements in both the regularity and quality of growth in the Philippines (i.e., less erratic growth with concomitant reductions in the poverty rate).

Still, the Philippines has a relatively stable macroeconomic environment. Although the Philippines has experienced periods of erratic growth throughout its nearly 65 years as a sovereign nation, it currently maintains a relatively stable macroeconomic environment with the annual real GDP growth rate trending at around 5%, a surplus in its balance of payments (primarily due to very high levels of remittances: nearly US$20 billion in 2010), and a relatively benign level of inflation (i.e., 4%) with unemployment hovering at around 7%.

The microeconomic environment in the Philippines bears the brunt of poor governance. The microeconomic environment of the Philippines captures most of the downside of poor governance, which negatively impacts the lives of the vast majority of the citizenry. Local elite-controlled conglomerates that over many decades consolidated their control in specific sectors of the economy have in recent times begun diversifying their holdings throughout the Philippine economy. Over the years, these entities have benefited from the "poor governance" status quo in the Philippines through rent-seeking behaviors, and seem to favor perpetuating the current situation.[52] Nye (2011:17) mentions that poor governance under the Philippine Comprehensive Agrarian Reform Program (CARP), which severely distorts land tenure in the Philippines, actually benefits the politically-connected economic elites who have the ability to control extensive property rights informally without requiring legal title.

Market Enabling Institutions

The ability to obtain higher levels of investment depends in part on the regulatory climate that supports private sector initiatives. A less restrictive and open regulatory environment should allow private capital to move where it is most profitable. Capital formation is facilitated by market-enabling institutions, rules, and regulations. Addressing the appropriate policy reforms that foster a favorable regulatory climate for investment, to the extent that they are constraints, will significantly contribute to enhancing the economy's productivity and long-term growth (ADB 2005b; World Bank 2005).

Past reform efforts have made the Philippines a relatively more open economy. Trade liberalization of the 1980s and 1990s has resulted in a fairly open domestic market with tariffs already at significantly low levels. Key sectors of the economy have been deregulated, including air and maritime transport, telecommunications, banking and finance, and utilities, including power and water. Sound macroeconomic fundamentals have contributed to the resiliency of the Philippine economy. Central Bank reforms have made monetary policy more independent and kept inflation at manageable levels.

[52] See Johnston (Asian Institute of Management, Draft paper 2010) and Habito (ADB:2010).

However, several restrictions that inhibit foreign investment remain. A major source of the legal restrictions is contained in provisions of the 1987 Philippine Constitution. These include constitutional provisions on nationality restrictions on equity, particularly the media, advertising, land ownership, natural resources, franchises and public utilities, educational institutions, and practice of professions (see Table 15). The restriction on foreign equity participation is comparable to policies of some of the Philippines' ASEAN neighbors (i.e., Indonesia, Malaysia and Vietnam).

Table 15: Constitutional Restrictions on Foreign Investment (by % of restriction)

Business Activity	Foreign Participation	First Constitutional Citation
Land Ownership (alienable lands of public domain)	By lease only	1935
Utilization of Natural Resources	Limited to 40%	1935
Public Utilities	Limited to 40%	1935
Media	No foreign participation	1973
Educational Institutions	Limited to 40%	1973
Advertising	Limited to 30%	1987
Practice of Professions	No foreign participation, unless provided by law	1987

Source: Forbes and Grino, (2009)

Forbes and Grino (2009) contend that **relaxation of restrictions on participation of foreign equity and professional participation in the economy must be seriously considered in order to attract greater foreign investment, to augment limited domestic capital and technical resources, and to be more aligned with progressive global practice.** Sicat (2010:4) and Nye (2011:16) also suggest removing these restrictive provisions under the Philippine Constitution, arguing that such action would provide a strong impetus to private investment in the country. Recognizing the political perils in the Philippines of entertaining a constitutional amendment, Sicat suggests that the current administration draft legislation that essentially transfers these constitutional provisions to the country's regular body of laws.

Beyond constitutional restrictions, there are a number of statutory, regulatory, and policy restrictions on investment. These include the negative list (outside of the Constitution-based negative list) under the Foreign Investments Act, and restrictions discriminating against foreigners under the Alien Registration Act; bank branch, entry, number, and foreclosure limitations; mandated lending and rural banking; Board of Investments (BOI) incentives; civil aviation; equity divestment mandates; Filipino consultant preference; government banks and insurance provider favoritism; procurement preferences for Filipino firms; retail local sourcing; shipping; differential treatment in taxation; etc.

While the Philippines has made considerable progress in opening-up the economy, this has not been accompanied by regulatory reforms that would reduce restrictions and foster competition in domestic sectors (Aldaba 2008). Competition in many industries remains limited due to regulatory capture and weak enforcement that insufficiently penalizes anticompetitive trade practices. With much of the corporate wealth in the Philippines concentrated in a few families and

large companies, the Philippines has neither a comprehensive law of competition nor a specialized enforcement entity to deal with anti-competitive practices. Politically-connected elites that are protected by favorable rules and regulations continue to exercise oligopolistic market power that make critical inputs to upstream and downstream industries expensive (Bocchi 2008). Weak bureaucratic institutions coupled with an environment controlled by powerful vested interests effectively constrain the ability of new entrants to participate in the economy.

In the labor market, distortionary policies and rigidities may be constraining opportunities for domestic job creation and growth despite the availability of labor supply. For a country that is labor abundant, employment growth in the Philippines has been anemic and the employment-to-population ratio stagnant around 60% for decades. Sicat (2010) articulated that Philippine labor market policies may have provided welfare protection to the employed, but have also discouraged more gainful job creation that can make significant inroads in reducing poverty. Examples noted are government interventions on regional minimum wage setting, benefits such as the 13th month of pay, and attainment of regular employment status after six months of work. However, "the government has intervened by making it difficult for the employer to dismiss or to end employment of workers…what should be a matter of industrial relations issues at the company level becomes a bureaucratic process."[53] In the Arangkada report (American Chamber of Commerce in the Philippines 2010), businesses also complained about the high minimum wage and the large number of work holidays that impede doing business in the country. Businesses are likely to adapt to such restrictions by hiring workers on temporary contracts (perhaps aggravating the underemployment problem). These distortions will also dissuade foreign investment and domestic businesses alike—particularly those that are more labor-intensive—from entering the market.

Governance impacts the business enabling environment. Although the Philippines has a strong legal framework on its books, in almost all major areas that support the business enabling environment, corruption and other illegal practices within the country's institutional structures have created a strong deterrent for investors. The most commonly cited form of corruption within the business enabling environment is for "facilitation fees," or charges above and beyond the legally-set fees to process a good, a case, a property title, etc. through the pertinent administrative system.

Courts are normally the last resort for resolving commercial disputes, but when they come into play, they may be the only resort. Consequently, they are fundamental for ensuring the overall integrity of the conflict resolution process. The proper execution of the court system is of vital importance not only to the protection of an entity's interests, but also to the attractiveness of a country, region, city, and town as a place to do business. The Philippines has a stable legal architecture to administer and resolve cases, but the implementing institutions are ineffective. Any reform of the court administration process in the Philippines should attempt to close the gap between how the Philippine legal system presents itself on paper (de jure), and how the system actually operates (de facto). To improve the effectiveness of courts, numerous steps would be required, from rethinking the regulations that govern the hiring of administrative staff to granting the judiciary greater control of its own budgets. On a practical level, providing statistics on caseload management (i.e., how many cases were opened, pending, or resolved in a court over a given period) could increase peer pressure on judges to clear their dockets.

[53] Sicat (2004), p. 5.

There is little incentive for judges and prosecutors to process cases more efficiently. This is attributable not only to attitudes of exclusivity, but also to structural, legal, and operational weaknesses of the Philippine court system:

- The Philippine legal system is founded on both the civil law legacy from Spanish colonial rule, and the constitutional and common law tradition of the American colonial period. There are certain areas in the judicial tradition of the Philippines where these two distinct systems are in conflict. For example, under the common law doctrine, Philippine courts abide by rulings and principles laid down by previous decisions of the Supreme Court; unlike traditional common law jurisdictions, the Supreme Court can also ignore previous rulings if it finds that circumstances are different.
- The Philippine court system suffers from a high judgeship vacancy rate (as high as 30%), a highly-centralized judicial administration, and meager resources (e.g., in 2010, the judiciary was allocated less 1% of the national budget). Further, the Supreme Court issues hundreds of administrative memoranda annually, which lower courts sometimes find to be excessive guidance.
- The Speedy Trial Act is not strictly followed by courts, and does not cover the prosecutorial process for determining probable cause.
- Though not a matter of law, it is a widely-accepted tradition that prosecutors exercise a quasi-judicial function, under which they make probable cause findings before criminal cases are filed. In this capacity, they distance themselves from police investigators under the notion that they must be impartial arbiters rather than advocates for the state's interests.

Deeper analysis would be required to uncover the root causes of why Philippine courts are frequently unable to timely reach and issue judgments in commercial matters. Factors to examine further in this connection may include the technical competence and work schedule of the judiciary, huge caseloads, inefficient judicial administration, and the absence of civil contempt powers to prod recalcitrant litigants.

Systems for commercial dispute resolution (CDR) consist not only of a country's courts of various levels, but also of out-of-court processes such as arbitration and mediation as well as more informal, local, and customary processes. Whether foreign companies choose to operate in a country depends, at least to some degree, on whether they believe their investments will be legally protected. The CDR situation in the Philippines is mixed. Although it is among the most advanced in the region, the legal structure providing alternative dispute resolution (ADR) continues to develop and its use is minimal. Still, contracts involving foreign direct investment often contain arbitration clauses that allow for adjudication in foreign venues and, for the most part, are enforced by Philippine courts. Problems occur when a court system lacks predictability, efficiency, and transparency. These traits act as a deterrent to both domestic and international investors engaging in local commercial activities.

Competition law goes by many names, such as anti-trust law or anti-monopoly law. It prohibits or restricts acts or practices that limit the choices of prices and products available to consumers by entities unlawfully restricting access to or competition in the marketplace. Consumer and national welfare is enhanced where open markets permit both incumbent firms and new entrants to compete openly for consumer favor through different combinations of price, quality, and innovation. An open and free marketplace promotes economic growth and development, and may lead to greater direct foreign investment attracted by the potential for expanding domestic and international trade. The Philippines has neither a legislated competition policy nor the requisite specialized enforcement entity, but Philippine laws and government entities vested with authority to challenge trade restraints exist. However, no de facto Philippine jurisprudence on competition

exists because virtually no cases have been tried and the law does not define, explain, or establish criteria for what constitutes the elements of a violation. While certain sectors have made headway in opening competition, there is no central government authority responsible for competition law or policy. At present, neither a national competition law—nor an agency to enforce it—appears to be a high priority.[54] Some observers note that there is no broad constituency for competition law, and minimal public awareness of its potential benefits to consumers and business competitors.

An effective bankruptcy regime supports economic growth in two fundamental ways. First, it encourages more lending by providing greater certainty that creditors' claims will be treated fairly when an enterprise comes under economic stress. Second, it liberates otherwise productive assets trapped in non-functioning or semi-functioning enterprises. It does this either by reinvigorating the enterprise through rehabilitation or reorganization, or by moving the assets to a third party through liquidation. The current bankruptcy regime in the Philippines is widely seen as a suboptimal arrangement in need of much reform.[55] The Philippines has established an entirely separate set of proceedings for corporate rehabilitation. It is based on a bare-bones Marcos-era decree, whereby corporate rehabilitation proceedings are governed by a set of interim rules that were promulgated by the Supreme Court in 2000. Petitions for corporate rehabilitation are heard by approximately 60 Regional Trial Courts specifically designated to hear commercial cases.

The ability to create and enforce contracts under a clear, consistent legal framework is a critical component of economic growth. Where there is the widely-held expectation that agreements freely entered into between businesses or individuals will be subject to enforcement by a court or other tribunal, a marketplace can be transformed. When business partners are in fact required to do what they have said that they will do—pay money, deliver goods, provide services, and so forth—risk diminishes and the recipients of a promise can better plan for the future. With decreased risk, the cost of doing business goes down, thereby elevating the private sector's prospects for economic gain. Philippine contract law is comprehensive and generally consistent with modern commercial codes. However, the institutions responsible for the enforcement of contracts lack predictability and efficiency, hampering some forms of commerce in the country.

Perspectives on Poor Economic Governance in the Philippines

The Philippines ranks poorly in doing business. According to the IFC/World Bank's Doing Business 2011,[56] the Philippines ranks 148th out of 183 countries in the ease of doing business; its ranking in 2010 was 146. The table below shows the ranking for the Philippines by topic according to the report. Of nine topic rankings, 3 improved from 2010 to 2011, while 3 deteriorated and 3 remained unchanged. If many of these "doing business" shortcomings are not satisfactorily addressed to allow for a more enabling and market-friendly microeconomic environment, the status quo could lead to a further deterioration of the Philippine investment climate.[57]

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[54]There are currently bills pending in Congress, and passage of the anti-trust bill was mentioned in President Aquino's 2010 State of the Nation Address.

[55]A new bankruptcy law was recently promulgated, but the associated Implementing Rules and Regulations (IRRs) have yet to be issued.

[56]See http://www.doingbusiness.org/~/media/FPDKM/Doing%20Business/Documents/Profiles/Country/DB11/PHL.pdf.

[57]In particular, the substantial decline in rank in "Dealing with Construction Permits" between 2010 and 2011 does not bode well for this year's Public Private Partnership (PPP) infrastructure program.

Table 16: Doing Business Rankings

TOPIC RANKINGS	DB 2011 Rank	DB 2010 Rank	Change in Rank
Starting a Business	156	162	6
Dealing with Construction Permits	156	124	-32
Registering Property	102	102	No change
Getting Credit	128	125	-3
Protecting Investors	132	131	-1
Paying Taxes	124	133	9
Trading Across Borders	61	68	7
Enforcing Contracts	118	118	No change
Closing a Business	153	153	No change

Source: World Economic Forum (2010).

Investors in the Philippines respond proactively to the dysfunctional microeconomic environment. In response to the subpar microeconomic environment prevailing in the Philippines, the Joint Foreign Chambers (JFCs) in the Philippines[58] formulated their action plan for accelerating growth in the Philippines. The JFCs submitted Arangkada 2010[59] to the government of the Philippines towards the end of last year. The document advocates specific actions to help promote direct investment, particularly foreign direct investment, in the country. The economic governance concerns highlighted in Arangkada 2010 mirror or complement those in the current IFC/World Bank's Doing Business 2011 ranking of the Philippines in terms of doing business.

The JFCs' primary concern in Arangkada 2010 focuses on improving the business enabling environment in the Philippines.[60] This includes reducing the number of requisite public sector authorizations to operate and expand a business; clearly establishing and communicating the policies, rules, and procedures that affect private sector investment at all levels of government; and ensuring the consistent application by all levels of government, both national and local, of pertinent laws, policies, and procedures to avoid discretionary interpretation by public sector officials. Applying these concerns to the governance perceptions as defined by the Worldwide Governance Indicators (WGIs),[61] the JFCs are particularly interested in Control of Corruption[62] (CC),

[58]American Chamber of Commerce of the Philippines, Inc., Australian-New Zealand Chamber of Commerce of the Philippines, Inc., Canadian Chamber of Commerce of the Philippines, Inc., European Chamber of Commerce of the Philippines, Inc., Japanese Chamber of Commerce & Industry of the Philippines, Inc., Korean Chamber of Commerce of the Philippines, Inc., Philippine Association of Multinational Companies Regional Headquarters, Inc.

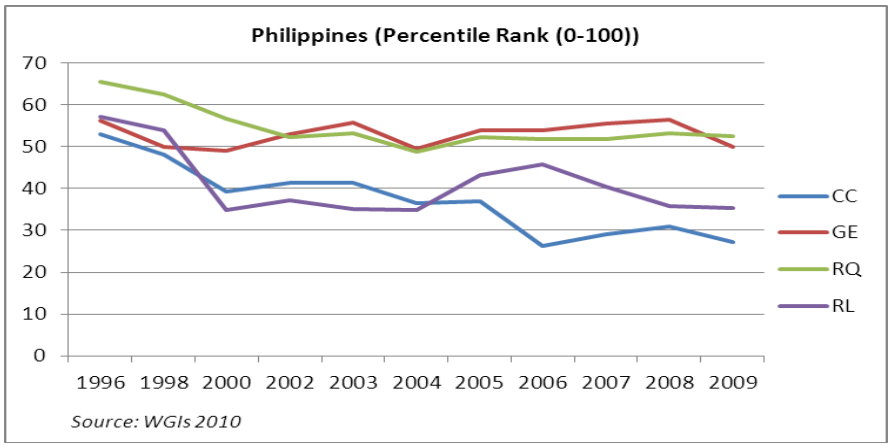
[59]The American Chamber of Commerce of the Philippines, Inc. (2010).

[60]Statement by JFCs to the Philippine Development Forum, February 26, 2011.

[61]First released by the World Bank in 1996. Also referred to as "KK", "KKZ", or "KKM" following the originators' names, these indicators were published every other year between 1996 and 2002, and annually thereafter. Covering over 200 countries, the WGIs compile data from 37 sources, such as cross-country surveys of firms, and expert assessments from commercial risk rating agencies, NGOs and think tanks, and governments and multilateral agencies: http://info.worldbank.org/governance/wgi/index.asp.

Government Effectiveness[63] (GE), Regulatory Quality[64] (RQ) and Rule of Law[65] (RL). According to these WGIs, the most pronounced deterioration in the Philippines among these four over the 14-year period ending in 2009 occurred in CC, followed by RL, RQ and then GE as indicated in the graph below.

Figure 15: Philippines World Governance Indicators



There is an ongoing need to drill down to identify offending governance actors. In Arangkada 2010, the JFCs decided not to rely solely on the deteriorating trend of the business enabling environment as depicted by the aforementioned WGIs to inform their action plan, but went a step further by drilling down to the actual Philippine institutions that they perceive as inhibiting qualitative improvements in the Philippines' microeconomic context. This is consonant with De Dios' (2011:7) skepticism that the perception indicators for GE and RQ "seem to suggest that little if any institutional problems exist" in the Philippines. He explains that one of the shortcomings of these indicators is that they are too general and, thus, do not allow "for a more nuanced appreciation" of the Philippine governance context.

Poor economic governance is the root cause of the Philippines' dysfunctional microeconomic environment that deters private investment. Poor economic governance in the Philippines is reflected in the weak state of many of the country's public sector institutions and agencies, particularly those that shape the microeconomic environment. It has deterred higher levels of private investment. As noted by numerous experts, sustainable broad-based economic growth in the Philippines will only be achieved once the overarching reach of corruption has been systemically mitigated. As a binding constraint on growth and investment in the Philippines, poor

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[62]Captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests (Source: WGI).

[63]Captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies (Source: WGI).

[64]Captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development (Source: WGI).

[65]Captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence (Source: WGI).

economic governance is a fundamental and pernicious one, since, to paraphrase Nye,[66] it systematically throttles economic competition at every step of the way, and, thereby, delivers a suboptimal level of both public and private investment. To reach a higher plan of sustainable trend growth, on par with other countries in the region, the Philippines needs to act decisively on upgrading the quality of its microeconomic environment.

More nuanced evaluations of governance are needed. In the spirit of a more nuanced appreciation of the subpar microeconomic environment characterizing the Philippines, it is instructive to compare the perceptions of the JFCs with other research. For example, many of the institutions that Arangkada 2010 cites as most in need of governance improvements match those that Habito (2010: 31) identifies as requiring intervention due to poor governance (i.e., "graft-prone"): Bureau of Internal Revenue (BIR), Bureau of Customs (BOC), Department of Agriculture (DA), Department of Education (DepEd), Department of Environment and Natural Resources (DENR), Department of Public Works and Highways (DPWH), and Department of Transportation and Communication (DOTC).[67]

2. Control of Corruption

This dimension captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Historical mass poverty along with weak social controls reduces the masses access to formal institutions and allows elite factions to compete for rents, causing corruption. Corruption is correlated with low foreign investment due to international organizations' unwillingness to conduct business in an unstable country (De Dios 2011:11).

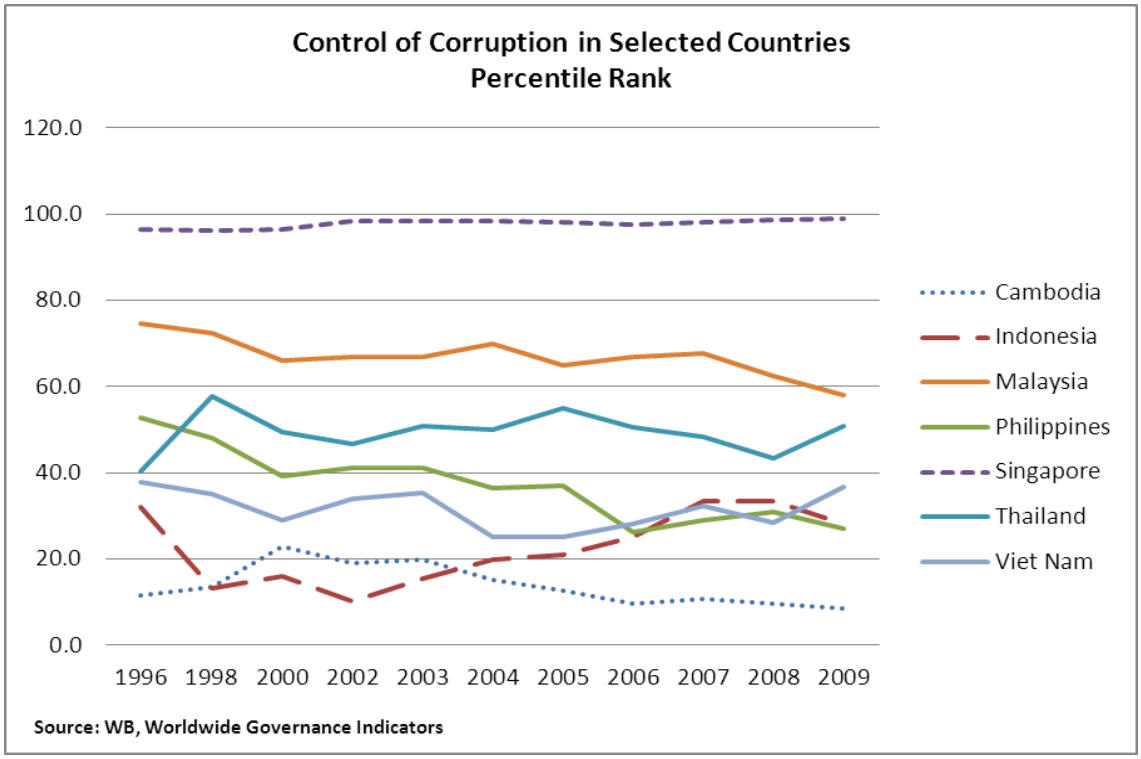
Corruption is a major problem in the Philippines. Corruption, or poor governance, appears throughout most of the recent literature on growth in the Philippines as a major impediment to substantial improvements in the country's economic performance. The 2010 Corruption Perceptions Index (CPI)[68] rated the Philippines with a 2.4 CPI score, which ranks the country 134th out of 178 countries, and 25th among 33 countries in the Asia-Pacific region—worse than Indonesia, Malaysia, Thailand and Vietnam.

[66]Nye, "*Why Quantitative Easing was good and should be better…and how the Philippines should benefit from it*", Special lecture, Bangko Sentral ng Pilipinas, Executive Business Center, January 14, 2011.

[67]A quick count of the institutions and agencies listed in *Arangkada 2010* in its sections on Governance, Judicial, Infrastructure, Local Government and Macroeconomic Policy requiring immediate reform totaled 17: BIR, BOC, Commission on Information Communications and Technology (CICT), Congress, Department of Budget and Management (DBM), Department of the Interior and Local Government (DILG), Department of Finance (DOF), Department of Justice (DOJ), DOTC, DPWH, Department of Trade and Investment (DTI), Government Owned and Controlled Corporations (GOCCs), the Supreme Court and judiciary, Local Government Units, National Competitiveness Council (NCC), National Economic Development Authority (NEDA) and the Office of the President (OP).

[68]See http://www.transparency.org/policy_research/surveys_indices/cpi/2010.

Figure 16



The control of corruption index in the Philippines has decreased fairly steadily since 1996 and since 2005, has fallen below that of both Viet Nam and Indonesia. Philippines is now ranked second-worst among comparator countries, second only to Cambodia. Corruption is expected to impact the Philippines economy through lower FDI flows (Lambsdorff, 2003a), lower productivity(Lambsdorff 2003b), weakening the ability of tax authorities to collect taxes through both tax evasion and bribe seeking (Wei 2000), and concentrating public investment in unproductive, politically-motivated programs.

Mitigating corruption is difficult. Historically, there have been numerous official attempts at mitigating corruption in the Philippines, particularly since the end of the Marcos dictatorship. The Arroyo administration (2001-2010) recognized corruption as a fundamental problem plaguing the Philippines, yet achieved little progress, if any, on that front.[69] Towards the end of the Arroyo administration, many commentators believe corruption actually worsened.

To help disentangle the channels through which corruption acts, corruption in the Philippines inhibits growth through these three primary channels:

[69]The Arroyo Administration's Medium Term Philippine Development Plan (MTPDP) covering the years 2004-2010 identified the following issues and efforts to curb corruption in the Philippines: (i) weak enforcement of anti-corruption laws; (ii) need to reinvigorate the anti-corruption agencies and improve their coordination; (iii) low social awareness and high tolerance for corruption; (iv) need to institutionalize government-civil society-business collaboration; (v) need to strengthen integrity and accountability in government-business transactions. See Canlas *et. al* (2011).

1. Corruption *drives away investment, both foreign and domestic,* through favoritism, need of bribes and inefficient investment laws, along with an inefficient and unpredictable judicial system.
2. Corruption in the government *leads to inefficient government revenue collection and expenditure* through politically-motivated public projects (transportation is a salient example) and inefficient taxation due to both bribe-seeking and tax evasion.
3. The high degree of favoritism and bribe-seeking in the government leads to *disillusionment of the populace*, further inhibiting government effectiveness.

1. Corruption *drives away investment, both foreign and domestic,* through need of bribes and inefficient investment laws, along with an inefficient and unpredictable judicial system.

Corruption impacts the level of foreign investment received. Looking at corruption's effects on investment and hence growth, De Dios (2008:23) regresses the ratio of investment to GDP for the Philippines for the period 1984 to 2006 on the corruption index of the World Governance Indicators. Across a variety of specifications, he finds a statistically significant relationship between corruption perceptions and investment, with corruption accounting for between one-quarter and one-half of the variation in the investment ratio. De Dios highlights that many of corruption's roots may lie in bureaucratic institutions: "The creation of overlapping jurisdictions and multiple centers of veto in post-Marcos Philippines—to the extent that rules-enforcement per se remained weak—may have increased the scope for uncertainty and extent of corruption" (De Dios 2008:21).

Governance impacts the business enabling environment. Although the Philippines has a strong legal framework on its books, in almost all major areas that support the business enabling environment, corruption and other illegal practices within the country's institutional structures have created a strong deterrent for investors. The most commonly-cited form of corruption within the business enabling environment is for "facilitation fees," or charges above and beyond the legally set fees, to process a good, a case, a property title, etc. through the pertinent administrative system.

2. Corruption inhibits growth through inefficient public revenue collection and expenditure.

Favoritism among government officials leads to inefficient public expenditures or public contracts tendered in a non-competitive fashion. Despite the 1993 BOT law which was designed to ensure that public projects are competitively contracted, very few projects are tendered in an open and competitive bidding process. This has led to government programs being contracted to inefficient companies and via nontransparent means. Favoritism in assigning contracts has necessitated multiple costly government bail-outs or renegotiations of failed projects in recent years (De Dios 2004). In 2010, President Aquino announced a commitment to more transparent government expenditures and has reworked the BOT law to encourage competitive bidding; however it is unclear whether these actions will bring about a notable reduction in corruption. Some of these recent changes, however, are perceived by the business community as compromising the integrity of the tendering system (Habito 2010:ix).[70]

[70]As Habito (2010:19, n. 16) observes, "[a] set of widely consulted revised guidelines (Revised Implementing Rules and Regulations) for the BOT Law had already been formulated by the BOT Center and had been endorsed by the business community after 2 years of wide consultations. However, this was

The favoritism shown by government officials is exacerbated the power of the president over government contracts and disbursements. This power has led to a political system where politicians switch to the winning side to benefit from being associated with the current president.[71] As a consequence, political parties are often relatively similar and elections have little impact on the level or type of favoritism displayed by the government. Favoritism is sometimes perceived as outweighing an objective consideration of the merits in the awarding of government contracts or other benefits.

The degree of bribe-seeking required in the Philippines is greater than any of its neighbors and is ranked 128 out of 139 by the Global Competitiveness Report (World Economic Forum 2010:274). To make up for inefficient revenue collection, the Philippines has higher tax rates than any of its neighbors, further driving away investment. Of the firms that responded to the 2005 Investment Climate Survey, 32% considered the high tax rate to be a major or severe constraint to doing business in the Philippines (World Bank 2005). This is apparent from a comparison of corporate tax rates for the Philippines and other comparable countries in the ASEAN (see Table 17). The Philippines clearly has the highest tax levels among these countries. However, despite the high corporate tax rate in the Philippines, Table 17 shows that the Philippines has lower tax *revenue* (as a fraction of GDP) than most of its neighbors. This would imply that inefficiency in the tax system via tax evasion or bribe seeking is likely playing a role in inhibiting government revenue. The Philippines Government noted in the early 2000s that "potential leakages in public and private transactions amount to 74 billion pesos" (Llanto and Gonzalez 2007). More recently, Vicente (2006:41) cites estimates of tax leakages in the Philippines ranging from 36% to 62% of total tax liabilities.

Table 17: Corporate Tax Rates

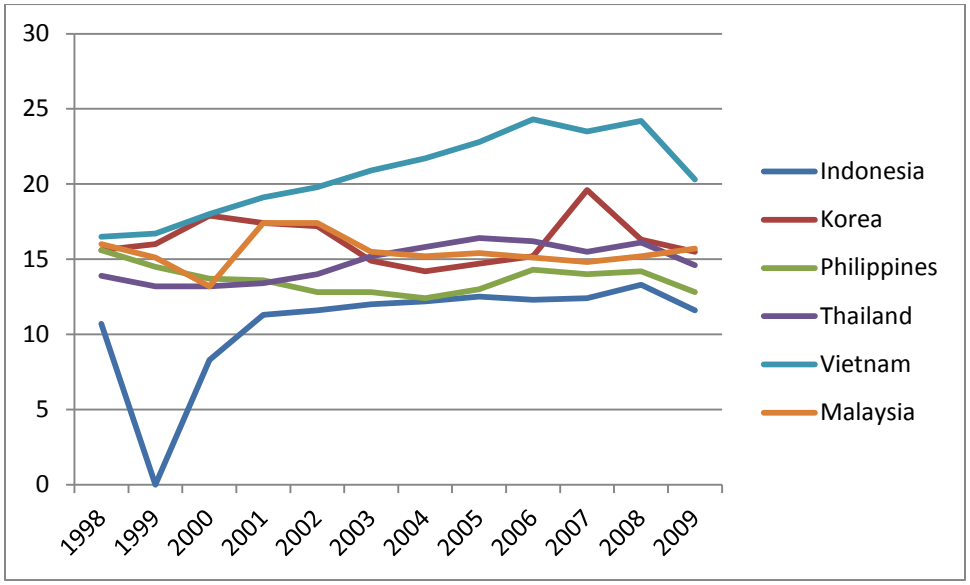
Economy	Corporate Income Tax	Value Added tax
PRC	30	5-17
Philippines	35	12
Indonesia	10-30	10
Malaysia	28	-
Thailand	30	10

Source: ADB (2007a).

summarily set aside when the Office of the President issued its own version. No major BOT project has been approved since."

[71]"The need to share the spoils of political victory often incites a scramble by politicians across parties to join the winning presidential candidate's party" (Llanto and Gonzalez 2007:10).

Figure 17: Tax Revenue as % of GDP



Source: ADB (2007a).

3. **The perception of high-level corruption undermines government efforts to combat it in two ways (Habito 2010:30):**
   - **a.** The perception—whether justified or not—that top leaders engage in graft and corruption sends a message to rank-and-file government workers that such behavior is tolerable and acceptable.
   - **b.** Such perception, if widespread, undermines the moral authority of leaders and government more generally, rendering government efforts to curb corruption less effective.

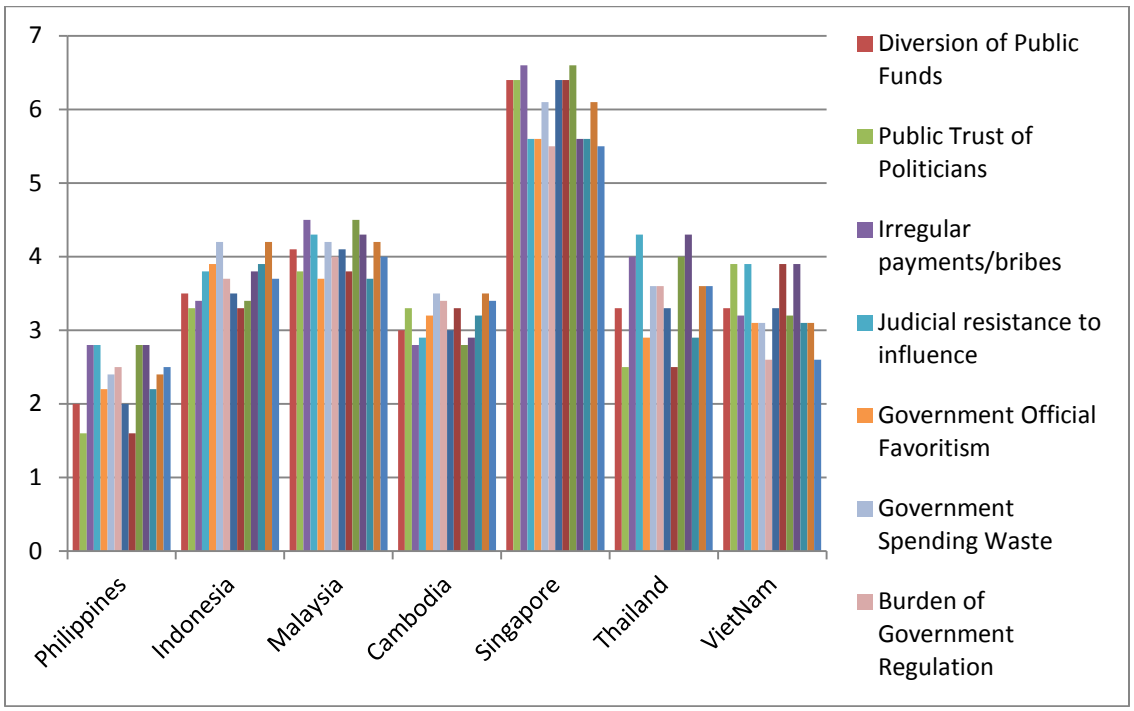
Public trust in the government has been extremely low in the Philippines. The 2010-2011 Global Competitiveness Report found that, on every facet of corruption examined by the survey on which this Report is based, the Philippines has scored in the bottom 20% worldwide, and lower than every one of its neighbors (see, e.g., Figure 18). This is a remarkably consistent, *negative* result that, particularly in the arena of foreign investment where competition across countries is central, will carry weight in terms of investment outcomes.[72] As John Nye (2011a:12) has recently written,

> [i]t is the relative importance of these faults at the margin which determines which countries win or lose in the international race. Moreover, it matters less how bad your core system is if you can promote rapid enough change to make greater investment not only more attractive today and but [*sic*] can credibly commit to an ever improving investment environment in the future. Hence, even countries like Vietnam have seen increases in Foreign Direct Investment because they have not only made numerous reforms but have convinced business and investors that those reforms will keep on into the future. Expectations drive much of future growth.
>
> The Philippines needs to do more than to open up to foreign investment. It need to bend over backwards to make investment easier and more desirable in the Philippines than in our neighbors.

[72]Recall de Dios' (2008:23) econometric evidence, cited above.

We cannot just say, "Look at what we've done: X or Y are improvements over what we had before." But if our neighbors are opening up to foreign investment EVEN faster, the Philippines will mostly be bypassed.

Figure 18: Public Opinion of Government Transparency and Efficiency

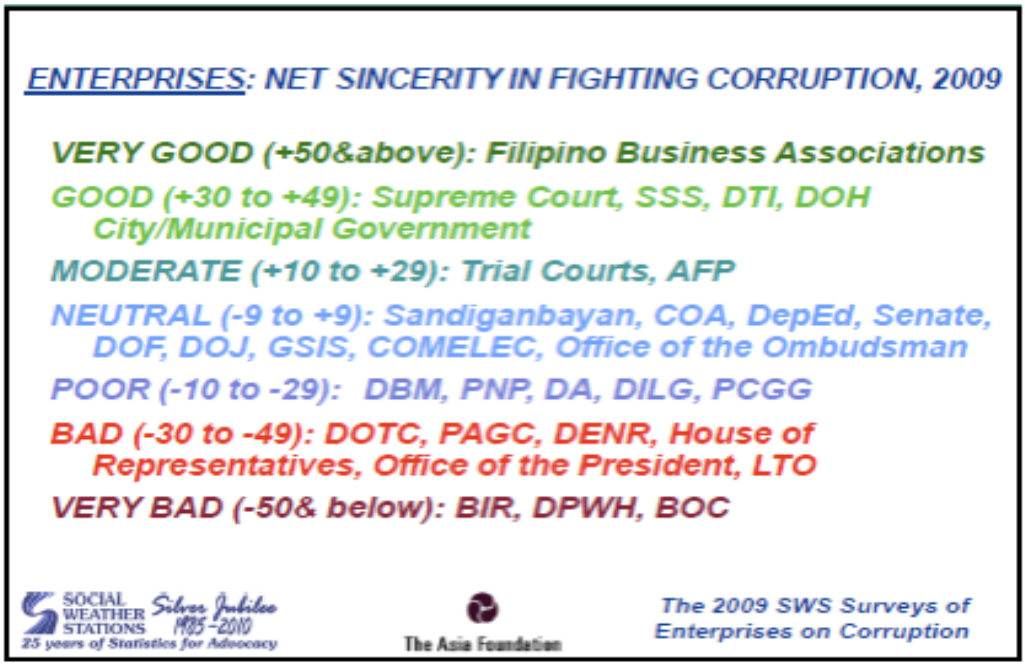


Source: World Economic Forum (2010).

Raising local public awareness about microeconomic impacts from corruption could further support reforms. Surveys of Enterprises on Corruption[73] illustrate the Philippine business sector's perspectives on corruption and good governance. These data help the local citizenry track business people's perceptions of corruption, the perceived sincerity of government agencies in fighting corruption, and the actual business practices of the private sector. The surveys have served to raise the public's awareness about the costs of corruption, to highlight the importance of anti-corruption reforms, and to measure the effectiveness of anti-corruption efforts. In contrast to many international corruption indices, Surveys of Enterprises on Corruption focus specifically on local business managers in the Philippines. The interviews are conducted face-to-face. The 2009 round of surveys covered 550 managers from five different areas of the Philippines. The responses are based on personal experience, so the data form a fairly accurate proxy for actual levels of corruption. Many of the respondents are sampled from year to year, allowing for useful comparisons over time.

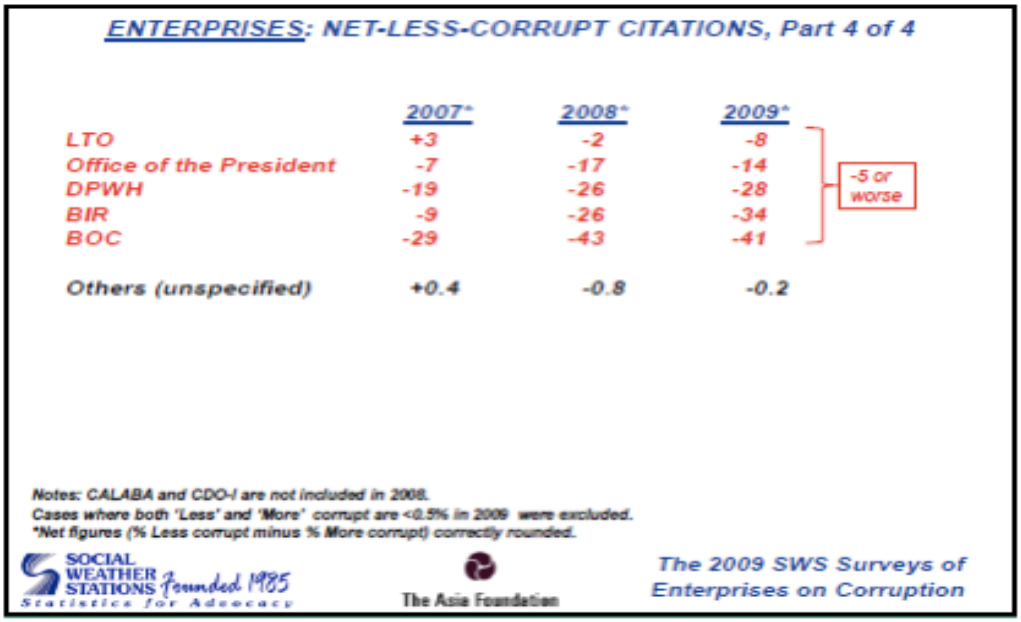
[73]Produced by the *Social Weather Station* (SWS). See www.sws.org.ph.

Figure 19: Philippines Willingness to Combat Corruption



Illustrations of the perceived sincerity among public sector officials to combat corruption help create pressures for reform. In the depiction above, SWS's 2009 Surveys of Enterprises on Corruption identified the perceived sincerity of public sector agencies among the 550 managers canvassed to assess the fight against corruption. The ones listed as bad and very bad are similar to those cited by Arangkada 2010 and Habito (ADB 2010a) in terms of poor governance and targets for anti-corruption efforts: BIR, BOC, Congress, DA, DENR, DOTC, and DPWH.

Figure 20: Corruption Citations by Organization



There is agreement on where the microeconomic dysfunction exists. In particular, it is interesting to note that in SWS's 2009 Surveys of Enterprises on Corruption, of the aforementioned public sector agencies listed as poor, bad and very bad in terms of perceived sincerity, the ones that had truly deteriorated in terms of becoming less "net-less-corrupt" (the slide above) also matched those of Arangkada 2010 and Habito (ADB 2010a): BIR, BOC, DPWH and Office of the President (OP). Clearly, there is some definite alignment in the perception of where poor governance or corruption lies among Philippine public sector institutions.

There seem to be common traits among corrupt public sector agencies. Most of the public sector agencies highlighted by Arangkada 2010, Habito (ADB: 2010) and SWS as suffering or being perceived to suffer from poor governance share some common characteristics. Namely, these are agencies that either directly collect or supply public revenues (e.g., BIR, BOC, DBM and Congress), directly administer the construction of public goods (e.g., DOTC and DPWH), or directly provide public productive inputs (e.g., DA). The poor governance practices of these identified public sector agencies have contaminated vast expanses of the country's microeconomic environment. These corrupt practices have come to define the operational Philippine business model within which all participating investors must contend. They have added substantial transaction costs to the enabling environment for business operations, while preventing much-needed public investments (i.e., reduced fiscal space) and deterring considerable new private (i.e., local and foreign) investments that, if realized, could elevate the Philippines to a higher GDP growth plane on par with its Southeast Asian peers.

The *underlying causes* of political instability and corruption are difficult to isolate and demonstrate. De Dios (2008:24) underscores recurrent problems of *regime legitimacy*, arising from (threatened or actual) political transitions that were extra-constitutional, or at least viewed as such by significant segments of the population. We examine (drawing on De Dios (2008:24-36)) the determinants of legitimacy further below.

Constitutional issues have arisen in presidential transitions of questionable legitimacy, but perhaps more influential in contributing to low legitimacy is the *weakness of formal political institutions*. In their stead, personal ties and kinship continue to hold sway over much of Philippine political and economic life. This vacuum of authority leads to *intra-elite rivalries* that encourage the use of corrupt practices to maintain power, and that tend also to foment political instability: "The threat that an opposing section of the ruling elite might acquire unlimited power—with the unprecedented access to corruption-rents that implies—is the fundamental reason that elite political conflict intensifies to the point where it threatens stability" (De Dios 2008:29). The stability of institutional arrangements in the Philippines is also impaired by the *relatively small middle class*. The middle classes have a stake in policy outcomes likely to affect their future prosperity, and unlike elites, they do not have preferential access to centers of power. Absent sufficient vigilance and mobilization, power-grabs by elites or military actions are perhaps more likely. *Concentration of power*, particularly in the presidency, is a root cause of corruption and political instability. The scope of such powers include considerable breadth of fiscal powers, and discretion over political appointments. This situation weakens independence of other branches of government and the executive bureaucracy, vitiates professionalism (indirectly through morale of career civil servants, and directly through appointment of less-than-qualified officials), and saps integrity in the bureaucracy. In the revenue collection bureaucracies, these weaknesses manifest themselves in low tax collections due in part to favoritism and inefficiencies, and ultimately persistently low fiscal space.

We conclude here that corruption is a binding constraint to growth in the Philippines. De Dios' (2008) regression evidence cited above for the Philippines linking investment with the WGI corruption index is both statistically and economically significant, explaining up to half of variations in investment over time. Looking at cross-sectional evidence, the cross-country control of corruption index has been on a persistently downward trend since 1996, and as of 2009, underperforms all but one regional comparator country. Other recent cross-country evidence from the World Economic Forum (Figure 18) clearly shows the Philippines underperforming other regional investment destinations.

Corruption is in part a function—and outcome—of a voluminous and complex body of laws and regulations affecting economic activity. This is true for some manifestations of corruption more than others. From Figure 18 above, shortcomings with respect to the aspects of "Irregular payments and bribes," "Government official favoritism, and "Burden of government regulation" are all plausibly a function of the underlying framework of rules affecting private sector activity. For others, e.g., "Diversion of public funds," "Public trust in politicians," "Judicial resistance to influence," it is harder to make the case that these are an *outcome* of public regulation of private activity, rather than simply related to *misconduct by public officials*. The argument comes full-circle in those instances in which distortion-inducing rules and regulations themselves arise from preferential access to and undue influence over public officials and the policy-making process by powerful economic interests (e.g., "elite capture"); such situations, in the extreme, can cross the line into corruption. There is clearly a circular dynamic here, so it is difficult to make convincing claims about the direction of causality between corruption, on the one hand, and legal, institutional, and administrative frameworks on the other. Nonetheless, if we accept that the *application and implementation of rules* (as well as the *genesis* of such rules) tends to be the direct consequence of decisions, actions, and omissions of *individuals* (rather than "institutions" or "framework conditions"), we view corruption as generally the prior, causal phenomenon, and hence the *root-cause constraint*.

Reflecting on potential connections to other sections of this report, corruption can also be *pervasive* in the sense that it is arguably an underlying cause of other constraints discussed in this report, for example:

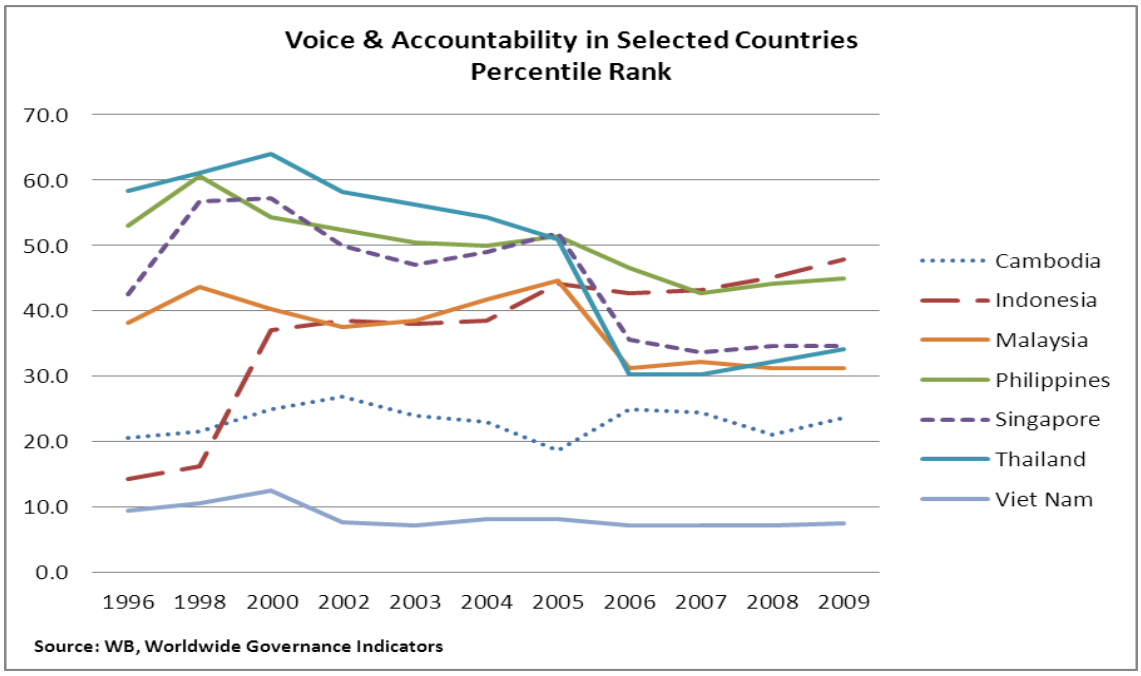
- inadequate fiscal space due to corruption in revenue-raising agencies;[74]
- corrupt public procurement processes forego the value of efficiently planned, technically sound, and cost-competitive infrastructure projects;

Seen in this light, these constraints may best be seen as *outcomes* of specific manifestations of corruption associated with particular agencies and administrative processes.

3. Voice and Accountability

This dimension captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.

Figure 21



The Philippines has consistently scored well on the Voice and Accountability Indicator over the past decade. This indicator measures freedom of speech, freedom of religion, and the ability for smooth democratic transfers of power through elections. It also includes measurement of discrimination: whether the freedom of minority groups is being inhibited. A low score in voice and accountability is often expected to cause corruption (Rodrik 2000) and disproportionately negative impacts on the extreme poor (Lake 2001); however, the consistently high Voice and Accountability rating of the Philippines suggests that this factor does not likely have a significant impact on growth in the Philippines.

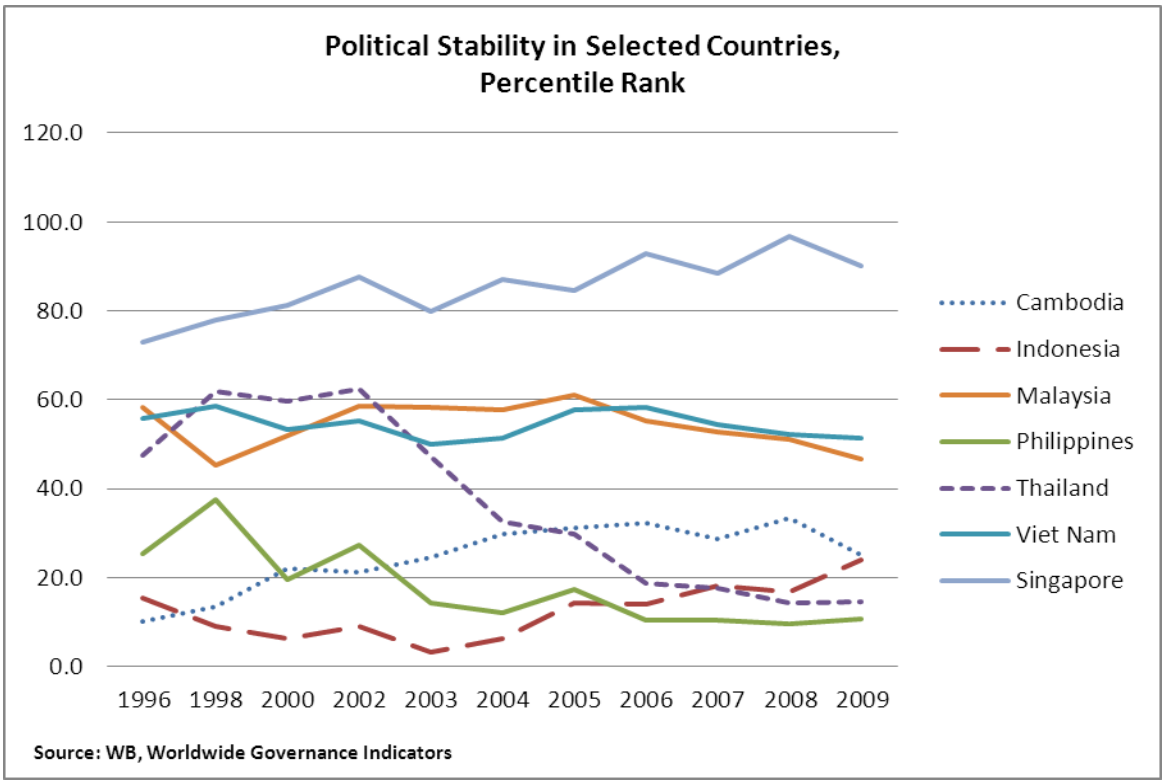
[74]See Vicente (2006:41), cited earlier.

We have found that Voice and Accountability as a dimension of governance is not a binding constraint to growth in the Philippines.

4. Political Stability and Absence of Violence

This dimension captures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.

Figure 22



The political stability of the Philippines as measured by the WGI Indicators (Kaufmann, Kraay, and Mastruzzi 2009) has been on a downward trend from the already low level of 1996, and has been stagnant or declining for the past 5 years. As of 2009, the most recent year for which data is available, it was *lowest-ranked* among comparable neighbors, and distinctly below the next lowest country, Thailand. Political stability is often linked with economic issues that constrain growth such as low FDI and lack of property rights (Heliwell 1994).

Low levels of political stability can have a negative impact on investment. To understand the economic consequences of the above trends in political stability, we look next at how *investment* depends on political stability, and do this for Philippines and regional comparator countries. Such comparison is particularly relevant for foreign investors who face a choice among alternative investment destinations. De Dios (2008:17) regresses relative per capita foreign direct investment

against lagged relative political stability for the period 1985 to 2006.[75] He finds a statistically significant positive relationship between these two variables, with political stability accounting for 20% to 50% of the variation in measure of foreign direct investment.

At a subnational level within the Philippines, the greatest concerns in recent years regarding political stability in the Philippines have focused on Mindanao.[76] Data are lacking on the regional distribution of events (and related perceptions) regarding political stability and violence, so it will not be possible here to study regional variation in these phenomena and relate these to potential growth implications.[77] At a more elementary level, we can use national accounts data to look at regionally-disaggregated growth alone. Specifically, we may examine the recent evolution of gross regional domestic products to assess the level and change in economic activity for Mindanao and other regions. From these data (source: NSCB), we can understand Mindanao's growth outcomes and their significance for Philippine growth overall.

From 2000 to 2009, the share of national product accounted for by Mindanao grew slowly from 16.6% to 16.9%, so that Mindanao accounts for a small and relatively steady fraction of overall Philippine economic activity. Meanwhile, Mindanao's regional product grew by a compound annual rate of 4.6%, compared to 4.3% for the balance of the Philippines. This average for all of Mindanao masks some differences among its constituent regions: over this period: Southern Mindanao grew by only 1.0% per annum, while on the other end of the spectrum, Central Mindanao saw average annual growth of 7.8%. We should emphasize, naturally, that other potential factors—e.g., government investment and spending, international financial and technical assistance, and so forth—are co-determinants of these outcomes, so that attribution to political stability, per se, is not possible. For Mindanao as a whole, though, we see that it accounts for a small though not insignificant portion of the total Philippine economy, and is growing slightly faster than the balance of the country. We may conclude, therefore, that neither does Mindanao lag behind the balance of the country in terms of growth outcomes (whether due to political stability or other factors), nor is Mindanao a particularly weighty contributor to overall Philippine growth.

The above evidence, both cross-sectional and Philippine-specific, points to **political stability as one dimension of the binding governance constraint** at a national level. In contrast, the scanty evidence available suggests that constraints specific to *subnational* units within the Philippines (e.g., in Mindanao) do not appear to be binding.

5. Political economic context

In considering the existence and, more importantly, the persistence of certain constraints on economic growth, it may be instructive to examine the political economy of the Philippines (Nye, 2010). Economic institutions, or the "rules of the game," are shaped by the context of political decision-making and the trade-offs and the distributive outcomes of a political process. Similarly, the prospects of proposed changes to these institutional arrangements (e.g., economic reforms) are

[75] *Relative per-capita FDI* is the mean of annual per-capita of FDI into Malaysia, Indonesia, and Thailand as a proportion annual per-capita FDI of the Philippines. *Relative political stability* is the mean ICRG Government Stability scores of Malaysia, Indonesia, and Thailand as proportion of the ICRG Government Stability score of the Philippines.

[76] In this work, "Mindanao" includes Regions IX, X, XI, XII, and the Autonomous Region of Muslim Mindanao (ARMM).

[77] Of course, the causality may even, under the circumstances, go the other way, with political stability as an outcome of levels of economic activity.

necessarily shaped by the same contextual factors. In developing countries like the Philippines that are characterized by inward-looking businesses, dominant elites, and weak public institutions; reform efforts that will challenge the status quo will expectedly encounter strong opposition from vested interests and will require significant political capital from the proponents that champion these reforms. The World Bank (2008) noted in a recent report that "careful review of the country's political economy and of stakeholders' concerns is required to identify the scope for a sustainable reform program."

De Dios and Hutchcroft (2003) argued that "political and institutional factors are central to understanding the uneven and often lagging character of Philippine economic performance." Many analysts point to the local oligarchy that depends on rent-seeking behavior and favorable access to the state apparatus as a strategy for capital accumulation. A 2008 World Bank Policy Paper by Bocchi noted that the Philippines has consistently attracted far less investment, both foreign and domestic, partly because of elite capture of the levers of government and oligopoly in key sectors of the economy. These elites are able to take advantage of weak bureaucratic institutions that often lack sufficient resources and capacity to develop policy that safeguards the public interest. With government assistance, elite monopolies and oligopolies provide key inputs at prices that render other sectors of the economy less competitive and less attractive for investment. Bocchi noted that economic growth is only maintained at a level that has been politically sustainable (and has sustained elite profits) via the emigration of workers and the creation of export-oriented industries which operate mostly outside of the domestic economy.

Reforms in the past have generally failed because of the opposition of monopoly interests and the lack of support from regulatory authorities who favored the status quo. Efforts to reform the National Food Authority (NFA), the main government agency with a monopoly to import grains and now the largest contributor to the national deficit, have not been successful due to a lack of bureaucratic resolve. Numerous attempts to reform tax policy and administration—in particular, the Bureau of Internal Revenue and the Bureau of Customs—have not had significant impact in improving revenue performance and in curbing corruption. Private sector participation in infrastructure development has waned since the 1990s because of a lack of transparency and the perception of back-room deals and pay-offs in the awarding of tenders. Attempts at deregulating and opening up the economy often encounter protectionist interests that ultimately benefit only a few individuals and families at the expense of the common good.

The deregulation of the telecommunications sector, the liberalization of civil aviation, the introduction of roll-on, roll-off transport policy in the domestic shipping sector, and water privatization are some of the more successful reforms of the past two decades. The successful reforms have had a transformative effect on the domestic economy providing more opportunities, increased incomes, and industrial expansion. These reform efforts, however, were not easily attained as they were furiously resisted by dominant players who, along with their government supporters, opposed and delayed the introduction of changes in their respective regulatory regimes. These reforms were only possible because of determined political leadership, support from a broad-based coalition of stakeholders, and catalysts that helped push these through the bureaucracy.

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