WHY DOES GOOD GOVERNANCE NEGATIVELY CORRELATES WITH ECONOMIC GROWTH? – A focus on the Philippines

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4. Three governance indicators and economic growth.
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1. Introduction

Summary of the Presentation

The paper correlates three governance indices with GDP per capita and economic growth, so as to comment on the presumption that good political, economic and social governance is associated with these two variables.

It is found that all the three governance indicators are positively associated with GDP per capita, but not with economic growth.

The study postulates that economic growth is related to changes in governance and not to levels of governance.

The study also comments on the state of governance in the Philippines.

The indicators used

The indicators relating to governance used in this study are:

(i)Political governance: measured by the Worldwide Governance Indicators;

(ii)Economic Governance: measured by the Macroeconomic Stability index #;

(iii)Social governance: Measured by the Non-income components of the Human Development Index.

The title of the economic and social indicators does not directly refer to governance, but they are strongly related to economic and social policy, which is itself associated with economic and social governance.

2. Brief literature review on governance and economic performance

Governance and GDP per capita

Simple correlations between good governance indicators and GDP per capita of countries, as done in this study, indicate that there is a high degree of correlation between the two variables. This relationship is confirmed in more rigorous and complicated studies on this issue, notably in Kaufman and Kraay (2002).

Kaufman and Kraay (2002) also find a strong positive causal effect running from better governance to higher per capita income, and a weak and even negative causal effect running in the opposite direction from per capita income to governance.

Governance and Economic Growth…2

Neoclassical growth theory predicts that low income countries should converge as theoretically they would tend to grow at a faster rate than higher income ones due to the law of diminishing marginal product with regard to capital, which is more abundant in developed countries. This neo-classical convergence theory is associated with Solow (1956).

In addition, intuitively, one should think that economically backward countries can grow faster than advanced countries as the former countries can copy and adopt readily available technologies invented by countries that developed earlier. This catching-up technological laggards has been termed the "advantage of

Governance and Economic Growth…3

In spite of this, a commonly held view is that good governance leads to economic growth. The presumed positive connection between growth and governance has been questioned by Kurtz and Schrank (2007) who doubt whether such a connection exists and queries whether the data used to measure governance as well as the methods used to estimate such a relationships are good enough.

Rodrik (2008) argues that there are many countries that are growing rapidly despite poor governance to render suspect any general claim to the contrary, suggesting that governance is generally not a prerequisite for getting growth going.

Governance and Economic Growth…4

The literature on the effect of good governance on economic growth therefore sends contradictory signals, with some authors, notably Kaufman and Kraay (2002) arguing strongly in favour the connection and others, such as Rodrik (2008) and Kurts and Schrank (2007) arguing that there is no evidence that such a connection exists.

Governance in the Philippines

There is a vast body of literature on the Philippine economy and the choice of studies considered here is extremely selective and focusses on governance aspects.

Many authors identify weak governance, particularly corruption, as a main constraint on inclusive growth in the Philippine, meaning that even if the economy is growing fast, large sections of the population are not reaping the benefits of such growth.

Corruption in the Philippines

In an interesting essay Polvorosa, Jr. (2014) argues that there is no guarantee that the current good performance of the Philippine economy will continue, and refers to a sense of déjà vu due to the fact that the economy had already experienced periods of rapid growth before, which fizzled out, particularly after World War 2.

When referring to bad governance in the Philippines, the author particularly mentions corruption and pork barrel scandals, non-payment of taxes, the bribery of officials for the creation of ghost projects, bureaucratic red tape, bribery, lack of financing, and unsatisfactory infrastructure.

Need for inclusive growth in the Philippines

Navarro and Llanto (2014), identify a number of positive features leading to economic growth in the Philippines, including that anti-corruption initiatives may have recently permeated policymaking. The improvements recommended by Navarro and Llanto include heightened infrastructural investments, expansion of the industrial base to create productive jobs and reforming regulatory institutions.

The same authors also refer to the high rates of poverty and unemployment as worrisome realities, therefore implying that economic growth is not permeating into the lower income population groups.

Positive features in recent years

The Global Competitiveness Report (2014-2015) also identifies positive and negative features of the Philippine economy. The Philippines gained of 33 places since 2010 in the Global Competitiveness Index, which is the highest improvement among all countries included in the Index.

The report argues that this came about because of the reforms during the 2010-2014 period which have bolstered the country's economic fundamentals. However the report refers to a number of major economic shortcomings including corruption, poor infrastructural facilities and severe rigidities and inefficiencies in the labour market.

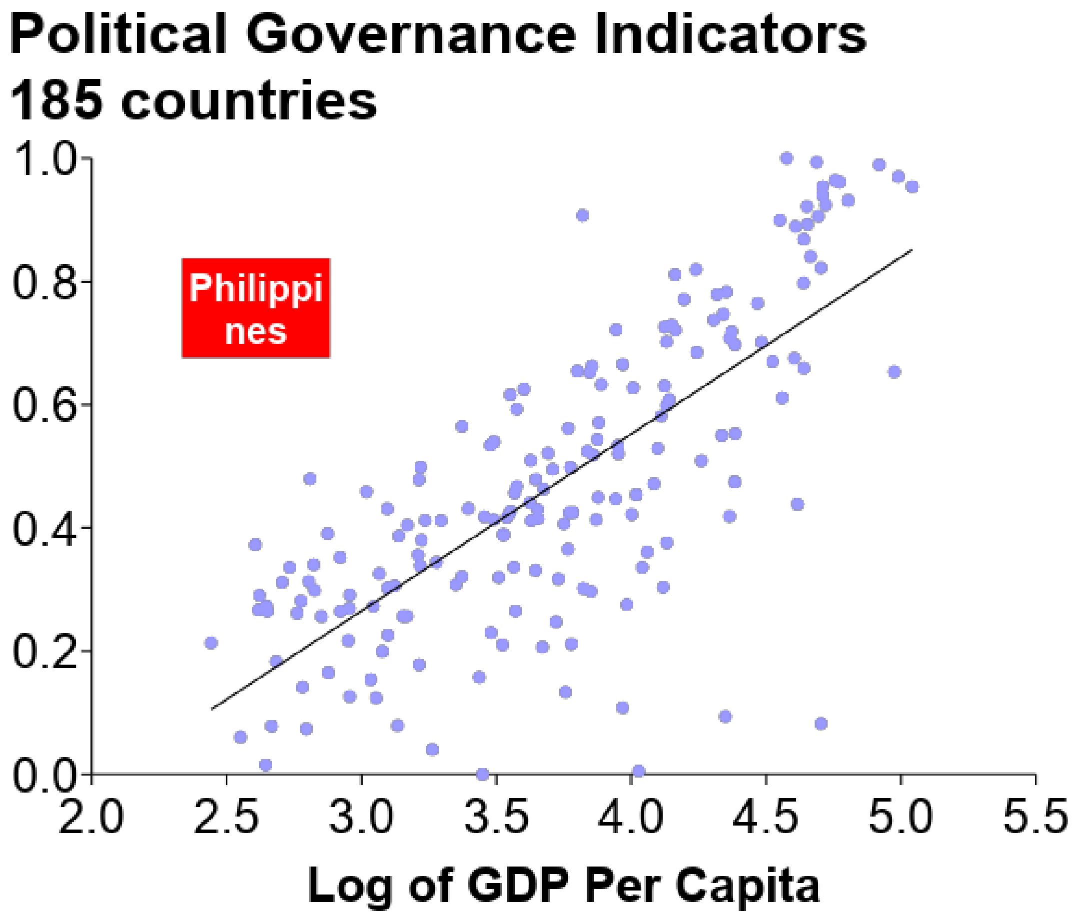
An economy with great potential

Usai (2012) also refers to the solid growth performance of the economy during the 2000s, but points out that the country, however, has not yet succeeded in translating this into inclusive growth.

The author opines that the Philippines has a great potential and discusses the reasons why this has not been realised. Amongst other things he identifies the lack of industrial dynamism as a major culprit in this regard, for which he blames governance leading to several constraints such as under-provision of basic infrastructure.

3. Three governance indicators and GDP per capita

Political governance and GDP per capita



It can be seen that political governance is positively correlated with GDP per capita (averaged 2010-2014). The Philippines performed better than the average of its income comparators, as indicated by the red marker over the trend line.

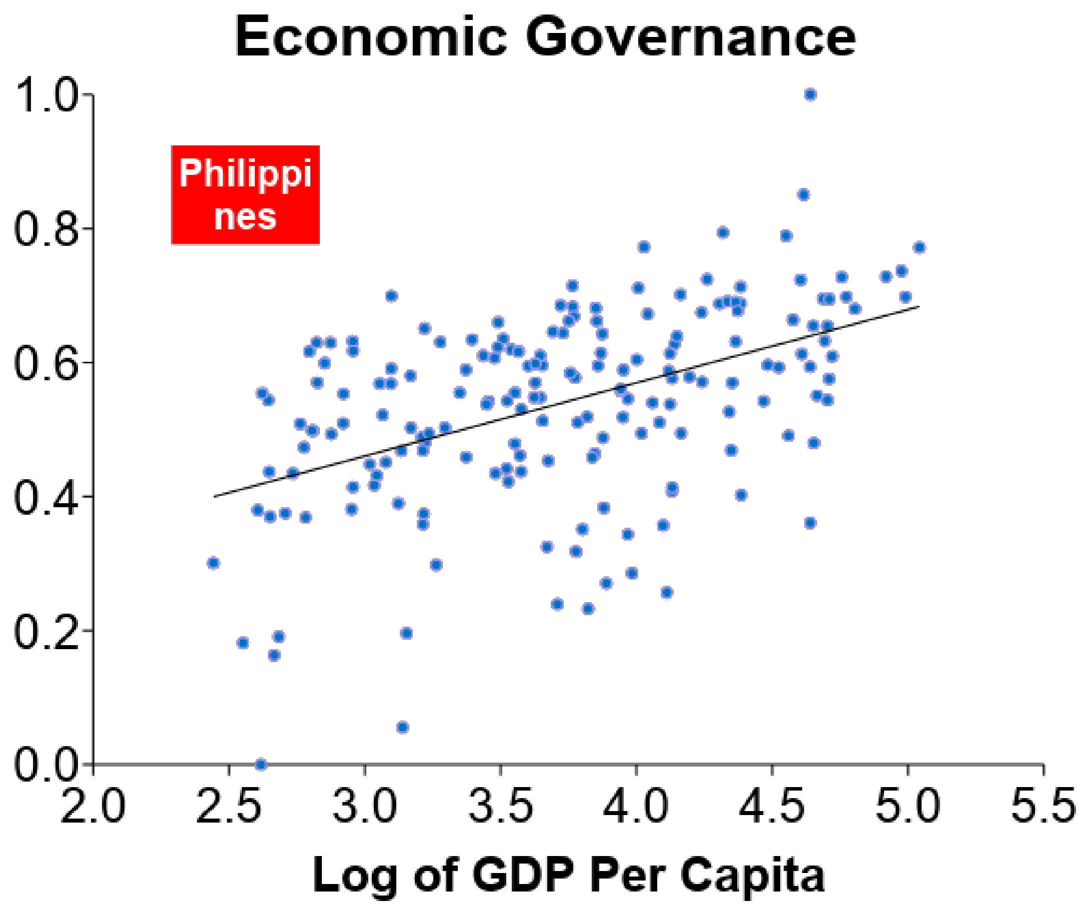
The index that measures political governance is the average of the six Worldwide Governance Indicators (WGI) available at: http://info.worldbank.org/governance/wgi/index.aspx#home. The WGI take a value of between -2.5 to +2.5, but for the purpose of this exercise the indicator was rescaled using the Max-Min formula so that it takes a value of between 0 and 1.

Political governance and country groups

Countries	PG
Philippines	0.431
ASEAN	0.458
OECD countries	0.806
High-income-countries' average	0.709
Upper-middle-income countries' average	0.452
Lower-middle-income countries' average	0.345
Low-income countries' average	0.244

It be seen that the Philippine political governance score is relatively low. It is lower that the average of the ASEAN. However it is higher than the average of its lower-middle-income comparators.

Economic governance and GDP per capita



It can be seen that economic governance is positively correlated with GDP per capita (averaged 2010-2014). The Philippines performed better than the average of its income comparators, as indicated by the red marker over the trend line.

The index that measures economic governance is the Macroeconomic Stability Index, (STB) which is a component of the Economic Resilience Index (Briguglio, 2014). For the purpose of this exercise the indicator was rescaled using the Max-Min formula so it takes a value of between 0 and 1.

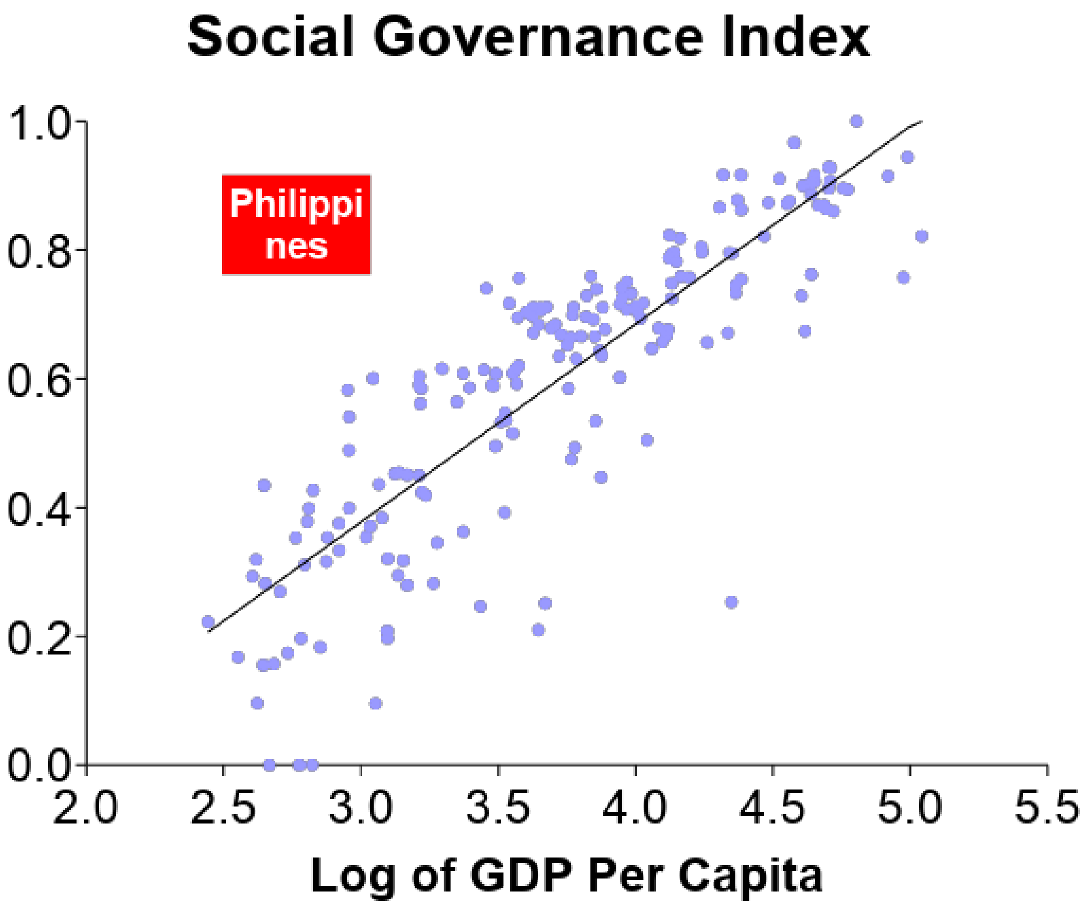
Economic governance and country groups

Countries	EG
Philippines	0.634
ASEAN	0.608
OECD countries	0.619
High-income-countries' average	0.614
Upper-middle-income countries' average	0.539
Lower-middle-income countries' average	0.506
Low-income countries' average	0.446

It can be seen that the Philippine economic governance score is higher than the average of the ASEAN and the average of all income categories.

It is well known that many advanced countries passed through a very unstable phased since 2009.

Social governance and GDP per capita



It can be seen that social governance is positively correlated with GDP per capita (averaged 2010-2014). The Philippines performed better than the average of its income comparators, as indicated by the red marker over the trend line.

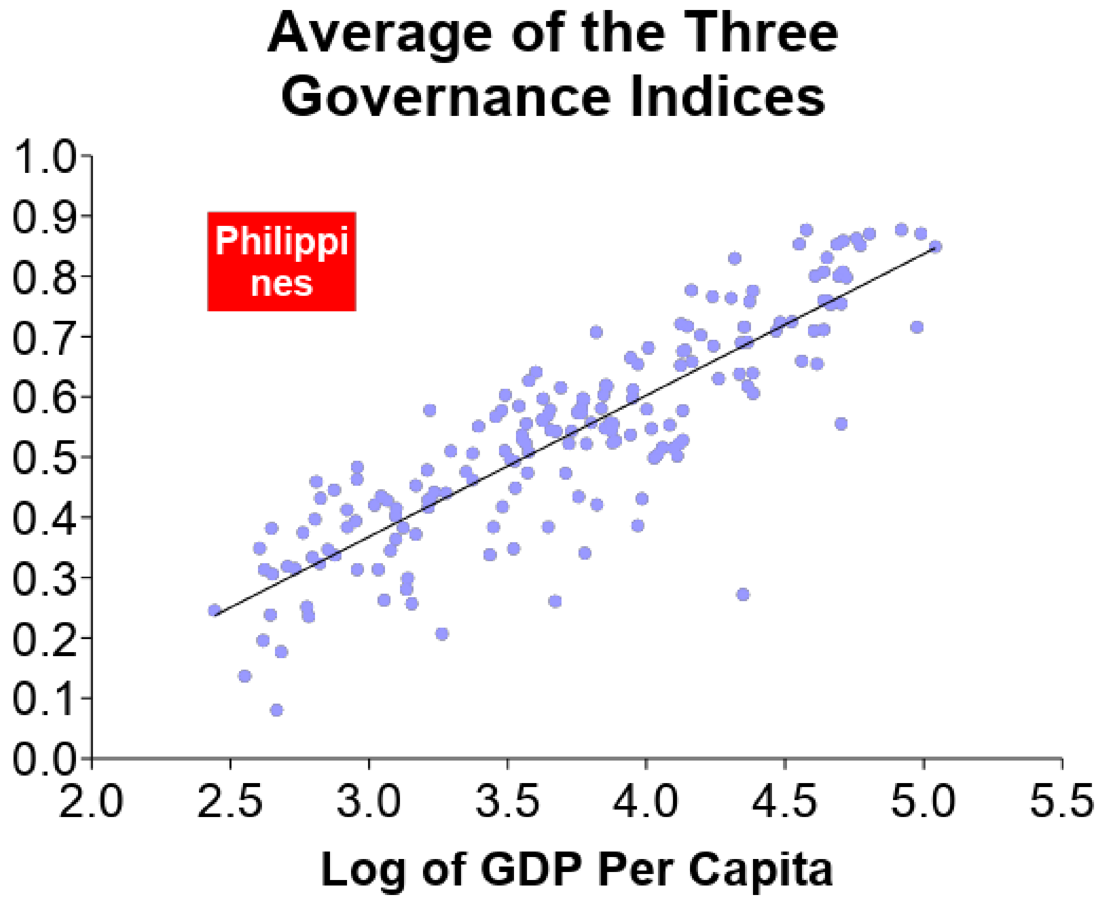
The index that measures social governance is the Non-Income components of the Human Development Index available at : http://hdr.undp.org/en/data .

Social governance and country groups

Countries	SG
Philippines	0.586
ASEAN	0.613
OECD countries	0.882
High-income-countries' average	0.815
Upper-middle-income countries' average	0.654
Lower-middle-income countries' average	0.486
Low-income countries' average	0.258

It can be seen that the Philippine social governance score is lower than the average of the ASEAN but higher than the average of its lower-middle-income comparators.

Overall governance and GDP per capita



It can be seen that the average of the three governance indicators is positively correlated with GDP per capita (averaged 2010-2014). The Philippines performed better than the average of its income comparators, as indicated by the red marker over the trend line.

The index is a simple average of the Political, Economic and Social governance indices described above.

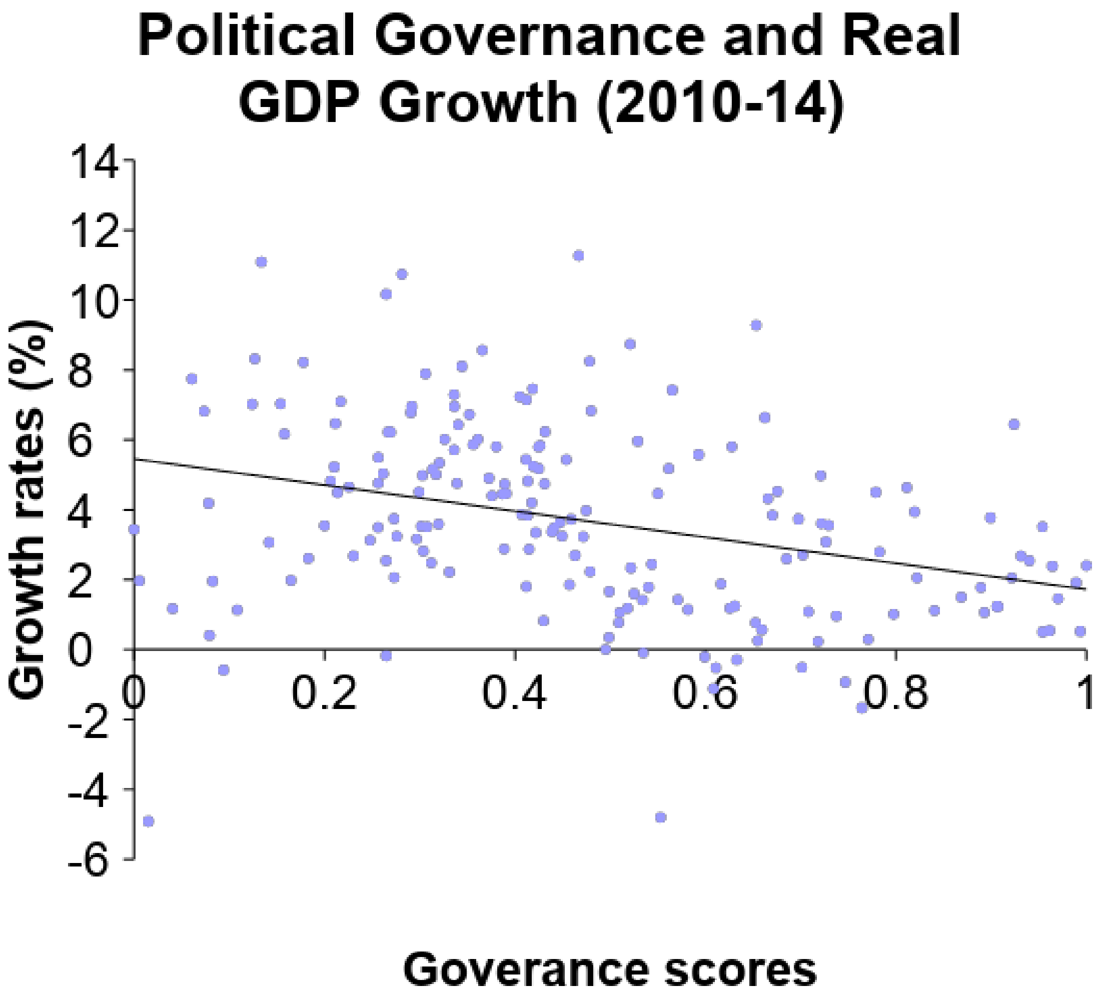
Overall governance and country groups

Countries	AG
Philippines	0.551
ASEAN	0.560
OECD countries	0.769
High-income-countries' average	0.713
Upper-middle-income countries' average	0.548
Lower-middle-income countries' average	0.446
Low-income countries' average	0.316

It be seen that the Philippine average governance score is lower than the average of the ASEAN but higher than its lower-middle-income comparators.

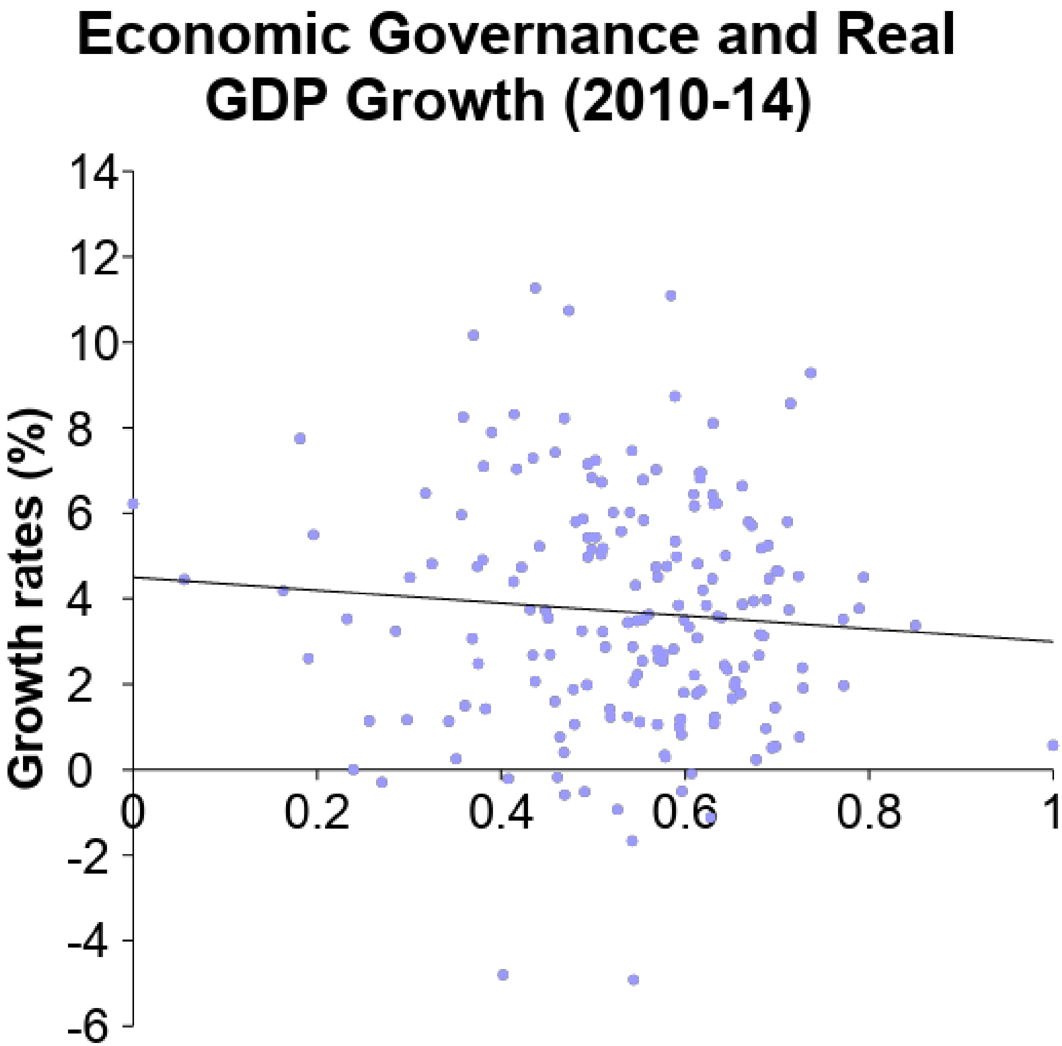
4. Three governance indicators and economic growth

Political governance scores and real GDP growth



It can be seen that the political governance is negatively correlated with real GDP growth (2010-2014). The Philippines performed better than the average of its income comparators, as indicated by the red marker over the trend line.

Economic governance scores and real GDP growth



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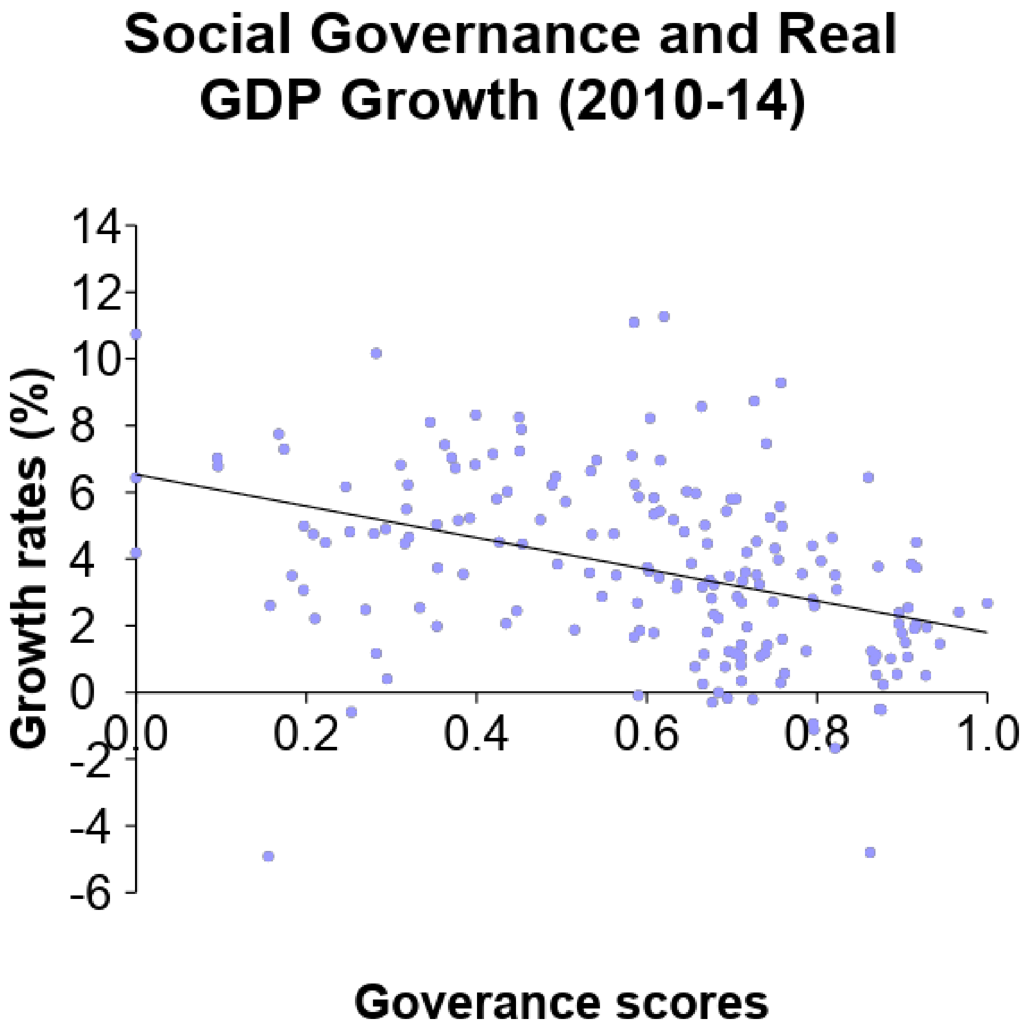

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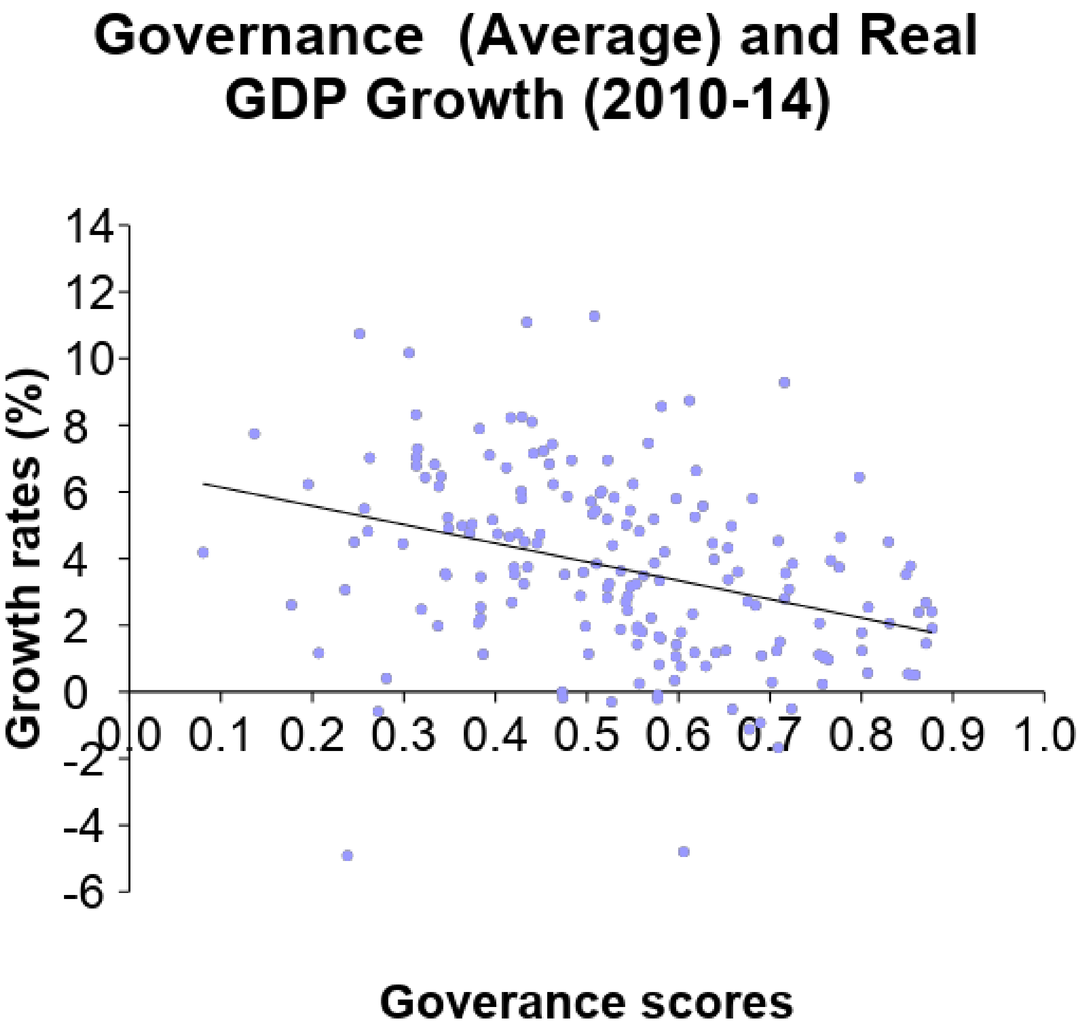

It can be seen that the average of the three governance indicators is negatively correlated with real GDP growth (2010-2014) The Philippines performed better than the average of its income comparators, as indicated by the red marker over the trend line.

5. A deeper look at the governance-growth relation

Why are growth and governance negatively correlated?

In this section we try to answer the question as to why governance scores and economic growth seem to be negatively correlated with each other. As has been shown above in this study, a simple correlation between economic growth and governance indicators suggest that indeed the slowest growing countries tend to have the highest governance scores. However this does not mean that good governance is bad for growth. We argue in this paper that the equation should compare like with like, that is changes in real GDP should be compared with changes in governance, and not with its levels. The hypothesis can then be stated as follows: **improvement in governance leads to improvement in real GDP (i.e. to economic growth).**

Diminishing marginal governance effect

This assumption may also help to explain why GDP per capita is found to be positively correlated with governance scores and negatively correlated with economic growth.

Most countries with relatively low governance also register low GDP per capita scores. It is likely to be easier for such a country to improve its GDP per capita and its governance level from a relatively low starting point. In other words, a given governance improvement effort would have a higher effect in a low income and poorly governed country than in a high-income well-governed one. This possibility may be termed as **"diminishing marginal governance effect".**

Testing a growth-governance equation…1

To test this assumption, we specify a simple growth equation as follows:

$\Delta GDP = f(\Delta GVN, GPC, \text{Log } P)$

Where:

ΔGDP_i = GDP growth in real terms during a given period in country i.

GPC_i is GDP per capita in country i.

ΔGVN_i = changes in governance during the same period in country i.

$\text{Log } P_i$ = Log of the population size in country i.

Testing a growth-governance equation…2

In this exercise, ΔGDP is measured by percentage changes in GDP in real terms averaged over the years 2010 to 2014 (that is the period following the global financial crisis).

GDP per capita (GPC) is included in the equation as a proxy for the stage of development of a country, in order to allow for the possibility that low income countries would tend to grow at a faster rate than higher income countries in line with the so-called convergence theory and to the possibility that backward countries tend to catch-up technologically, by amongst other things adopting technological advances previously created by more advanced countries. The sign of the coefficient on GPC is therefore expected to be negative. GDP per capita is measured in US dollars for the year 2013.

Testing a growth-governance equation…3

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THE VARIABLES AND THE DATA

Changes in governance are measured in terms of the Rule of Law dimension of the Worldwide Governance Indictors (WGI) between 2010 and 2014. This index was chosen because of its implications for political governance, because it has a wide coverage of countries and also because it was produced by and large consistently during each year of the period under consideration.

The variable ΔGVN is expected to have a coefficient with a positive sign, capturing the effects of governance improvements on growth.

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THE VARIABLES AND THE DATA

The population variable was introduced in the equation to allow for the various constraints faced by small states, including their high exposure to external shocks and their limited ability to reap the benefits of economies of scale (Briguglio 2014). The sign of the coefficient on this variable is expected to be positive.

It is measured in logs to allow for the possibility that a country twice the size of another is less than twice advantaged in terms of growth.

The GDP and population data was sourced from the IMF World Economic Outlook Database (IMF, 2014) and the Governance data was sourced from World Bank (2014).

THE RESULTS OF THE REGRESSION ANALYSIS

The equation was applied for 185 countries, and the regression results indicate that the coefficients were statistically significant, as shown by the t-statistics (in Italic below the estimated coefficients:

$$\begin{array}{lcccccccc} DGDPi & = 1.07 & - & 0.04\ GPCi & + & 13.31\ DGVNi & + & 0.85\ LogPi \\ & & & \mathit{-3.5} & & \mathit{2.8} & & \mathit{3.6} \end{array}$$

$R^2 = 0.17$;   N=185

Tests of multicollinearity and heteroscedasticity indicated that the regression did not suffers from this problems.

THE RESULTS OF THE REGRESSION ANALYSIS

The correlation coefficient improved considerably when a dummy variable (D) was introduced to capture the effect of the austerity programme which 5 euro-area countries were obliged to follow during the growth period under consideration. These are Cyprus, Ireland, Greece, Portugal and Spain. These results are shown below:

$$DGDPi = 1.06 - \underset{-3.1}{0.03\ GPCi} + \underset{2.5}{11.48\ DGVNi} + \underset{3.8}{0.87\ LogPi} - \underset{4.1}{4.91\ Di}$$

$R^2 = 0.28$; N=185

6. Implications

Good governance and economic well-being

The indicators presented above, show first and foremost that desirable governance scores, be they political, economic or social, are correlated with GDP per capita. This would seem to suggest that good governance is associated with economic prosperity. This conclusion, also often found in the literature, supports intuitive thinking, given that good governance is likely to mean responsive administration, better institutional set-ups and more efficient utilisation of resources.

Good governance and economic growth

The governance indicators considered in this study do not seem to be positively correlated with economic growth.

This should not be interpreted as an indication that good governance is undesirable for growth, and that it should not, therefore, be pursued. On the contrary, the fact that good governance and economic prosperity are correlated, in that the best governed countries tend to enjoy the highest standard of living, can be seen as a sign that well-governed countries do reap benefits in the form of high income per capita, albeit this has occurred over a long period of time.

Good governance and economic growth

The negative correlation between good governance and economic growth would seem to contradict a commonly held view that growth and good governance go hand-in-hand.

As has been shown in this paper, the relationship between governance and real GDP growth is likely to be between changes (and not levels) in the governance variables. This study has hypothesised that that governance improvements are more difficult to achieve in a country with high governance standards when compared to a country which has considerable room for improvement in this regard.

Good governance and economic growth

The basic contention of this study is that improvement in governance is likely to improve the chances of economic growth, other things remaining constant.

For example if one compares economic growth between two countries, A and B, which are in the same level of development and with the same level of governance, one would expect that country A would register a higher growth rate than country B during a given period, if country A improves its governance more than country B.

A related argument is that if country A is less developed than country B, a given governance effort is likely to have a higher affect on growth in country A.

As already explained this has been termed “diminishing marginal governance effect”.

The interesting results produced in this study, namely that improvements (as against levels) in political governance have a positive statistically significant effect on economic growth, given the stage of development, can be considered as an added piece of evidence that it pays to improve governance.

Implications for the Philippines

The Philippines registered relatively high growth rates during the recent decade, but it is still a lower-middle-income country, according to the World Bank's classification. Typically, countries in that income bracket tend to have inferior governance structures when compared to richer countries.

Basing on the regression results of the present study one could argue that even though the Philippines has relatively low governance scores, the improvements in its governance in recent years may be one reason why the country is achieving relatively high growth rates.

Implications for the Philippines

The fact remains however, according to the indicators we selected, that the Philippine political and social governance leaves much to be desired, and this could possibly be one reason why the benefits of growth in that country are not being enjoyed by large sections of the population.

Income distribution in this country is very uneven. According to many authors of studies on the current situation in the Philippines, some of which were referred to above, good governance in the Philippines is an imperative for inclusive growth.

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