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# Examining the dimensions of governance that are relevant for private investment

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Which types of governance indicators matter the most for private investment? This short paper answers the question by examining the impact of specific governance indicators on private investment in a cross-section of developing economies. Results indicate that an effective government that includes competent and independent civil service and credible governmental policies are positively associated with private investment. Fair and predictable rules of the game that determine the extent to which property rights are protected also facilitate greater private investment. Based on this the paper concludes that since some indicators of governance matter more than others, targeted institutional reform that focuses first on the significant dimensions may be key to facilitating private investment in developing areas.

**JEL Classifications:** E02, E22, O16

**Keywords:** Private investment, governance, developing economies.

## Introduction

Governance matters! Good institutions are important for economic growth and economic development (North, 1990; Rodrik, 2001; Kaufmann et al., 2000; La Porta et al., 1999). While empirical literature on the channels by which weak institutions impact economic growth is still nascent, the positive impact of private investment on economic growth has been well documented (Khan and Reinhart, 1990). What determines the private investment decision? Although research has mainly focused on economic policies, market size issues, and the risk environment as main determinants of gross investment behavior (Salahuddin and Islam, 2008), there is some consensus on the significance of institutional quality in creating a salutary for private investment. Indeed, private investment has surfaced in literature as a mediating channel between good governance and economic growth (Mauro, 1998). This emphasis on private investment motivates our investigation of the linkages between governance and capital formation in the private sector. The research question asked by this paper, simply stated, is - which types of governance indicators are significant for private investment in developing economies?

To this end, the paper examines the impact of different dimensions of institutional quality on private investment in a sample of 47 developing economies. The empirical analysis utilizes a multidimensional view of governance as proposed by the Worldwide Governance Indicators (WGI) that reports governance indicators for several countries over 1996–2007, for six dimensions of governance, viz., Voice and Accountability, Political stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of law, and Control of Corruption (Kaufmann et al., 2007).

An examination of which types of governance indicators matter for private investment has implications for policy. Much of the current policy thrust in developing economies is on the expansion of private investment and on institutional reform as a prerequisite for a private investment-led growth strategy (Rodrik, 2001). However, there has been no agreement on the ingredients of governance that encourage private investment in developing economies. As a matter of practicality, broad-based institutional reform may not be feasible for such economies given their resource constraints. Perhaps, examining the dimensions of governance that matter the most for private investment in these countries will help prioritize an institutional reform agenda for policymakers.

The paper is organized as follows. The next section surveys pertinent literature on governance and private investment and motivates the paper's focus. Research methodology and data employed in the analysis are discussed in the following section. The rest sections present the econometric results and conclusions.

## Governance and private investment

Poor institutional quality vitiates the investment climate and increases the risk associated with the investment decision. Such risks can in effect staunch the willingness of the private sector to invest (Johnson et al., 2000). The importance of investment to economic growth has prompted research on the significance of governance on private capital accumulation. However, most studies have concentrated on examining the impact of particular governance indicators on private investment. Noteworthy among these are studies that are focused on the connections between security of property rights and private investment, especially in the context of developing economies (Mauro, 1995; Knack and Keefer, 1995).

Other specific dimensions of governance and their significance for private investment have also been explored in the literature. Empirical and pioneering work by Barro (1991) posits a negative association between political violence and private investment as a share of GDP. Pastor and Hilt (1993) empirically document the positive impact of democracy (voice) and political openness on private investment. The quality of public service provision, bureaucratic quality, and policy credibility also seem to matter for private investment as has been underscored in Jacobs (2002, p.1) who asserts that the underperformance of private investment in Asia's utility sectors may be related to "investor doubts about the quality of the regulatory environment."

Finally, there is a growing body of literature that particularly focuses on the corruption dimension of governance and examines its effect on private investment. Mauro (1995) and Pelligrini and Gerlagh (2004) examine corruption and its consequences for private investment and growth. Similarly, Wedeman (1997) contends that the level of corruption can vitiate the domestic investment climate by contributing to uncertainty and insecurity.

In sum, the extant literature on governance and private investment has only established the significance of institutional quality by studying the impact of particular indicators of governance. There has been no study that fully exploits the multidimensional nature of governance by considering the impact of several markers of institutional quality. In this regard, our analysis seeks to add to the literature on governance by econometrically examining the relevance of a cluster of indicators on the private investment decision. Such an investigation, as discussed above, is important in the context of prioritizing institutional reform for resource constrained developing economies.

## Data and model

Our empirical investigation consists of an econometric analysis of a sample of 47 developing economies over the 1990s. The sample and time-period were determined by data availability. The key source of governance data, viz. the WGI, provides data for 1996, 1998, 2000, and 2002-2006. However, the IFC dataset supplies private investment data only from 1970 to 1998. There are also many gaps in the series, which further restrict the sample size and study period.

Figure 1 illustrates the simple relationships between six governance indicators and private investment. A positive correlation is indicated which warrants further study. The following econometric model provides a framework of analysis.

$$PRIVINV_i = \alpha + \beta X_i + \eta Z_i + \mu_i \quad (1)$$

where,  $PRIVINV_i$  is the share of private investment in GDP and  $X_i$  is a vector of control variables.  $Z_i$  represents the six dimensions of governance.

Data on the dependent variable,  $PRIVINV$ , were obtained from Bouton and Sumlinski (2000). The control variables employed are: the log of real GDP per capita in 1990 ( $LNGDPPC$ ) - a proxy for country size; the annual growth of real GDP per capita in the 1990s ( $GROWTH$ ), and the amount of credit available to the private sector ( $CREDPRIV$ ). Data on these variables were acquired from the World Development Indicators and their coefficients are expected to be positive per economic theory.

Another control variable is the share of public investment in GDP ( $PUBINV$ ) taken from Bouton and Sumlinski (2000). The sign on  $PUBINV$  is ambiguous - it depends on the relative strength of "crowding out" versus "crowding in" (Khan and Reinhart, 1990; Pastor and Hilt, 1993; Ramirez, 2006). Data on governance are obtained from the WGI research project which computes aggregate perceptions about six indicators of institutional quality from 31 data sources provided by 25 organizations. These are: voice and accountability,  $VOICE$ , political stability and lack of

violence, *POLSTAB*, governance effectiveness, *GOVEFF*, regulatory quality, *REGQUAL*, rule of law, *RULE*, and control of corruption, *CONTLCCORR*. Descriptive statistics of the variables are presented in Table 1.

Alternative measures of governance, such as those compiled by the International Country Risk Guide (ICRG) are extremely broad and therefore too noisy for our analysis. Salahuddin and Islam (2008) employ ICRG as a proxy for uncertainty and find an insignificant impact on investment.

FIGURE 1. PRIVATE INVESTMENT AND GOVERNANCE INDICATORS

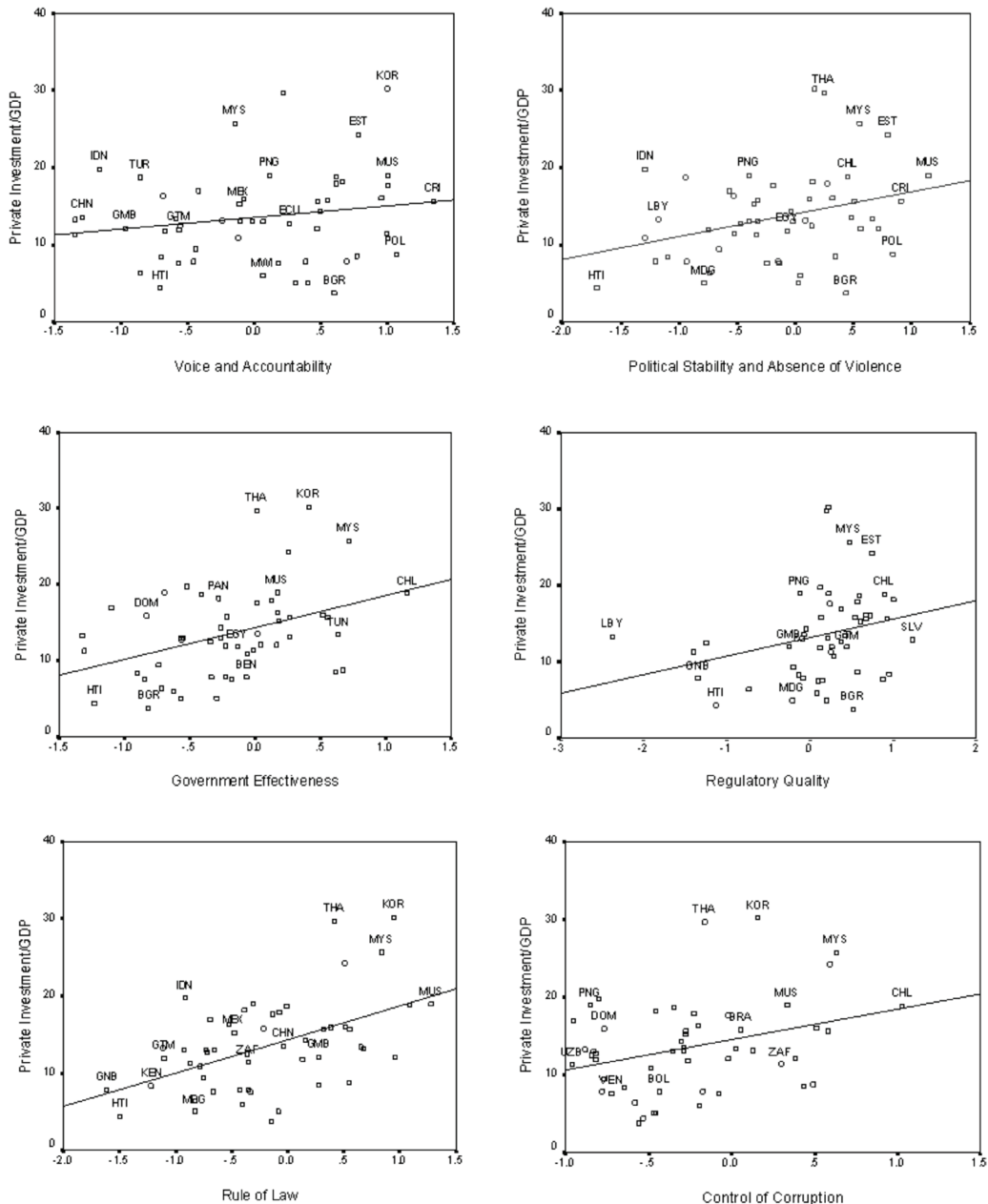


TABLE 1. DESCRIPTIVE STATISTICS

	Minimum	Maximum	Mean	Std. Deviation
<i>PRIVINV</i>	3.771	30.250	13.718	5.953
<i>LNGDPPC</i>	6.571	9.435	8.198	0.729
<i>GROWTH</i>	-2.950	5.760	1.348	1.780
<i>PUBINV</i>	1.960	20.757	7.799	4.143
<i>CREPRIV</i>	4.701	129.592	35.557	29.017
<i>VOICE</i>	-1.346	1.345	-0.0137	0.700
<i>POLSTAB</i>	-1.709	1.144	-0.178	0.642
<i>GOVEFF</i>	-1.322	1.166	-0.231	0.537
<i>REGQUAL</i>	-2.376	1.233	0.116	0.675
<i>RULE</i>	-1.615	1.279	-0.218	0.686
<i>CONTLCORR</i>	-0.963	1.029	-0.285	0.478

## Results

Table 2 contains econometric results. The positive and significant signs on the control variables *LNGDPPC* and *GROWTH* as displayed in the table are per expectation. *PUBINV* is negative but insignificant. The positive and significant sign on *CREPRIV* is again per expectation.

Regarding our variables of interest, Table 2 indicates that only two dimensions of governance, viz., *GOVEFF* and *RULE* matter for private investment across the sample. The Adjusted R2 statistics are quite high for each regression, as the regressors explain close to 50 percent of the variation.

Despite the limitations of cross-sectional regressions, the analysis is suggestive. Our results demonstrate that an effective government that includes competent and independent civil service and credible governmental policies is positively associated with private domestic investment across the sample. Fair and predictable rules of the game that determine the extent to which property rights are protected also contribute to greater private investment in the same sample.

TABLE 2. OLS REGRESSIONS FOR PRIVATE INVESTMENT AND GOVERNANCE INDICATORS

	(1)	(2)	(3)	(4)	(5)	(6)
<i>CONSTANT</i>	-8.342 (9.653)	-4.428 (10.296)	-3.931 (9.293)	-9.821 (9.534)	-0.089 (10.405)	-6.931 (9.337)
<i>INITIAL LNG- DPPC</i>	2.455** (1.165)	2.050* (1.201)	2.032* (1.088)	2.647** (1.174)	1.577 (1.209)	2.359** (1.091)
<i>GROWTH</i>	0.873** (0.438)	0.862** (0.428)	0.880** (0.420)	0.851** (0.437)	0.753* (0.424)	0.860** (0.429)
<i>PUBINV</i>	-0.224 (0.191)	-0.273 (0.194)	-0.229 (0.185)	-0.230 (0.201)	-0.276 (0.187)	-0.229 (0.189)
<i>CREPRIV</i>	0.069** (0.028)	0.068*** (0.028)	0.056* (0.029)	0.069** (0.028)	0.065** (0.028)	0.063** (0.029)
<i>VOICE</i>	0.392 (1.106)					
<i>POLSTAB</i>		1.169 (1.194)				
<i>GOVEFF</i>			2.424* (1.476)			
<i>REGQUAL</i>				0.055 (1.562)		
<i>RULE</i>					1.989* (1.211)	
<i>CONTLCORR</i>						1.355 (1.535)
Adjusted R <sup>2</sup>	0.476	0.486	0.506	0.474	0.506	0.484
No. of Obs.	47	47	47	47	47	47

Notes: White heteroskedasticity-constant standard errors in parentheses. \*\*\* Significant at 1%; \*\* significant at 5%; \* significant at 10%.

## Conclusions

This article adopts a multidimensional view of governance and tests the impact of six specific governance indicators on private investment across a sample of developing economies. Our results suggest that some indicators of governance matter more than others. In particular, effective enforcement of the rule of law and improving the efficiency of government in delivering services, matter the most for the private investment decision. Institutional reform that focuses first on these dimensions is vital to encouraging private investment in our sample of developing economies.

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