ACCOUNTABILITY, CORRUPTION AND GOVERNMENT EFFECTIVENESS IN ASIA: AN EXPLORATION OF WORLD BANK GOVERNANCE INDICATORS

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ABSTRACT

This study utilizes World Bank Governance indicators to investigate government effectiveness in Asia, both regionally and across sub-regions. Several factors seem to influence the level of government effectiveness: accountability and voice, control of corruption, and wealth and income. The presence of a democratic form of government does not seem to be an important factor, but we note that more sensitive measures of democracy might produce more positive results. We then comment on the strengths and weaknesses of the dataset and offer some suggestions for future research.

INTRODUCTION

In the past thirty years questions about governance capacities and the performance of governments has become internationally prevalent, and performance management has become a central concern in the field of public management (Boyne et al., 2006; Organisation for Economic Co-operation and Development [hereafter OECD], 2005; Pollitt and Bouckaert, 2004). New Public Management (NPM) reforms within OECD nations have accelerated this trend, and currently many public institutions in the world are implementing various reforms to measure and improve their performance. Although growing attention has been given to the question of improving government effectiveness (Boyne, 2003), surprisingly little cross-country research has been carried out using an evidence-based approach (Brewer, 2004; Knack & Keefer, 1995; Van de Walle, 2005). Furthermore, most research about governance and performance has been largely limited to historical case studies, which makes systematic testing and comparison between countries difficult.

In fact, from an international and central government standpoint, large-N studies within a single country (such as U.S. Federal agencies, state health and human service organizations, English local authorities, or Texas school districts) are little more than intensive case studies that supply an incomplete picture of government effectiveness in the country being studied and provide a weak basis for generalizability to other settings or countries. Such studies merely inform us about one part of the public sector in one country, and are typically time-bound. Such "snapshots" do not capture the rapidly changing social, economic, and political environment that frames the public sector, or the dynamism and innovativeness of many public sector organizations. Our point is not to disparage these important studies, for indeed, they have provided path-breaking evidence about government performance and effectiveness, and from a more parochial standpoint, we (Brewer and

Walker) have been primary contributors to that growing body of literature. Rather, our main purpose is to highlight the sizable gap that exists in the performance literature on cross-country studies. Very few have been mounted. Moreover, the studies described above may contribute to theory development, but they cannot satisfy the need for more descriptive work on government performance in the Asian region, which is sorely lacking.

To help fill this gap in the literature this article empirically investigates the relationship between accountability, corruption, and government effectiveness, focusing on Asian countries. We are interesting in Asia because of recent changes. Notably the Asian Financial Crisis fundamentally affected many Asian societies during the late 1990s and led to many countries launching NPM reforms to improve governance in various areas. In addition, corruption levels are a prominent bureaucratic pathology in many Asian countries and have been commented upon for some time (Schaffer, 1986). Furthermore, cross-country studies on governance have mainly focused on OECD and Western countries. This scarcity of research is partly due to the difficulty of assessing information, such as written documents in English (Jones & Kettl, 2003) though a comparative literature is emerging (Wescott & Jones, 2007).

In this article we are interested to know if Asia is different from other regions in the world on key measures of governance that include accountability, corruption and government effectiveness. Our analysis also extends to examining governance capacities within Asia in an attempt to identify some key variables that are likely to influence governance outcomes. Alongside this geographically focused analysis we also explore the impact of societal wealth on progress on accountability, corruption and government effectiveness.

The present study is organized as follows. The first part summarizes previous cross-country literature regarding government effectiveness. We then introduce the dataset and research method used in this study. The data used are the 2006 update of the World Bank's worldwide government indicators (Kaufmann et al. 2006). This dataset is particularly robust, for it incorporates various data sources constructed by different organizations. The preliminary nature of this study is singled in our findings section where we explore descriptive statistics and use three background variables to explore variations in the accountability, corruption, and government effectiveness indicators. In the conclusion, some future directions for research are discussed.

LITERATURE REVIEW

In this section, we first review government performance research in cross-country settings. Then we argue that more cross-country studies are needed, particularly in underdeveloped regions. Finally, we explain the need for more studies of Asian countries.

Performance management is currently in vogue in the worldwide public sector, but cross-country research on government performance is relatively rare. Moreover, researchers have employed different indicators for measuring government performance (e.g., effectiveness, bureaucratic quality, efficiency, corruption, and rule of law) due to the lack of agreement

regarding the definition of performance. Carvalho et al. (2006) indicate that cross-country comparisons of government effectiveness are impeded by different data collection methods and different definitions of variables (also see Bouckaert and Van de Walle, 2003; Boyne et al., 2006).

There is a paucity of cross-country research on government performance overall. However, several scholars have conducted empirical studies and assessed the impact of various independent variables on performance across countries. For instance, bureaucratic structure, cultural and social differences including religion or ethnic diversity, openness, administrative reform, bureaucratic structure, and political accountability have been used as determinants of government performance in the previous studies. La Porta et al. (1999) analyze measures of government performance and their possible determinants in 152 countries. The determinants of government effectiveness are drawn from economic, political, and cultural theories. La Porta et al. (1999) conclude that quality of government is closely related to cultural differences such as religion or ethnic diversity. In contrast, Islam and Montenegro (2002) find that social characteristics, including ethnic diversity, are not associated with institutional quality. Concerning the size of government, the authors suggest that bigger governments are more likely to perform better. However, Afonso et al. (2003) and Brunetti and Weder (1999) present evidence supporting the opposite conclusion.

Several studies have shown that bureaucratic structure is a significant factor which influences government performance. Rauch and Evans (2000) conclude that meritocratic recruitment, internal promotion and career stability lead to increased performance. From a survey in twenty African countries, Court et al. (1999) find that better bureaucratic performance is associated with more bureaucratic power and autonomy, better career opportunities in the public sector, higher pay of public employees, and minimal shifting between public and private employment.

The relationship between openness and government performance is also analyzed in previous studies. Openness is mainly measured in terms of economic trade between countries. Brunetti and Weder (1999) find that more open countries have better governments. Islam and Montenegro's (2002) study finds the same result. Also, Brewer (2004) conducts an empirical study of the relationship between administrative reform and bureaucratic performance in 25 OECD nations. His study shows that contextual factors (i.e., political risk variables) have a greater effect on bureaucratic performance than the particular type of administrative reforms that have been implemented.

Adsera et al. (2003) consider level of democracy, including civil liberties and free circulation of daily newspapers per person, as indicators of political accountability.
They find the positive impact of political accountability on the quality of government using panel models. Similarly, Brewer and Choi (2007) investigated the relationship between democracy and government performance with panel data compiled from 213 countries over the period 1996-2005. Their results showed that democracy was positively and significantly related to government performance. More democratic countries tended to have more effective governments and do a better job of controlling corruption.

To summarize, there are few cross-country studies of government performance, and most of these studies have focused on developed nations. Few studies have examined regional differences, and even fewer have focused on sub-regional trends. The studies mounted thus far have identified some promising variables, but their findings are not wholly consistent. More studies are needed to fill in these gaps and sort out conflicting findings from prior research. Cross-country studies of Asian countries are extremely rare in this line of research. There is an urgent need for scholars to attempt more empirical research on government performance in the Asian region, in part because China and several other countries are among the fastest growing economic powers in the world, and also because the region faces a number of unique challenges.

DATA AND METHODS

In this article we use the World Bank's Governance Indicators to explore accountability, performance and corruption in Asian countries. The Indicators provide data on 213 countries and territories for the period 1996-2005 (the data are biannual, 1996-2002 and annual thereafter). Six dimensions of governance are included in the set of indicators:

- Voice and accountability,
- Political stability and absence of violence,
- Government effectiveness,
- Rule of law,
- Regulatory quality, and
- Control of corruption.

The construction of the indexes is complex, drawing upon data from 25 organizations, many tens of variables and over thirty datasets. Unobserved components models are used to create the indexes, and the resultant measures range from -2.5 to 2.5 with a mean of zero. Our purpose in this article is not to critique these data, but to use them to examine variations in voice and accountability, government effectiveness and control of corruption. Further details of the Worldwide Governance Indicators can be found in the papers by Kaufmann and colleagues at the World Bank (for details, see Kaufmann et al., 2006 or visit www.worldbank.org).

We focus on three indexes: "voice and accountability," "control of corruption," and "government effectiveness." These are selected because they are more related to our interest: public management. Of the others, political stability is more clearly associated with political science while the rule of law is linked to legal studies. Kaufmann et al. (2006, p. 4) describe the measures as follows:

(1) Voice and accountability measures "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 free media."

(2) Control of corruption measures "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."
(3) Government effectiveness measures "the quality of public services, the quality of the civil services 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."

To ascertain if there were variations in these measures of governance, comparisons between different countries by region, sub-region, democracy and wealth of nations were undertaken. Countries were categorized into regions based upon United Nations groupings (www.un.org). This includes: Asia, Africa, North America, South America, the Caribbean and Central America, Europe, and Oceania. Asian countries are examined in more detail, and the list of countries used for Asian sub-regions and those classified as a democracy, or not, are included in the Appendix. We use income level as a measure of the wealth of nations. To classify the countries used in this study, we used the World Bank List of Economics (2006) which includes 2005 data for gross national income per capita. Four groups are identified: low income, $875 or less; lower middle income $876-$3,465; upper middle income $3,466-$10,725; and high income $10,726 or more.

The analysis is undertaken on a cross-sectional panel of 1,369 cases. Descriptive statistics are examined and similarities and differences between groups and measures are made using correlations, t-tests and analysis of variance (ANOVA).

RESULTS

Our initial task is to inspect the relationships between the three World Bank Governance variables explored in this paper to determine if there are positive relationships between corruption and effectiveness and accountability and effectiveness. Table 1 provides a correlation matrix that suggests that there are strong relationships between these variables with correlation coefficients ranging from 0.75 to 0.94. This suggests that the control of corruption is strongly associated with government effectiveness (r=.9425), and that accountability is also associated with government effectiveness, though with a lower correlation (r=.7744). These findings imply that government effectiveness is enhanced when corruption is controlled for and societies have voice and accountability channels. These findings are not surprising, but indicate that the measures perform as might be anticipated and give us some confidence to go on to examine these variables in more detail.

Table 1. Correlation between the World Bank Governance accountability, effectiveness and corruption indicators

	Voice and Accountability	Government Effectiveness	Control of corruption
Voice and accountability			
Government effectiveness	0.7744		
Control of corruption	0.7526	0.9425	

To analyze the collected data, we first consider geographical region (Table 2). North America and Europe are ranked first and second across all three domains of governance, respectively. Africa is consistently in the bottom two places based upon these means. Asia's mean score on all three measures generally ranks at a low position; last for voice and accountability, fifth for control of corruption and on the mid-point for governance effectiveness. Asia is the only region to display such a range of scores, performing adequately on effectiveness, but more poorly on control of corruption and voice and accountability. Notably, the score for voice and accountability ranks the lowest while the government effectiveness score ranks fourth among seven regions of the world.

If we take a mean of the rankings for all three measures it suggests the following: North America is placed first, Europe second, followed by Caribbean and Central America. Oceania is in the middle of the rank, placed fourth. Asia is fifth, followed by South America and Africa. To see if these differences are statistically significant, an ANOVA test was run and the results are presented in Table 3. These results reveal that the differences among each region and for each of the three governance variables are statistically significant at the 0.001 level. Thus the achievements and experiences of these global regions are very different.

Table 2. Means of the World Bank Governance accountability, effectiveness and corruption indicators by Region

Variable / Region	Voice and Accountability	Government Effectiveness	Control of Corruption
Asia	-.6586994	-.1139589	-.2056637
Africa	-.6285246	-.6527322	-.5947009
North America	1.228333	1.704444	1.805556
South America	.2070455	-.1645455	-.21625
Caribbean & Central America	.4392814	.0759756	.0921519
Europe	.821115	.8216606	.806803
Oceania	.7620619	-.1151515	.0616049

Table 3. Analysis of Variance of the World Bank Governance accountability, effectiveness and corruption indicators by Region

Source of variance	Sum of squares (SS)	df	Mean squares (MS)	F	p-value
Voice and Accountability					
Model	606.8	6	101.1	177.5	0.0000
Residual	776.2	1362	.6		
Total	1383.0	1368	1.0		
Government Effectiveness					
Model	403.5	6	67.3	95.4	0.0000
Residual	948.7	1346	.7		
Total	1352.2	1352	1.0		
Control of Corruption					
Model	377.4	6	62.9	84.8	0.0000
Residual	962.2	1297	.7		
Total	1339.6	1303	1.0		

In Table 4 we focus more intently on Asia and undertake a t-test to compare the means of Asian and non-Asian countries. As shown in Table 4, the mean scores for two groups of countries are significantly different. For all three measures—voice and accountability, control of corruption, and government effectiveness—the score for Asian countries are

lower than scores for non-Asian countries. These results suggest that the performance of Asia is generally quite poor on these measures of governance and that the region's performance is, in broad terms, worse than that of non-Asia societies in general.

Table 4. Comparing Asian with non-Asian countries

Group	Obs.	Mean	Std. Err.	Std. Dev.
Voice and Accountability				
Asia	346	-.66	.05	.86
Non-Asia	1023	.19	.03	.96
t		-15.37*		
Government Effectiveness				
Asia	341	-.11	.05	.89
Non-Asia	1012	.01	.03	1.03
t		-2.07*		
Control of Corruption				
Asia	339	-.21	.05	.90
Non-Asia	965	.04	.03	1.04
t		-4.20*		

* $p < .05$

The difference between the two groups of countries probably involves more than geographical region because significant cross-country variations within each region also exist. Thus, income level, another explanatory variable, is employed in the following analysis. Table 5 shows that countries with high income have higher mean scores of accountability, government effectiveness, and control of corruption. If we again rank the mean scores, as we did with region, the results offer very clear and stark evidence on the relationship between governance indicators and wealth and country wealth, as measured by income per capita. Each income band retains the same ranking for each governance variable thus: high income countries score first, upper middle second, lower middle third and low income countries are always last. The evidence in Table 6 confirms that there are significant differences among income groups. The differences are substantial: the lowest F-score is 303.5, while for corruption the F-score rises to 961.2. This suggests that wealth/income is a powerful explanatory variable of governance, more so that the regional aspects examined above (the F-scores in Table 3 range from 84.5-177.5).

Table 5. Means of the World Bank Governance accountability, effectiveness and corruption indicators by Income

Variable / Income level	Voice & Accountability	Government Effectiveness	Control of Corruption
Low	-.7845924	-.8140164	-.7858592
Lower middle	-.3750246	-.4688557	-.5259694
Upper middle	.4062257	.1499216	.0992593
High	.847931	1.330098	1.408562

Table 6. Analysis of Variance of the World Bank Governance accountability, effectiveness and corruption indicators by Income

Source of variance	Sum of squares (SS)	df	Mean squares (MS)	F	p-value
Voice and Accountability					
Model	552.2	3	184.1	303.5	0.0000
Residual	816.2	1346	.6		
Total	1368.4	1349	1.0		
Government Effectiveness					
Model	878.6	3	292.9	846.9	0.0000
Residual	458.5	1326	.3		
Total	1337.1	1329	1.0		
Control of Corruption					
Model	922.1	3	307.4	961.2	0.0000
Residual	410.9	1285	.3		
Total	1333.0	1288	1.0		

Given the strength of wealth as an explanation of governance capacity, we returned to the earlier correlations reported in Table 1 between the governance variables of interest in this article. A partial correlation is used for statistical control, thus we recomputed the correlations in Table 1 while controlling for income. When we do this, the correlation coefficients drop from the original values suggesting that income mediates the relationships. The partial correlation coefficient between voice and accountability and government effectiveness is r=.4806, a decrease of nearly .3 from the original correlation coefficient, r=.7744. When controlling for income, the coefficient between control of corruption and government effectiveness drops by .1 to r=.8405 compared to the original correlation, r=.9425. Income clearly influences the relationship between our variables.

The remaining analysis focuses on Asia. We present a similar analysis to that reported above, focusing upon region and income, but also include a dichotomous variable that classifies countries by their democratic status. As shown in Table 7, Eastern Asia (i.e., China, Hong Kong, Macao, Japan, Mongolia and the Republic of Korea) has the highest scores on three measures. By contrast, Central Asia scores lowest on voice and accountability, government effectiveness and control of corruption. These countries are in the former Soviet block and are transitional economies. Moving up the ranking, Central Asia is followed by Southern Asia, South Eastern Asia and Western Asia. The differences between these mean scores for each region of Asia were compared via an ANOVA test. The differences of mean scores among sub-regions of Asia are statistically significant at the .01 levels for each governance indicator (see Table 8). The biggest difference is found on the control of corruption measure where the F-score is 214.2.

Table 7. Means of the World Bank Governance accountability, effectiveness and corruption indicators by Sub-Region within Asia

Variable / Sub-region	Voice & Accountability	Government effectiveness	Control of corruption
Central Asia	-1.324286	-1.057143	-1.09
Eastern Asia	-.183913	.386087	.2676087
Southern Asia	-.7985714	-.3398361	-.5038983
South-Eastern Asia	-.6839474	-.01	-.2757895
Western Asia	-.5619841	.0152033	.0553659

Table 8. Analysis of Variance of the World Bank Governance accountability, effectiveness and corruption indicators by Sub-Region within Asia

Source of variance	Sum of squares (SS)	df	Mean squares (MS)	F	p-value
Voice and Accountability					
Model	28.3	4	7.1	10.6	0.0000
Residual	226.9	341	.7		
Total	255.2	345	.7		
Government Effectiveness					
Model	48.6	4	12.2	18.6	0.0000
Residual	219.4	336	.7		
Total	268.0	340	.8		
Control of Corruption					
Model	51.7	4	12.9	214.2	0.0000
Residual	220.2	334	.7		
Total	271.9	338	.8		

Table 9 presents the results of the comparison of means by income. The same pattern of results is found in Asia as was noted in our global analysis. Higher income is clearly associated with higher achievement on these measures of governance. One result of note for the Asia societies included in this analysis are the negative means for all countries on the voice and accountability measure, all below the mean of zero. The results of the ANOVA test on these data again show statistically significant differences between each income group in Asia, with the biggest differences again found on the treatment of corruption (see Table 10).

Within Asia, income level continues to play a crucial role in explaining relationships among all three measures of governance. Yet after controlling for income, the correlation is still greater than 0 suggesting that there could be a causal link between the two measures. Specifically, the correlations of government effectiveness with accountability and control of corruption are, respectively, moderate (0.5286) and strong (0.8034) in comparison with the original correlation coefficients. All correlation coefficients are significant at the 0.01 levels providing relatively high confidence.

Table 9. Means of the World Bank Governance accountability, effectiveness and corruption indicators by Income within Asia

Variable / Income level	Voice & Accountability	Government effectiveness	Control of corruption
Low	-1.01319	-.7214035	-.7890265
Lower middle	-.9026786	-.4737838	-.6538182
Upper middle	-.485	.3033333	.165
High	-.0331579	.9017391	.9128261

Table 10. Analysis of Variance of the World Bank Governance accountability, effectiveness and corruption indicators by Income within Asia

Source of variance	Sum of squares (SS)	df	Mean squares (MS)	F	p-value
Voice and Accountability					
Model	59.3	3	19.8	34.7	0.0000
Residual	198.6	349	.6		
Total	257.9	352	.7		
Government Effectiveness					
Model	156.5	3	52.2	154.96	0.0000
Residual	115.5	343	.3		
Total	272.0	346	.8		
Control of Corruption					
Model	179.8	3	59.9	214.2	0.0000
Residual	95.4	341	.3		
Total	275.2	344	.8		

Last, we run a t-test to analyze the influence of democracy on our measures of governance. Asian countries are classified into two groups: countries with a democratic central government (e.g. Japan, South Korea, and Malaysia) and those with other forms of central government (e.g. China, North Korea, and Vietnam). According to the results in Table 11, democracy significantly matters for voice and accountability within the Asian region, but not for control of corruption or government effectiveness. This suggests that wealth/income is a stronger predicator of governance capabilities in Asian societies, and a strong predictor elsewhere in the world.

Table 11. Comparing Asian Democracies with Non-Democracies

Group	Obs.	Mean	Std. Err.	Std. Dev.
Voice and Accountability				
Democratic	88	-.39	.10	.92
Non-democratic	67	-.94	.12	.10
t		3.50*		
Government Effectiveness				
Democratic	88	.01	.12	1.15
Non-democratic	67	-10	.12	.95
t		0.68		
Control of Corruption				
Democratic	88	-.18	.12	1.10
Non-democratic	67	-.31	.11	.88
t		0.85		

* $p < .05$

This finding is interesting in light of research by Brewer and Choi (2007), who found a modest positive relationship between democracy and government effectiveness in a study of 213 countries during the period 1995-2006, while controlling for more macro-economic measures of wealth; e.g., inflation, trade and gross domestic product. The latter variable was by far the strongest predictor in the model. Thus, it appears that economic success—whether at the individual level or on more macro-economic measures—has a strong positive impact on government effectiveness. Future research should try to sort out the impact of democracy, which was not consistent in these two studies.

CONCLUSION

In this article we have examined the relationship between three government performance measures—accountability, corruption, and effectiveness—in a cross-country setting using the World Bank Governance indicators. The results of the analyses point towards four findings, of which the main conclusion is that the wealth of nations is the most likely variable in this study to affect performance on these three measures.

First, we found that both accountability and corruption are significantly correlated with government effectiveness. Countries with higher scores on the accountability and control of corruption index have higher government effectiveness. This might be to be expected, and it tends to confirm what we know from prior research on government performance. More open and transparent societies are likely to be more effective at delivering public services:

no bribes are paid to receive services and government dollars end up in the desired program. Although strong and statistically significant correlations are not sufficient evidence of a causal relationship, they do make causal assertions seem more convincing. In this case, our correlations suggest that an increase in accountability and control of corruption leads to better government effectiveness.

The second finding is that corruption has a corrosive effect on government effectiveness across countries. Government effectiveness is more strongly correlated with control of corruption than with accountability. This finding remains valid within Asian countries. Third, the wealth of nations affects the performance of nations on our three governance variables and reduces the correlations between corruption and government effectiveness, as well as between accountability and government effectiveness. The impact is greater for the correlation between voice and accountability, reducing the coefficient nearly .3 for all countries in our study, but has a slightly less dramatic impact in Asia where the correlation falls by .25. The relationship between corruption and effectiveness is not mediated to the same extent, but reduces the correlation by nearly .15 in Asia.

Finally, within South and East Asia, countries with democratic government have statistically significant correlations with voice and accountability at 0.05 levels of statistical significance. This positive relationship seems reasonable, in part because some sub-indicators of voice and accountability are considered essential elements of democracy; e.g., freedom of association and press, political rights, and civil liberties. On the other hand, the presence of a democratic government within a country does not correlate statistically with corruption or government effectiveness. This interesting finding calls for future research. Although several cross-country studies have considered a "democracy" variable in their analyses (e.g., Brewer and Choi, 2007; Adsera et al., 2003; Islam and Montenegro, 2002; Islam et al., 1997), they do not provide systematic evidence regarding the impact of democracy on government performance (Skelcher, 2006; Treisman, 2000). Despite the common assumption that democracy is detrimental to corruption, empirical results are not consistent with the assumption (Sung, 2004; Trang, 1994).

One implication of these findings is that the variables may be interrelated in ways that have not yet been explored. For example, controlling corruption may increase economic success in a country, which in turn increases government effectiveness. The mechanisms of change also need to be explored and documented more fully. For example, researchers need to explain *how* per capita income increases government effectiveness. Does it merely increase perceptions of effectiveness, or does it act in more substantive ways such as by providing increased funding for government operations or making social problems more tractable?

The World Bank Governance dataset has advantages in that it gives general snapshots on each measure and covers a very wide range of countries, but there are several critiques of these measures that need to be taken into account when interpreting our results. The correlations among all indexes are very high. This result raises a critical question about the measurement validity of the dataset: What exactly do these indexes measure? High correlations amongst different measures of performance and governance would normally

suggest that they are tapping the same topics and concepts, and, as Van de Walle (2006) has noted, it is difficult to grasp what the indicators really mean.

The three World Bank Governance indicator variables used in our study were created by aggregating several hundred individual variables from different sources. While the aggregation process increases the reliability of indicators, it simultaneously deteriorates their conceptual precision (Knack and Manning, 2000). For example, Svensson (2005) demonstrates that the control of corruption indicator used by the World Bank dataset represents a particularly broad definition of corruption because it aggregates various cross-country sub-indexes which often focus only on specific aspects of corruption. A more technical issue relates to Kaufmann et al.'s treatment of the independence of measurement errors. Kaufmann et al. (2006) assume the measurement errors of sub-indicators made by different sources are not correlated with each other. This assumption can increase the reliability of the indicators, but the possibility remains that the measurement errors are highly correlated because the experts are likely to share perceptions and read the same reports to assess complex concepts. If the assumption of independent measurement errors is disregarded, the advantage of precision from aggregating various sources would be less clear (Svensson, 2005).
More systematic work needs to be undertaken using these indicators to test their robustness over time and also to explore their true explanatory capacity. Researchers should consider unpacking the measures to increase measurement validity. Some sub-indicators may be more useful than others depending on the research questions. Researchers can refine complex, broad concepts by thinning out less useful sub-indicators for their own studies.

Furthermore, the variables used in the present study are not all of the factors that affect government effectiveness. For example, the extent of managerial reforms related to accountability, corruption, and government effectiveness were not included in this study (Knill, 1999; Brewer, 2004). Legal origins also might be related to corruption. For example, La Porta et al. (1999) argue that countries with English legal origins (i.e., former colonies) have less corruption, while countries with French and Socialist legal origins have higher levels of corruption.

Building a new database from the World Bank dataset is encouraged. This effort might have positive effects on the growth of government performance research in a cross-country setting. In this study, we have run introductory statistical techniques using small research models with 3-5 variables. With these simple correlation analyses, it is hard to recognize causal paths from independent and dependent variables, thus various explanatory variables and multivariate regression analyses need to be utilized in a future study. Though this study is preliminary and suffers a number of limitations, we hope that the results will foster discussion and research on government effectiveness, globally as well as in Asia where more work is urgently needed.

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APPENDIX

Sub-Regions of Asia

- Central Asia - Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan
- Eastern Asia - China, Hong Kong Special Administrative Region of China, Macao Special Administrative Region of China, Democratic People's Republic of Korea, Japan, Mongolia, and Republic of Korea
- Southern Asia - Afghanistan, Bangladesh, Bhutan, India, Iran, Islamic Republic of, Maldives, Nepal, Pakistan, and Sri Lanka
- South-Eastern Asia - Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, and Vietnam
- Western Asia - Armenia, Azerbaijan, Bahrain, Cyprus, Georgia, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Turkey, United Arab Emirates, and Yemen

Forms of Government in South and East Asia

- Democracies include: Japan, South Korea, Malaysia, Taiwan, East Timor, Indonesia, Philippines, and Singapore.

- Non-democracies include: China, North Korea, Macao, Hong Kong, Brunei, Myanmar, Laos, Thailand, Vietnam, and Mongolia.

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